Graduate Catalog 2019-2020

The policies and procedures herein have been approved, as appropriate, by the USF Graduate Council Policy Committee and by the full USF Graduate Council, a Standing Committee of the Faculty Senate.

The policies, procedures, and requirements herein are applicable to students admitted to a graduate degree program or graduate certificate, and/or non-degree seeking students taking graduate coursework. Undergraduate students should refer to the Undergraduate Catalog, even if taking graduate coursework. It is the student level that dictates which publication governs, not the level of coursework.

USF Office of Graduate Studies, 4202 E. Fowler Avenue, ALN226
Tampa, FL 33620~ www.grad.usf.edu

Office of Graduate Studies Mission Statement

The mission of the Office of Graduate Studies is to serve as the center of leadership for graduate education at the University of South Florida.

Office of Graduate Studies Diversity Statement

The Office of Graduate Studies at the University of South Florida is committed to the full engagement, empowerment and encouragement of *all* of the members and constituents we serve; these include students, faculty, staff, academic departments, aspirants, and affiliates.

In recognizing that a university serves a diverse population, we strive not only to serve, but also to lead the future in which we "stimulate, encourage and support graduate education efforts that build national distinction..." We understand that in order to realize this future, we must remain steadfast to the policies and practices that emphasize achievement, equal opportunity, trust, respect, and collaboration. Hence, equity and excellence are not merely espoused, but rather are the "lived" values that we strive for and advocate for members of the community of universities and a global workforce.

USF's Office of Graduate Studies Administration Policy Statement

For information on the University's Policy on the Office of Graduate Studies Administration, Refer to USF Policy 11.001, at http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-11-001.pdf

This catalog is effective for the 2019-2020 academic year. This catalog includes all policies, procedures, and major and course descriptions in effect at the time of publication. USF reserves the right to repeal, change, or modify the policies, procedures, majors, and course descriptions at any time.

The University of South Florida is committed to the principles of equal education, equal access, and equal employment opportunities without regard to race, color, marital status, sex, religion, national origin, disability, age, or Vietnam or disabled veteran status as provided by law and in accordance with the University's respect for personal dignity. These principles are applied in the conduct of University programs and activities and the provision of facilities and services.

Archives online: http://www.grad.usf.edu/catalog.php
Archived copies are available online. Paper copies are also archived at the USF Library.

Welcome to Graduate Studies

A Message from the President, Dr. Steven Currall

Thank you for your interest in graduate education at the University of South Florida. We invite you to explore USF's globally recognized academic programs and the many opportunities to learn and work alongside some of the world's most accomplished scholars, scientists and inventors. At USF, our graduate students play active and important roles in our growing national and international research success, and are part of many significant projects that contribute to our rising institutional prestige. We are proud that the USF System is first in Florida in the percent of bachelor's and graduate degrees awarded in programs of strategic emphasis, including STEM, health, accounting and education. USF also ranks fifth among American public universities and 12th among universities worldwide in generating new U.S. patents.

The continuing growth of our research enterprise is among the reasons that the Board of Governors of Florida's State University System designated USF as a Preeminent Public Research University. This means we meet rigorous standards and it confirms our standing as one of the state's top institutions of higher education. Only two other Florida universities have earned this impressive designation – and they are more than 100 years older than we are.

Our strong interdisciplinary academic programs are coupled with a global focus to place USF on the leading edge of a number of disciplines, including health and critically needed science, technology, engineering and math fields. USF's entrepreneurial spirit encourages our graduate students to have an immediate impact with their education. For example, the Student Innovation Incubator in USF's Office of Research & Innovation is home to 25 student-led companies, and graduate students are regularly found leading hands-on projects that directly serve our community, such as environmental research, urban design, music and the arts, and public health. For those looking to link their interest in high-demand disciplines with new skills to start a business, USF has created several programs that couple a Master of Business Administration with STEM degrees.

We offer a variety of opportunities for postgraduate study through our numerous Master's and Graduate Certificate programs, many of which include online learning and are designed to prepare graduates to make immediate and relevant contributions in their professions and fields of study. We work in partnership with our region's top international corporations, including Nielsen, Raymond James, TechData, Jabil Circuit Corp., and Home Shopping Network to connect our talented students to these global powerhouses where they find exciting and rewarding careers.

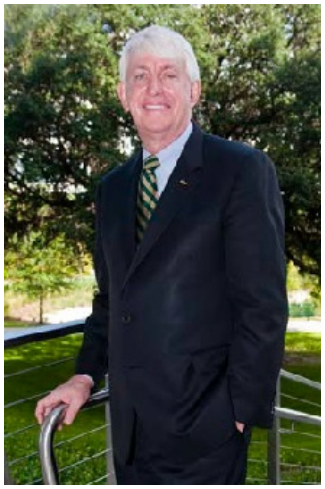
USF is situated in the heart of one of the nation's fastest growing and most diverse metropolitan regions, and our university is deeply connected to all aspects of the community. USF graduate students are creative, energetic and working to build a bright and successful future for themselves and their families. We look forward to being a partner in your educational, professional and personal journey.

Sincerely yours,

Steven Currall, Ph.D.
President
https://www.usf.edu/system/president/

A Message from the Provost and Executive Vice President, Dr. Ralph Wilcox

I want to welcome you to the University of South Florida and your new academic home as you prepare to embark on the challenging, yet ultimately rewarding, journey into graduate education. As a top 50 global research, USF attracts many of the world's best and brightest students, and, today, that includes you.



Graduate school is a serious commitment, and one to which the dedicated faculty and staff at USF attach special importance. It is our sincere promise to engage you in meaningful programs and initiatives that support the educational and socio-economic wellbeing of the local, national, and global communities we serve and prepare you for life-long success in the workforce. We champion interdisciplinary inquiry and collaboration as the keys to success not only within our academic programs, but also in the global landscape of 21st century business, communications, science, and culture.

At USF, we highly encourage students and faculty to forge meaningful relationships that transcend the academic, department-centered experiences found in other graduate schools. We believe that partnerships between students, faculty, and researchers across campus, in the community, and around the world strengthen both the university and the graduate student experience by creating a "collaboration for competition" that leads to new knowledge and exciting, innovative solutions to pervasive and emerging problems.

Continuing to deliver top-quality graduate programs remains a leading priority for USF as we further enhance our position as a premier research university with state, national, and global impact. USF has been designated as a "Preeminent State Research University," an award which recognizes our high performance and trajectory of national excellence.
The University of South Florida is a place where you can challenge yourself by contributing to your chosen discipline, your community, and the world-at-large in a meaningful and sustainable way. Whether you aspire to remain in academe or to pursue professional positions in the public sector, business or industry, I am confident that your investment of time, talent, and energy as a graduate student at USF will present you with wonderful and exhilarating prospects for the future.

Ralph C. Wilcox, Ph.D.
Provost and Executive Vice President
www.acad.usf.edu

A Message from the Dean of the Office of Graduate Studies

It gives me great pleasure to welcome you to the University of South Florida (USF) Graduate Studies Catalog. As you will see, we are a vibrant University providing opportunities for student success and outstanding achievement (see USF Points of Pride at https://www.usf.edu/about-usf/points-of-pride.aspx). USF has nearly 170 masters and doctoral majors, several concurrent degree options, and over 130 graduate certificates. We also have many opportunities for non-degree seeking students. At the three institutions across the USF System, we serve more than 50,000 students. Of these, over 10,000 are a geographically, demographically, socially, and disciplinarily diverse body of students pursuing their graduate education. USF has student success, research and innovation, community engagement, global literacy and impact, and integrated, interdisciplinary inquiry as its strategic priorities. Our tuition provides affordability and we also offer a number of financial aid options. We recognize that graduate students have an array of responsibilities and needs, so many of our majors offer flexible day, evening, and weekend classes in addition to online course and degree program offerings.

The mission of the Office of Graduate Studies is to serve as the center of leadership for graduate education at the University of South Florida (see our 2018-2019 Annual Report). As a graduate student at the University of South Florida, you can be proud that USF is one of the nation's top public research universities and one of only 40 public research universities nationwide that holds both very high research and community engaged designations by the Carnegie Foundation for the Advancement of Teaching. As well, it has been named as one of three designated Preeminent Universities in the Florida State University System. Graduate students at USF can apply for research, teaching, and graduate assistantships, enhancing their educational experiences by putting knowledge into action. At the same time, a number of our Master's degree programs, as well as Graduate Certificates, offer varied opportunities for professional development and advancement. As a perusal of the Catalog will show, there's something for everyone!

We urge you to become the leader you are destined to be, so I invite each of you to learn more about graduate education at the University of South Florida. Welcome to our community of scholars and family of learners!

M. Dwayne Smith, Ph.D.
Senior Vice Provost & Dean, Office of Graduate Studies
www.grad.usf.edu

About USF

Welcome to the University of South Florida, a Preeminent State Research University! Located in the heart of Tampa Bay, the University of South Florida is dedicated to empowering students to maximize their potential for lifelong success.

Our school is situated in the vibrant and diverse Tampa Bay region, with campuses in Tampa, St. Petersburg and Sarasota. Together these campuses serve more than 50,000 students and offer undergraduate, graduate, specialist and doctoral level degrees.

Across our 14 colleges, undergraduates choose from over 180 majors and concentrations, from Business and Engineering to The Arts and USF Health. We are proudly dedicated to empowering our students to prosper and have been recognized nationally for our achievements in closing the gap between white and black student success.

Our graduate programs continue to number among the best, according to the U.S. News and World Report, with eight programs ranking in the top 50 in 2018. We strive to make these stellar programs affordable and offer a number of assistantships, fellowships and grants to help graduate students fund their degrees.

High-impact, global research is central to what we do here at USF. In 2018, our university skyrocketed into the top 25 public universities for research expenditure – and reached 42nd in the nation overall among public and private universities. With a total research expenditure of $568 million in 2016-2017, USF is at the forefront of cutting-edge research of medicine, science, engineering and the arts.

Established in 1956, we take pride in being a Golden Age university and a leader among young universities. Our youth allows us the flexibility and freedom to forge new paths and foster innovation and progress. Our on-campus Technology Incubator has created over 230 jobs locally, and our Center for Entrepreneurship ranks in the top 15 nationally. We are also leaders internationally, and in 2018 were the number one producer of Fulbright Scholars in the nation, for the second year in a row.

Above all else, our forward-looking, entrepreneurial spirit has helped us cultivate an exceptional environment for our students. In 2018, USF earned the Active Minds Healthy Campus Award, given in recognition of our success prioritizing and promoting the health and well-being of our students. And now home to a chapter of Phi Beta Kappa – the most prestigious national honor organization in the country – USF is poised to help these students unleash their greatest potential.

Our belief that every student will succeed if given the opportunity informs everything we do here at USF. We welcome you to explore more about our university – in person and online – and discover how you can prosper at USF.

USF Vision, Mission, Goals, Values, and, Accreditation

USF Strategic Plan: https://www.usf.edu/system/about/strategic-plans.aspx

Mission

The University of South Florida's mission is to deliver competitive undergraduate, graduate, and professional programs, to generate knowledge, foster intellectual development, and ensure student success in a global environment.

Vision

The University of South Florida is a global research university dedicated to student success and positioned for membership in the Association of American Universities (AAU).

As Florida's leading metropolitan research university, USF is dedicated to:

- Student access, learning, and success through a vibrant, interdisciplinary, and learner-centered research environment incorporating a global curriculum.
- Research and scientific discovery to strengthen the economy, promote civic culture and the arts, and design and build sustainable communities through the generation, dissemination, and translation of new knowledge across all academic and health-related disciplines.
- Partnerships to build significant locally- and globally-integrated university-community collaborations through sound scholarly and artistic activities and technological innovation.
- A sustainable economic base to support USF's continued academic advancement.

Accreditation

The University of South Florida (USF) is accredited by the Southern Association of Colleges and Schools' Commission on Colleges to award associate, baccalaureate, master's, specialist and doctorate degrees.

Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, or call 404-679-4500 for questions about the accreditation of the University of South Florida.

Normal inquiries about the institution, such as admission requirements, financial aid, educational programs, etc., should be addressed directly to the institution and not to the Commission's Office.

Degrees Offered by the University

Undergraduate Degrees

Bachelor of Arts	B.A.
Bachelor of Fine Arts	B.F.A.
Bachelor of Music	B.M.
Bachelor of Science	B.S.
Bachelor of Science in Chemical Engineering	B.S.C.H.
Bachelor of Science in Civil Engineering	B.S.C.E.
Bachelor of Science in Computer Engineering	B.S.C.P.
Bachelor of Science in Computer Science	B.S.C.S.
Bachelor of Science in Electrical Engineering	B.S.E.E.
Bachelor of Science in Industrial Engineering	B.S.I.E.
Bachelor of Science in Information Technology	B.S.I.T.
Bachelor of Science in Mechanical Engineering	B.S.M.E.
Bachelor of Social Work	B.S.W.

Graduate Degrees

Master of Accountancy	M.Acc.
Master of Architecture	M.Arc.
Master of Arts	M.A.
Master of Arts in Teaching	M.A.T.
Master of Business Administration	M.B.A.
Master of Education	M.Ed.
Master of Fine Arts	M.F.A.
Master of Health Administration	M.H.A.
Master of Music	M.M.
Master of Physician Assistant Studies	M.P.A.S.
Master of Public Administration	M.P.A.
Master of Public Health	M.P.H.
Master of Science	M.S.
Master of Science in Bioinformatics and Computational Biology	M.S.B.C.B.
Master of Science in Biomedical Engineering	M.S.B.E.
Master of Science in Biotechnology	M.S.B.
Master of Science in Chemical Engineering	M.S.C.H.
Master of Science in Civil Engineering	M.S.C.E.
Master of Science in Computer Engineering	M.S.C.P.
Master of Science in Computer Science	M.S.C.S.
Master of Science in Electrical Engineering	M.S.E.E.
Master of Science in Engineering Management	M.S.E.M.
Master of Science in Environmental Engineering	M.S.E.V
Master of Science in Health Informatics	M.S.H.I.
Master of Science in Industrial Engineering	M.S.I.E.
Master of Science in Information Technology	M.S.I.T.

Master of Science in Marketing	M.S.M.
Master of Science in Materials Science and Engineering	M.S.M.S.E.
Master of Science in Mechanical Engineering	M.S.M.E.
Master of Science in Medical Sciences	M.S.M.S.
Master of Science in Public Health	M.S.P.H.
Master of Social Work	M.S.W.
Master of Urban and Community Design	M.U.C.D.
Master of Urban and Regional Planning	M.U.R.P.

Advanced Graduate Degrees

Education Specialist	Ed.S.
Doctor of Audiology	Au.D.
Doctor of Business Administration	D.B.A.
Doctor of Education	Ed.D.
Doctor of Philosophy	Ph.D.
Doctor of Public Health	Dr.P.H.
Doctor of Nursing Practice	D.N.P.

Professional Degrees

Doctor of Medicine	M.D.
Doctor of Pharmacy	Pharm.D.
Doctor of Physical Therapy	D.P.T.

Additional Accreditation:

Muma College of Business	Association to Advance Collegiate Schools of Business (AACSB)
College of Education	National Council for Accreditation of Teacher Education (NCATE)
College of Engineering	Engineering Accreditation Commission of ABET
College of Nursing	Commission on Collegiate Nursing Education (CCNE)
College of Public Health	Council on Education in Public Health (CEPH)
Lynn Pippenger School of Accountancy	Association to Advance Collegiate Schools of Business (AACSB)
School of Art & Art History	National Association of Schools of Art and Design (NASAD)
School of Music	National Association of Schools of Music (NASM)
School of Social Work	Council on Social Work Education (CSWE)
School of Theatre & Dance	National Association of Schools of Theatre (NAST), National Association of Schools of Dance (NASD)

The University of South Florida and all colleges, departments and degree programs therein establish certain academic requirements that must be met before a degree is granted. These requirements concern such things as curricula and courses, majors and minors, and academic residence. Advisors, directors, department chairs, and deans are available to help the student understand and arrange to meet these requirements, but the student is responsible for fulfilling them. At the end of a student's course of study, if requirements for graduation have not been satisfied, the degree will not be granted. For this reason, it is important for all students to acquaint themselves with all regulations and to remain currently informed throughout their college careers and to be responsible for completing requirements. Courses, majors, and requirements described in the Catalog may be suspended, deleted, restricted, supplemented, or changed in any other manner at any time at the sole discretion of the University and the USF Board of Trustees.

Degrees, Majors, and Concentrations (Authorized)

As of the date of this publication, the University is authorized to offer over 55 different degrees, with graduate majors authorized as follows. Click here to view the Graduate Majors (A-Z) .

108	Master's	164	Concentrations at the Master's Level
2	Education Specialist	15	Concentrations at the Specialist Level
53	Doctoral (Ph.D., Ed.D., Au.D., D.N.P., D.P.H., D.B.A.)	76	Concentrations at the Doctoral Level
3	Professional Doctoral (including M.D., D.P.T., PharmD.)	1	Concentration at the Professional Level

List of Majors

- Accountancy, M.Acc.
- Adult Education, M.A.
- Advanced Athletic Training, M.S.
- Advertising, M.S.
- Aging Studies, Ph.D.
- Applied Anthropology, M.A.
- Applied Anthropology, Ph.D.
- Applied Behavior Analysis, M.A.
- Applied Behavior Analysis, M.S.
- Applied Behavior Analysis, Ph.D.
- Architecture, M.Arch.
- Art History, M.A.
- Art, M.F.A.
- Athletic Training, M.S.
- Audiology, Au.D.
- Autism Spectrum Disorder and Intellectual Disabilities, M.A.
- Behavioral and Community Sciences, Ph.D.
- Bioinformatics and Computational Biology, M.S.B.C.B.
- Biology, M.S.
- Biomedical Engineering, M.S.B.E.
- Biomedical Engineering, Ph.D.
- Biotechnology, M.S.B.
- Business Administration, D.B.A
- Business Administration, M.B.A.
- Business Administration, Ph.D.
- Business Analytics and Information Systems, M.S.
- Cancer Biology, Ph.D.
- Cancer Chemical Biology, Ph.D.
- Cancer Immunology and Immunotherapy, Ph.D.
- Career and Technical Education, M.A.
- Cell and Molecular Biology, Ph.D.
- Chemical Engineering, M.S.Ch.

- Chemical Engineering, Ph.D.
- Chemistry, M.A.
- Chemistry, M.S.
- Chemistry, Ph.D.
- Child and Adolescent Behavioral Health, M.S.
- Civil Engineering, M.S.C.E.
- Civil Engineering, Ph.D.
- Communication Sciences and Disorders, Ph.D.
- Communication, M.A.
- Communication, Ph.D.
- Computer Engineering, M.S.C.P.
- Computer Science and Engineering, Ph.D.
- Computer Science, M.S.C.S.
- Counselor Education, M.A.
- Creative Writing, M.F.A.
- Criminal Justice Administration, M.A.
- Criminology, M.A.
- Criminology, Ph.D
- Curriculum and Instruction, Ed.S.
- Curriculum and Instruction, M.Ed.
- Curriculum and Instruction, Ph.D.
- Cybercrime, M.S.
- Cybersecurity, M.S.
- Economics, M.A.
- Economics, Ph.D.
- Educational Leadership, Ed.S.
- Educational Leadership, M.Ed.
- Educational Leadership, Ph.D.
- Educational Program Development, Ed.D.
- Electrical Engineering, M.S.E.E.
- Electrical Engineering, Ph.D.
- Elementary Education, M.A.
- Elementary Education, M.A.T.
- Engineering Management, M.S.E.M.
- English Education, M.A.T.
- English, M.A.
- English, Ph.D.
- Entrepreneurship in Applied Technologies, M.S.
- Environmental Engineering, M.S.E.V.
- Environmental Engineering, Ph.D.
- Environmental Science and Policy, M.S.
- Exceptional Student Education, M.A.
- Exceptional Student Education, M.A.T.
- Executive, M.B.A.
- Exercise Science, M.S.
- Finance, M.S.
- Foreign Language Education, M.A.
- Foreign Language Education, M.A.T.
- Foreign Language Education, M.Ed.
- French, M.A.
- Geography and Environmental Science and Policy, Ph.D.
- Geography, M.A.

- Geology, M.S.
- Geology, Ph.D.
- Gerontology, M.A.
- Global Sustainability, M.A.
- Health Administration, M.H.A.
- Health Informatics, M.S.H.I.
- History, M.A.
- History, Ph.D.
- Industrial Engineering, M.S.I.E.
- Industrial Engineering, Ph.D.
- Information Technology, M.S.I.T.
- Integrated Mathematical Oncology, Ph.D.
- Integrative Biology, Ph.D.
- Intelligence Studies, M.S.
- Latin American, Caribbean, and Latino Studies, M.A.
- Learning Design and Technology, M.S.
- Liberal Arts, M.A.
- Library and Information Science, M.A.
- Linguistics and Applied Language Studies, Ph.D.
- Linguistics: English as a Second Language, M.A.
- Management, M.S.
- Marine Science, M.S.
- Marine Science, Ph.D.
- Marketing, M.S.M.
- Mass Communications, M.A.
- Materials Science and Engineering, M.S.M.S.E.
- Mathematics Education (6-12), M.A.T.
- Mathematics Education, M.A.
- Mathematics, M.A.
- Mathematics, Ph.D.
- Mechanical Engineering, M.S.M.E.
- Mechanical Engineering, Ph. D.
- Medical Sciences, M.S.M.S.
- Medical Sciences, Ph.D.
- Medicine, M.D.
- Microbiology, M.S.
- Middle Grades Mathematics (5-9), M.A.T.
- Music Education, M.A.
- Music, M.M.
- Music, Ph.D.
- Nurse Anesthesia, D.N.P.
- Nursing Science, Ph.D.
- Nursing, D.N.P.
- Nursing, M.S.
- Pharmaceutical Nanotechnology, M.S.
- Pharmacy, Pharm.D.
- Philosophy, M.A.
- Philosophy, Ph.D.
- Physical Education, M.A.
- Physical Therapy, D.P.T.
- Physician Assistant Studies, M.P.A.S.
- Physics (Applied Physics), Ph.D.

- Physics, M.S.
- Political Science, M.A.
- Politics and International Affairs, Ph.D.
- Psychology, Ph.D.
- Psychology, M.A.
- Public Administration, M.P.A.
- Public Health, Dr.P.H.
- Public Health, M.P.H.
- Public Health, M.S.P.H.
- Public Health, Ph.D.
- Reading Education, M.A.
- Rehabilitation and Mental Health Counseling (Post-Bacc), M.A.
- Rehabilitation Sciences, Ph.D.
- Religious Studies, M.A.
- School Psychology, M.A.
- School Psychology, Ph.D.
- Science Education, M.A.
- Science Education, M.A.T.
- Social Science Education, M.A.T.
- Social Work, M.S.W.
- Social Work, Ph.D.
- Sociology, M.A.
- Sociology, Ph.D.
- Spanish, M.A.
- Special Education, Gifted, M.A.
- Speech-Language Pathology (Post-Bacc), M.S.
- Sport and Entertainment Management, M.S.
- Statistics, M.A.
- Supply Chain Management, M.S.
- Technology in Education and Second Language Acquisition (TESLA), Ph.D.
- Urban and Community Design, M.U.C.D.
- Urban and Regional Planning, M.U.R.P.
- Women's and Gender Studies, M.A.

University Administration

The University of South Florida is a member of the State University System (SUS) of Florida and is governed by the Florida Board of Governors and the University Board of Trustees.

Florida Board of Governors

For a current list of the Board of Governors (BOG), please refer to their website: http://www.flbog.org/

University Board of Trustees

The USF Board of Trustees was created in 2001 and is responsible for cost-effective policy decisions appropriate to the system mission and the implementation and maintenance of high quality education programs within the laws and rules of the State. The legislature also mandated a Campus Board for each of the following USF System institutions and campuses: USF St. Petersburg and USF Sarasota-Manatee. The members of each Campus Board are appointed by the USF Board of Trustees.

The 13 trustees include distinguished figures in the law, commerce, medicine, education, philanthropy and public policy leadership. Six trustees are appointed by Florida's governor and five trustees are appointed by the Board of Governors. The USF System Faculty Council President and USF System Student Advisory Council President also serve as trustees. The University of South Florida System President and President of the University of South Florida serves as Corporate Secretary. Information about each Trustee is available online at:
http://system.usf.edu/board-of-trustees/index.asp

Jordan B. Zimmerman, Chair
Leslie Muma, Vice Chair
Mike Carrere
Britney Deas
Stephanie E. Goforth
Michael E. Griffin
Oscar Horton
Deanna Michael
Harold W. Mullis, Esq., Chair
John B. Ramil
Byron E. Shinn
Charles Tokarz
Nancy H. Watkins

Chief Executive Officer of the USF System and President of USF: Steven Currall, Ph.D.

Provost and Executive Vice President of the USF System and USF Campus: Ralph Wilcox, Ph.D.

Office of Graduate Studies Administration

Reference USF Policy 11-001 - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-11-001.pdf

Sr. Vice Provost and Dean, Office of Graduate Studies	Dwayne Smith, Ph.D.
Associate Dean, Office of Graduate Studies	Ruth Bahr, Ph.D.

USF System Graduate Liaisons

USF	Dwayne Smith, Ph.D.
USF	Ruth Bahr, Ph.D.
USF St. Petersburg	Martin Tadlock, Ph.D.
USF Sarasota-Manatee	Karen Holbrook, Ph.D.
USF Health	Charles J. Lockwood, M.D., MHCM

College Deans

College of Arts and Sciences	Eric Eisenberg, Ph.D.
College of Behavioral and Community Sciences	Julianne Serovich, Ph.D.
Muma College of Business	Moez Limayem, Ph.D.
College of Education	Robert C. Knoeppel, Ph.D.
College of Engineering	Robert Bishop, Ph.D., P.E.
College of Global Sustainability	Govindan Parayil, Ph.D.
College of Graduate Studies	Dwayne Smith, Ph.D.
College of Marine Science	Jacqueline Dixon, Ph.D.
Morsani College of Medicine	Charles J. Lockwood, MD, MHCM
Taneja College of Pharmacy	Kevin Sneed, Ph.D.
College of Nursing	Victoria Rich, Ph.D.
College of Public Health	Donna Petersen, Ph.D.
College of The Arts	James Moy, Ph.D.
Honors College	Charles Adams, Ph.D.
Library	Todd Chavez, M.A.
Undergraduate Studies	Paul Atchley, Ph.D.

College Graduate Associate Deans (EGAD)

- http://www.grad.usf.edu/graduate-coordinators.php

College of Arts and Sciences	Bob Potter, Ph.D.
College of Behavioral and Community Sciences	Alicia Mendoza, Ph.D.
Muma College of Business	Jackie Reck, Ph.D.
College of Education	Anne Cranston-Gingras, Ph.D.
College of Engineering	Sanjukta Bhanja, Ph.D.

College of Global Sustainability	TBA
College of Graduate Studies	Ruth Bahr, Ph.D.
College of Marine Science	David Naar, Ph.D.
Morsani College of Medicine	Tricia Penniecook, Ph.D.
Morsani College of Medicine – Graduate Studies	Michael Barber, D.Phil.
Morsani College of Medicine – Rehabilitation Sciences	Laura Swisher, Ph.D.
College of Nursing	Catherine Gaines Ling, Ph.D.
College of Nursing	Theresa Beckie, Ph.D.
Taneja College of Pharmacy	Shyam Mohapatra
College of Public Health	Kay Perrin, Ph.D.
College of The Arts	Barton Lee

USF Graduate Council

For the most current list members, please refer to the website: http://www.grad.usf.edu/graduate-council.php

College of Arts and Sciences (4)	Gary Daughdrill
College of Arts and Sciences	Rocco Malservisi
College of Arts and Sciences	TBA
College of Arts and Sciences	TBA
College of Behavioral and Community Sciences (2)	Amy Davis
College of Behavioral and Community Sciences	Ray Miltenberger, Council Chair
Muma College of Business (2)	Robert Hooker
Muma College of Business	Shivendu Shivendu
College of Education (2)	Katie Tricarico
College of Education	TBA
College of Engineering (2)	TBA
College of Engineering	TBA
College of Marine Science (2)	Pamela Hallock Muller
College of Marine Science	Brad Seibel
Morsani College of Medicine (3)	Vrushank Dave, Vice-Chair
Morsani College of Medicine	Ingrid Bahner, Policy Chair
Morsani College of Medicine	TBA
College of Nursing (2)	Marcia Johansson, Curriculum Chair
College of Nursing	Harleah Buck
Taneja College of Pharmacy (2)	Manas Biswal
Taneja College of Pharmacy	Sheeba Varghese Gupta
College of Public Health (2)	Janice Zgibor
College of Public Health	TBA
College of The Arts (2)	TBA
College of The Arts	TBA
Libraries (1)	Maryellen Allen

USF Institution Locations

University of South Florida
4202 E. Fowler Avenue
Tampa, Fl 33620
(813) 974-2011
Website: www.usf.edu
Catalog: http://www.grad.usf.edu/catalog.php

University of South Florida Sarasota-Manatee
5700 N. Tamiami Trail
Sarasota, FL 34243-2197
(941) 359-4200
Website: http://usfsm.edu/
Catalog: http://usfsm.edu/catalog/

University of South Florida St. Petersburg
140 Seventh Avenue S.
St. Petersburg, FL 33701
(727) 87-1142
Website: www.usfsp.edu
Catalog: http://www.usfsp.edu/catalog/

Office of Graduate Studies Directory

4202 E. Fowler Ave., ALN226, Tampa, FL 33620 813-974-2846 www.grad.usf.edu

	Phone Number	Email
Senior Administration		
Dwayne Smith, Ph.D., Sr. Vice Provost and Dean, Office of Graduate Studies	(813) 974-7359	dsmith@usf.edu
Ruth Bahr, Ph.D., Associate Dean	(813) 974-7161	rbahr@usf.edu
Staff		
Ashlee John, Executive Administrative Specialist	(813) 974-7359	
TBA, Administrative Specialist		
Kokita Wilson, HR Liaison and Office Manager	(813) 974-3810	kwilson@usf.edu
TBA, Receptionist	(813) 974-2846	

Academics

Carol Hines-Cobb, Assistant Director, Academics	(813) 974-4239	cdh@usf.edu
Joseph Butts, Technology & Systems Manager, Academics	(813) 974-3586	tron@usf.edu
Mathdany Clark, Academic Services Administrator	(813) 974-2847	mnoel@usf.edu
Lisa Wetmore, Academic Services Administrator, Cybersecurity	(813) 974-3689	lwetmore@usf.edu

Accounting

Elizabeth Fernandez, Fiscal and Business Manager	(813) 974-	efernand@usf.edu
Javier Rodriguez, Fiscal and Business Specialist	(813) 974-9328	jrodriguez@usf.edu

Student Affairs

Gary Oliver, Assistant Director, Student Success	(813) 974-7935	goliver@usf.edu

Office of Postdoctoral Affairs (OPA)

Kiri Kirkpatrick, Ph.D., Associate Director of Postdoctoral Affairs and Graduate Student Development	(813) 974-0795	kiri@usf.edu
Brandis Baines-Waiz., Academic Program Specialist	(813) 974-3655	bwaiz@usf.edu

Graduate and Professional Student Council	(813) 974-2846	gpsc@grad.usf.edu

Office of Admissions - Graduate Admissions Contact:

Admissions	(813) 974-3350	admissions@usf.edu

Academic Calendar

Helpful Links:

Academic Calendar: https://www.usf.edu/registrar/calendars/
Thesis/Dissertation Deadlines: http://www.grad.usf.edu/ETD_Deadlines.php
Cultural/Diversity Events: http://www.usf.edu/diversity/about-dieo/upcoming-events.aspx
Attendance Policy for the Observance of Religious Days:
http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-045.pdf

Academic Calendar Dates for 2019-20 and beyond are pending approval from the University Calendar Committee and the University Board of Trustees. Note: Dates and times listed below are subject to change. For current information, refer to: https://www.usf.edu/registrar/calendars/

FALL SEMESTER 2019	
August 26	First day of classes
August 30	Last day to Drop/Add or late Register
August 30	Last day to pay fees
September 2	Labor Day holiday - No Classes & USF offices closed
September 23	Graduation Application Deadline
November 2	Last day to withdraw ("W") without academic penalty
November 11	Veteran's Day Holiday - No Classes & USF offices closed
November 28-29	Thanksgiving Holiday - No Classes & USF offices closed
December 4	Last day of classes
December 5-6	Reading Days
December 7	Final Exams begin
December 12	Final Exams End (end of term)
December 13-14	Tampa Commencement

SPRING SEMESTER 2020	
January 13	First Day of Classes
January 17	Last day to Drop/Add or late register
January 17	Last day to pay fees

January 20	Martin Luther King Jr. Holiday - No Classes & USF offices closed
February 10	Graduation Application Deadline
March 16-20	Spring Break - No Classes
March 28	Last day to withdraw ("W") without academic penalty
April 29	Last day of classes
April 30	Reading Day
May 1	Reading Day
May 2	Final Exams begin
May 7	Final Exams end (End of Term)
May 7-9	Tampa Commencement

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Summer 2020	
Session A and C	
May 18	First day of classes (Sessions A&C)
May 22	Last day to Drop/Add or late register
May 22	Last day to pay fees
May 25	Memorial Day Holiday - No Classes & USF offices closed
June 6	Last day to withdraw ("W") without academic penalty (Session A)
June 10	Graduation Application Deadline
June 26	Last day of classes (Session A)
June 27	Last day to withdraw ("W") without academic penalty (Session C)
July 3	Independence Day Holiday Observed - No Classes & USF offices closed
July 18	Last day of classes (Session C)
August 8	Tampa Commencement
Session B	

June 10	Graduation Application Deadline
June 29	First day of classes (Session B)
July 3	Independence Day Holiday Observed - No Classes & USF offices closed
July 6	Last day to Drop/Add or late register
July 6	Last day to pay fees
July 18	Last day to withdraw ("W") without academic penalty from Session B
August 7	Last day of classes (Session B)
August 8	Tampa Commencement

Updates for 2019-2020

USF Graduate Council (GC) and/or the Office of Graduate Studies (GS) approved on the date noted.

Policy	Revisions	GC Approved
Application of USF Credit	clarified wording	9/10/18
Non-Degree Seeking Students	clarified application of USF credit wording	9/10/18
Transfer of Credit	addressed transfer from completed master's to doctorate	9/10/18
Admissions	added statement to allow review of incomplete application	10/1/18
Major Professor	added language to address College administered majors	12/3/18
Comprehensive/Qualifying Exam	added language to make it explicit exams are taken *at USF*	12/3/18
Admission to Candidcay	cleaned up langauge and aligned policy to form	1/14/19
Conferral of Master's Degree	added language for how to award a master's degree whill in a doctorate	3/18/19
English Proficiency	revised policy for clarity and to streamline language	4/1/19
Thesis/Dissertation Format	revised policy to refer to ETD website	4/1/19
Enrollment Policies	moved language from ETD section to enrollment section	4/1/19

Programs/Majors	Degree	New/Terminated	GC Approved
Supply Chain Management (SCX)	M.S.	New Degree Program	3/18/19
Foreign Language Education (FME)	M.Ed.	New Major under existing CIP 13.1306 effective 201908	4/29/19
Integrated Mathematical Oncology (IMO)	Ph.D.	New Major under existing CIP 26.0911 effective 201908	9/10/18
Government (GOV)	Ph.D.	Change Title to *Political Science and International Affairs (PIA)* under existing CIP 45.0901 effective 201908	4/29/19
Real Estate (RST)	M.S.R.E.	Terminate Degree Program CIP 52.1501 effective 201908	2/4/19
Nurse Anesthesia (NAT)	M.S.	Terminate Degree Program CIP 51.3804 effective 201908	10/1/18

Saturday MBA (MBS)	M.B.A.	Terminate Major under existing CIP 52.0201 effective 201908	4/1/19
Civil Engineering (ECE)	M.C.E.	Terminate Major under existing CIP 14.0801 effective 201908	3/4/19
Environmental Engineering (EVE)	M.E.V.E.	Terminate Major under existing CIP 14.1401 effective 201908	3/4/19
Special Education, Motor Disabilities (AMD)	M.A.	Terminate Major under existing CIP 13.1001 effective 201908	4/29/19
Linguistics (LIN)	M.A.	Terminate Major under existing CIP 16.0102 effective 201908	4/29/19
Mathematical Education (AMA)	M.A.	Internal Suspension under existing CIP 13.1311 effective 201908	4/29/19
Science Education (SCE)	M.A.	Internal Suspension under existing CIP 13.1316 effective 201908	4/29/19

Major	Degree	**New/Changed/Terminated Concentrations**	**GC Approved**
Civil Engineering (ECE)	M.C.E.	Terminate: Geotechnical Engineering (GTL)	3/4/19
Civil Engineering (ECE)	M.C.E.	Terminate: Maerials Engineering and Science (MTL)	3/4/19
Civil Engineering (ECE)	M.C.E.	Terminate: Structural Engineering (STR)	3/4/19
Civil Engineering (ECE)	M.C.E.	Terminate: Transportation Engineering (TPT)	3/4/19
Civil Engineering (ECE)	M.C.E.	Terminate: Water Resources (WRS)	3/4/19
Nursing (Accelerated Masters) (NAS)	M.S.	Terminate: Adult-Gerontology Acute Care Nursing (NAG)	4/1/19
Nursing (Accelerated Masters) (NAS)	M.S.	Terminate: Adult-Gerontology Primary Care Nursing (NPG)	4/1/19
Nursing (Accelerated Masters) (NAS)	M.S.	Terminate: Clinical Nurse Leader (NCL)	4/1/19
Nursing (Accelerated Masters) (NAS)	M.S.	Terminate: Family Health Nursing (NFH)	4/1/19
Nursing (Accelerated Masters) (NAS)	M.S.	Terminate: Nursing Education (NED)	4/1/19
Nursing (Accelerated Masters) (NAS)	M.S.	Terminate: Pediatric Health Nursing (NPH)	4/1/19
Nursing (Accelerated Masters) (NAS)	M.S.	Terminate: Psychiatric-Mental Health Nursing (NPM)	4/1/19
Physics (PHY)	M.S.	Terminate: Applied Physics (APM)	4/1/19
Physics (PHY)	M.S.	Terminate: Atomic and Molecular Physics (AMZ)	4/1/19
Physics (PHY)	M.S.	Terminate: Laser Physics (LPZ)	4/1/19
Physics (PHY)	M.S.	Terminate: Materials Physics (MPZ)	4/1/19

Physics (PHY)	M.S.	Terminate: Optical Physics (OPZ)	4/1/19
Physics (PHY)	M.S.	Terminate: Semiconductor Physics (SCZ)	4/1/19
Physics (PHY)	M.S.	Terminate: Solid State Physics (SSZ)	4/1/19
Child and Adolescent Behavioral Health (CAB)	M.S.	Terminate: Developmental Disabilities (ABDD)	3/4/19
Child and Adolescent Behavioral Health (CAB)	M.S.	Terminate: Leadership in Child and Adolescent Behavioral Health (ABLC)	3/4/19
Child and Adolescent Behavioral Health (CAB)	M.S.	Terminate: Translational Research and Evaluation (ABTR)	3/4/19
Child and Adolescent Behavioral Health (CAB)	M.S.	Terminate: Youth & Behavioral Health (ABYB)	3/4/19
Communication Sciences and Disorders (CSD)	Ph.D.	Terminate: Hearing Sciences and Audiology (HAS)	9/10/18
Communication Sciences and Disorders (CSD)	Ph.D.	Terminate: Neurocomunicative Sciences (NCS)	9/10/18
Communication Sciences and Disorders (CSD)	Ph.D.	Terminate: Speech-Language Sciences (SLS)	9/10/18
Curriculum and Instruction (CUR)	M.Ed.	Terminate: Instructional Technology (SIT)	4/29/19
Curriculum and Instruction (CUR)	M.Ed.	Terminate: Secondary Education: Foreign Language Education (CFE)	4/29/19
Educational Program Development (EPD)	Ed.D.	Terminate: Administration of Special Education (ESE)	4/29/19
Educational Program Development (EPD)	Ed.D.	Terminate: Adult Educaiton (EAE)	4/29/19
Educational Program Development (EPD)	Ed.D.	Terminate: Vocational Education (EVO)	4/29/19
Elementary Education (AEE)	M.A.	Terminate: Early Childhood (MEA)	4/1/19
Elementary Education (AEE)	M.A.	Terminate: Language Arts (MLG)	4/1/19
Elementary Education (AEE)	M.A.	Terminate: Science and Mathematics (MSM)	4/1/19
Medical Sciences (MSG)	Ph.D.	Terminate: Anatomy (ANA)	4/29/19
Medical Sciences (MSG)	Ph.D.	Terminate: Biochemistry & Molecular Biology (BMB)	4/29/19
Medical Sciences (MSG)	Ph.D.	Terminate: Clinical and Translational Research (CTR)	4/29/19
Medical Sciences (MSG)	Ph.D.	Terminate: Microbiology and Immunology (MMI)	4/29/19
Medical Sciences (MSG)	Ph.D.	Terminate: Pathology and Laboratory Medicine (PML)	4/29/19
Medical Sciences (MSG)	Ph.D.	Terminate: Pharmacology and Therapeutics (PAT)	4/29/19
Medical Sciences (MSG)	Ph.D.	Terminate: Physiology and Biophysics (PAB)	4/29/19

Nursing (NUR)	M.S.	Terminate: Clinical Nurse Leader (NCL)	4/1/19
Nursing (RN to Masters (NBM)	M.S.	Terminate: Clinical Nurse Leader (NCL)	4/1/19

Graduate Certificates	**New/Changed/Terminated**	**GC Approved**
Health and Wellness Coaching (XHW)	New	9/10/18
Simulation Based Academic Fellowship in Advanced Pain Management (XSR)	Change title to *Advanced Pain Management Fellowship (XAPM)*	11/4/18
Biomedical Ethics (XBE)	Terminate	4/29/19
BRIDGE (XBR)	Terminate	4/15/19
Coastal Sustainability (XCN)	Terminate	4/15/19
Coastal Sustainable Management (XCG)	Terminate	4/15/19
Diasporas and Health Disparities (XDH)	Terminate	12/3/18
Environmental Health (XEH)	Terminate	4/29/19
Globalization Studies (XGO)	Terminate	12/3/18
Sustainable Tourism Leadership (XSR)	Terminate	4/15/19
Planning for Healthy Communities (XHT)	Terminate effective 201905	9/9/19

Questions about these updates may be directed to cdh@usf.edu **in the Office of Graduate Studies**

Graduate Faculty

The University of South Florida recognizes Graduate Faculty and Affiliate Graduate Faculty. Only Graduate Faculty, and Affiliate Graduate Faculty approved for such purposes, may serve as the Instructor of Record for graduate level courses.

Graduate Faculty Definition

Graduate Faculty is defined to consist of all tenure-track or tenured faculty appointed at the Assistant, Associate, or Professor rank, who holds a terminal degree or equivalent in their discipline. Graduate Faculty members are eligible to teach graduate courses and may direct and serve on masters, specialist, and doctoral level committees. To chair a doctoral level committee, a Graduate Faculty member must engage in current and sustained scholarly, creative, or research activities, such as publications, performances, exhibitions, patents, inventions and research grants.

Affiliate Graduate Faculty membership may be granted by the Office of Graduate Studies Dean to individuals who do not meet the University definition of Graduate Faculty, but whose skills or expertise meet criteria established by the College. Affiliate Graduate Faculty membership is in effect for a specified period of time and specific purposes. Affiliate members may be eligible to serve on masters, specialist, and doctoral level committees, to direct master's and specialist's level committees, and to co-direct doctoral level committees, at the discretion of the College.

Affiliate Graduate Faculty can only serve as the Instructor of Record when they have a terminal degree in the discipline and are approved to teach graduate courses in that field. Emeritus Professors and retired or recently resigned professors may also be appointed as Affiliate Graduate Faculty with the approval of the College and Office of Graduate Studies Dean. For approval, a current CV and request for approval, including the reason for the request (e.g. serving on a master's student supervisory committee), is submitted through the Major, the College, and the Office of Graduate Studies. For procedures, contact the Office of Graduate Studies.

Graduate Faculty Approval – Graduate faculty is defined as noted above; Colleges and Departments may have additional requirements. The Office of Graduate Studies will maintain a list of Graduate Faculty along with approval guidelines from the Colleges and Departments.

List of Graduate Faculty

References:

SACSCOC Comprehensive Standard 3.7.1, http://www.sacscoc.org/pdf/081705/faculty%20credentials.pdf for specific information and requirements in reference to the teaching of graduate courses.

Also, note, per USF Policy 10-115 – Faculty Credentials for Teaching Undergraduate and Graduate Courses - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-115.pdf

Admissions

University of South Florida
Office of Admissions
4202 East Fowler Avenue, SVC1036
Tampa, FL 33620-5816

Website: http://www.usf.edu/admissions/graduate/index.aspx
E-mail: GradAdmissions@usf.edu
Phone: 813-974-3350
Fax: 813-974-9689

Dean of Admissions Glenn Besterfield
Interim Director Sean Gilmore

University Admissions Criteria and Policies

USF Regulation USF3-008: http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf3.008.pdf

Statement of Principles

In graduate admission decisions, multiple sources of information should be used to ensure fairness, promote diversity and balance the limitations of any single measure of knowledge, skills, or abilities. The sources may include: undergraduate grade point average, letters of recommendation, personal statements, samples of academic work, portfolios, auditions, professional experience related to proposed graduate study, as well as nationally known, standardized test scores. It is the responsibility of each graduate major to select admissions criteria that best predict success in their specific field and to determine the weight given to each measure. Graduate programs have the option of admitting students without all required components of the specified admission requirements for the major, if items submitted from the student confirm a likelihood for success in the graduate major.

None of the sources of information, particularly standardized test scores, should be used in isolation nor should such scores be used in combination or separately to establish minimum or "cut off" scores. Major specific guidelines for the use of standardized test scores should be developed based on the experience of a given department with its pool of applicants. (*Adapted from the GRE "Guide to the Use of Scores" 2003-2003*)

Admission Requirements

Each applicant to a graduate degree program at the University of South Florida is required to meet the following minimum requirements:

1. An applicant must have **one** of the following (a, b, or c):
    1. A bachelor's degree from a regionally accredited institution and satisfying at least one of the following criteria:
        1. "B" average (3.00 on a 4.00 scale) or better in all work attempted while registered as an undergraduate student working for a degree, **or**
        2. "B" average (3.00 on a 4.00 scale) or better in all work attempted while registered as a graduate student working for a graduate degree.
    2. A bachelor's degree with a "B" average or better from a regionally accredited institution and a previous graduate degree with a "B" average or better from a regionally accredited institution. In cases where an applicant has a bachelor's and a graduate degree at the time of admission, the credentials and GPA of the graduate degree will be the determining factor for admission.

3. The equivalent bachelors and/or graduate degrees from a foreign institution. Bachelor's degrees from institutions in the European Higher Education Area (EHEA) are considered equivalent based on the Bologna Accord. For applicants with a 3-year Bachelor's Degree with less than 120 hours, from Non-Bologna Accord Institutions, a transcript evaluation from a NACES member is required to confirm equivalency.
2. Submission of standardized test scores if required by the graduate degree program. For Graduate Majors that require the GRE, the Personal Potential Index (PPI) may be required. Refer to individual major admission requirements for information.
3. Applicants from countries where English is not the official language must also demonstrate proficiency in English* as outlined in the section on English Proficiency. Applicants who earn a baccalaureate or equivalent degree at a foreign institution where English is the language of instruction (for the institution and not just the major) may meet this requirement. However, other related factors (including test scores) will also be considered. Medium of Instruction must be documented on the transcript or on an official Certificate of Medium of Instruction from the Institution
4. All specific and additional requirements of the graduate major to which admission is sought (including requirements to submit standardized test scores) consistent with the above Statement of Principles.

The Department Chair and College Dean must approve any exceptions to these requirements before they will be considered by the Office of Graduate Studies. The reason for the waiver and related documentation must be included on the Graduate Application Referral form.

**International students who are seeking employment as a teaching assistant (in departments that offer them) must meet additional English Language Requirements.*

Application Process (How it works)

Graduate applicants are urged to submit accurate and complete information **as early as possible**. Applications and supporting documents received after the application deadline will only be acted upon at the discretion of the graduate major. They will be kept on file for up to one year. At the request of the applicant or graduate major, they will be processed for the next available term.

The Graduate Admissions Office and the Graduate Department review your application for admission to graduate study at USF. Once the Graduate Department reviews your eligibility for its graduate major they will forward their decision to the Graduate Admissions Office which, in turn, will issue the official decision.

If you are a foreign graduate applicant, the International Services Office (http://global.usf.edu/is/) will evaluate your financial and immigration documents after you are admitted to determine your eligibility for a student visa. Your financial statement must be dated within 12 months of the starting the degree program. Each of these offices may request additional documents from you to make a decision.

For a complete list of graduate majors and deadline dates please visit the Office of Graduate Studies website at http://www.grad.usf.edu/programs.php

Graduate Admission Application Deadlines

MASTER'S AND EDUCATION SPECIALIST DEGREES	Admission for Fall Semester	Admission for Spring Semester	Admission for Summer Semester
• Applications received by the Priority Deadline will receive maximum consideration. • Applications received after the Priority deadline, but by the Final University Deadline, are considered on a space available basis. • Applications must be complete with all required information by the stated deadline. Any application materials received after the deadline may be reviewed on a space-available basis. Check with the Graduate Major Director for availability or to discuss options for admission in a subsequent term.			
Priority Deadline (for funding and consideration)	Refer to Specific Major	Refer to Specific Major	Refer to Specific Major
Final University Deadline Domestic Applicants	June 1	October 15	February 15
Final University Deadline International Applicants	June 1	October 15	February 15

DOCTORATE DEGREES	Admission for Fall Semester	Admission for Spring Semester	Admission for Summer Semester
• Applications received by the Priority Deadline will receive maximum consideration. • Applications received after the Priority deadline, but by the Final University Deadline, are considered on a space available basis. • Applications must be complete with all required information by the stated deadline. Any application materials received after the deadline may be reviewed on a space-available basis. Check with the Graduate Major Director for availability or to discuss options for admission in a subsequent term.			
Priority Deadline (for funding and consideration)	Refer to Specific Major	Refer to Specific Major	Refer to Specific Major
Final University Deadline Domestic Applicants	February 15	October 15	February 15
Final University Deadline International Applicants	February 15	October 15	February 15

Additional Requirements for International Applicants

In addition to meeting the published application deadline for the Major of interest, all immigration documents should be submitted as soon as possible, but must be on file at USF no later than the deadlines listed above. Foreign applicants who are outside the U.S. are required to apply for a visa. Depending on the country of origin, this may take a few months. So the deadlines for these international applicants may be earlier than the deadline for the Major and these applicants must apply no later than the posted International deadline. They are strongly encouraged to apply as early as possible. Foreign applicants who are in the U.S. and are currently on a visa may use the domestic application deadline dates.

Application Checklist (To-Do-List)

To assist you in the admissions process the following is your *To-Do-List*. To expedite the processing of your application please upload a copy of all of your supporting documents when you submit your application on line. You will also need to send official transcripts and test scores. If you are admitted to a graduate major.

1. Fill out the Graduate Application on line and upload all supporting documents
2. List all post-secondary institutions you have attended on the application
3. Pay the Application Fee
4. Upload through the online application a copy of transcripts of all prior post-secondary courses taken (including translations and evaluations for international transcripts). If you are admitted, you must ALSO have official and final transcripts sent to the Office of Admissions.
5. Upload through the online application a copy of your test score reports. If you are admitted, you must also have official Test Scores sent to USF
6. Review and respond to Conduct Clearance Policy (Legal Disclosure Statement)
7. Review Florida Residency Policy for Tuition Purposes and provide documents, if needed

1. Graduate Application: https://secure.vzcollegeapp.com/usf/

Applicants should also check with the Graduate Major to determine if they require any additional, supporting documents beyond the ones listed here. Admission requirements may be found in the Major listing in the Catalog. Applicants should upload a copy of each supporting document required by the major through the on-line application when it is submitted. However, they may upload additional documents after the application has been submitted. For instruction on uploading, go to http://www.usf.edu/admissions/documents/how-to-upload-grad-adm-docs.pdf

2. Application Fee:

All applicants are required to submit an application fee of $30.00 USD for admission to the University of South Florida. Students may apply for multiple majors, with only one application fee being required per every 12 month period from the date of initial application. (USF Regulation USF4-0107: Fees, Fines and Penalties http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.0107.pdf. If you attended USF as a former degree seeking student or non-degree student then you will also be required to submit the application fee. Applicants have the option to pay their application fee by credit card (Master Card or Visa issued from a U.S. bank), by E-Check (personal checking/savings account issued from a U.S. bank), or through Flywire through the Graduate Online Application. The Online Graduate Application will not be processed if the application fee is not paid. ALL APPLICATION FEES SUBMITTED ARE NON-REFUNDABLE.

3. Transcripts:

One (1) complete official transcript from all institutions of higher learning attended by the applicant is required of all students who are admitted and matriculate at USF (reference USF Policy 10-044). At least one transcript must show that the bachelor's degree was completed prior to the start of the graduate major at USF. Former USF students should not submit their USF transcript; it is already on file. However, they must list USF as a post-secondary institution on the application. Applicants should upload copies of all other transcripts to expedite the processing of their applications. These uploaded transcripts are considered unofficial.

Please upload them through the on-line application. Any offer of admission based on unofficial transcripts is considered "provisional" and **will not** be finalized until official transcripts are received in a sealed envelope from the Office of the Registrar where the applicant attended. All transcripts must be in English; International applicants must submit original language transcripts and a certified English translation. It is the applicant's responsibility to have transcripts translated and evaluated* before submitting them as part of the graduate application packet. If they are applying while still completing an undergraduate degree, they must submit transcripts of at least six (6) semesters of completed undergraduate work.

*All foreign transcripts that are not in English must be accompanied by a certified English translation. Documents signed by a notary or other public official with no affiliation to the institution of higher learning will **not** be accepted. Some graduate majors require a **course-by-course** evaluation. In the event that the university receives documentation that is questionable, or suspicious in any way, the university will require the applicant to obtain a course-by-course evaluation from a foreign transcript evaluation service. Refer to the Graduate Admissions' website for a list of evaluation services (http://www.usf.edu/admissions/graduate/application-requirements/transcripts-foreign.aspx)

Bologna Process – Applications from the European Higher Education Area

USF accepts applications from prospective graduate students with undergraduate degrees from countries that subscribe to the Bologna Process. Applicants with three-year degrees from universities in the European Higher Education Area (EHEA) may be considered for admission to graduate majors, at the discretion of the Department (or equivalent) and College that offer the Major and with the approval of the Office of Graduate Studies, under the following condition:

Official documentation is presented to demonstrate that a three-year degree (at least 180 ECTS) has been awarded prior to USF matriculation by an institution within the European Higher Education Area (EHEA), defined by the Bologna Declaration of 1999. Where applicable, diploma supplements should be included

with transcripts and other documents required to demonstrate degree completion. An up-to-date, official listing of Bologna signatory countries may be found at www.ehea.info.

Non-Bologna Institutions

Transcripts for applicants from non-Bologna Accord Institutions must be accompanied by an evaluation of the bachelor's degree by an independent third-party member of the National Association of Credential Evaluation Services (NACES). Confirmation of the baccalaureate degree as equivalent is required and will be jointly determined by relevant major faculty, the Office of Admissions, and the Office of Graduate Studies.

4. Test Scores

GRE (Graduate Record Examination)*: http://www.gre.org

Applicants to graduate majors requiring the GRE must submit GRE test scores earned within five (5) years of the desired term of entry. Official scores must be submitted to USF directly from the Educational Testing Service, but applicants should upload with the application unofficial copies of their test scores to expedite the processing of their applications. Any offer of admission based on unofficial scores is considered "provisional" and will not be finalized until official scores from ETS are received. The institution code for USF is 5828 and applies to all tests administered by ETS.

** The GRE requirement is determined by the individual graduate majors. Please contact your major of interest directly for additional information.* **Editor's Note: GRE has a new score scale; scores listed on the Major pages in this catalog may reflect the old scale.** *Refer to the GRE Concordance Tables to see how the scores compare. http://www.ets.org/s/gre/pdf/gre_guide.pdf or http://www.ets.org/s/gre/pdf/concordance_information.pdf*

GMAT (Graduate Management Aptitude Test): http://www.gmac.com/gmat.aspx

Applicants to majors in the Muma College of Business should submit GMAT** scores earned within five (5) years of the desired term of entry. Official scores must be submitted to USF directly from the Pearson VUE Testing Service, but applicants may provide unofficial copies of their test scores to expedite the processing of their applications. Any offer of admission based on unofficial scores is considered "provisional" and will not be finalized until official scores from Pearson VUE are received. The following are the Pearson VUE institution codes for USF majors.

VP9-M4-23 Ph.D. in Business Administration	VP9-M4-67 M.A. in Economics
VP9-M4-04 Executive M.B.A.	VP9-M4-86 M.S. in Finance
VP9-M4-41 Hospitality Management, USF-SM	VP9-M4-17 M.S. in Management
VP9-M4-97 M.B.A., Full Time	VP9-M4-66 M.S. in Management Info. Systems
VP9-M4-80 M.B.A., Part Time	VP9-M4-40 M.S.M. in Marketing
VP9-M4-01 M.B.A., USF Sarasota-Manatee	VP9-M4-74 M.S.R.E in Real Estate
VP9-M4-25 M.B.A., USF St. Petersburg	VP9-M4-48 M.S. in Entrepreneur in Applied Tech.
VP9-M4-18 Masters in Accountancy	VP9-4J-76 Health Admin., College of Public Health

** Applicants may not have to submit a GMAT if they have taken the GRE. Please contact the major of interest directly for additional information.

MCAT

For those majors that may require or accept the MCAT, the test typically must be taken with the last five (5) years; check with the Graduate Major for specific requirements

English Proficiency

Applicants whose native language is not English must demonstrate proficiency in English by submitting acceptable scores on one of the English proficiency tests listed below. Scores must have been earned within two (2) years of the desired term of entry. Applications submitted with English proficiency scores that do not meet the minimum requirements will be denied.

Note – the following test scores are for the purposes of Admissions and do not demonstrate English Proficiency for Teaching Assistant (TA) positions. For eligibility as a Teaching Assistant (TA), go to: https://www.usf.edu/graduate-studies/funding/graduate-assistantships-resource-center-graduate-assistant-eligibility.aspx .

a. Test of English as a Foreign Language (TOEFL iBT)	79 or higher
b. International English Language Testing System (IELTS)	6.5 or higher
c. INTO English Language Assessment (IELA)	176 or higher (with minimum sub scores of 169)
d. Cambridge English First (FCE/B2 First)	176 or higher (with minimum sub scores of 169)
e. Cambridge English Level 1 Advanced/Business (C1)	180 or higher
f. Cambridge English Level 2 Proficiency/Business (C2)	200 or higher
g. Pearson Test of English Academic (PTE-A)	53 or higher
h. Graduate Record Exam (GRE) Exam Verbal Score	153 or higher
i. Graduate Management Admission Test (GMAT) Verbal	30 or higher

By successfully completing INTO USF's Academic English Program Level 6 or the following INTO USF courses: EAP 1850 and EAP 1852 with a Satisfactory grade.

* Proof of English proficiency (additional documentation or exam scores) may be requested based upon information provided in the application.

English Proficiency Exemptions

A student may qualify for an exemption from taking an English Proficiency Examination for the purpose of Admissions if one of the following criteria is met:

- Native speaker of English. (List of English Speaking Countries: https://www.usf.edu/admissions/graduate/admission-information/english-speaking-countries.aspx)

Earned a baccalaureate or higher degree at a regionally accredited institution in the United States.

- Successfully completing INTO USF's Academic English Program Level 6 or the following INTO USF courses: EAP 1850 and EAP 1851 with a Satisfactory grade.
- Earned a baccalaureate degree or higher at a foreign institution where English is the language of instruction (for the institution and not just the major) may meet this requirement. However, other related factors (including test scores) will also be considered. Medium of Instruction must be documented on the transcript and on an official Certificate of Medium of Instruction from the Institution.

English Proficiency for Assistantship Eligibility

International students from countries from predominantly non-English-Speaking Countries who want to be considered for a teaching assistantship must show proficiency in spoken English even if their English proficiency examination requirement has been waived for admission to a graduate program.

PLEASE NOTE: International students from countries other than those listed in Appendix C of the *Policy on Spoken English Proficiency for Graduate Teaching Assistants/Associates/Graduate Instructional Assistants* (http://www.grad.usf.edu/International_Teaching_Assistants_Handbook.php) who want to be considered for a teaching assistantship must show proficiency in spoken English even if their TOEFL has been waived or accepted for admission to a graduate major. They need a minimum score of 26 on the spoken portion of the Internet-based TOEFL (iBT) or 160 on the spoken portion of the TOEIC test administered by ETS http://www.ets.org/toeic.

Please reference http://www.usf.edu/admissions/international/graduate/requirements-deadlines/english-proficiency.aspx for more information on language requirements.

5. Conduct Clearance Policy (Legal Disclosure Statement): All graduate applicants are required to answer the Conduct Clearance questions of the graduate application. The applicant will not be notified of the admission decision until answers to the two questions have been received. Applicants who meet the criteria for disclosure must provide specified documents and be reviewed by the Vice President of Student Affairs or his/her designee, if warranted.

6. Florida Residency Policy: Graduate students are typically considered "independent" for tuition purposes. Applicants desiring classification as Florida residents for tuition paying purposes must sign and complete the Florida Residents section of the Florida Residency Classification page of the Graduate Application. **Incomplete or unsigned forms will be classified as non-Florida residents.** The Office of Graduate Admissions will classify applicants as Florida residents if they have provided a minimum of two forms of documentation that verifies they began living in Florida at least twelve months prior to the first day of classes of their admitted term of entry. Additional documentation other than what is required may be requested in some cases. All documentation is subject to verification. For assistance with residency questions contact gradadmissions@usf.edu

Students are responsible for checking their residency classification when admitted to the University of South Florida. The residency classification is noted on the official acceptance letter. If students feel that their initial classification is in error, they have until the last day of the term to contact the appropriate admissions office and request a re-evaluation. After students have completed their first semester of study they may still seek to have their residency reconsidered; however, they must then submit a Request for Reclassification Form with the Office of the Registrar. This must be filed by the 5th day of classes for the term being requested. For more information in on Residency refer to: Independent Student: the Registrar's webpage. For information on reclassification go to http://www.registrar.usf.edu/Residency/Deadlines.php

Application Documents Access/Forward/Return Policy

No application, test scores, transcripts, letters of recommendations, or other documents submitted with the application packet will be returned to the applicant or forwarded to another institution/third party. The Office of Graduate Admissions applicant file is not to be released to the applicant or other third parties. Requests, subpoenas, or court orders are to be forwarded to the Office of the General Counsel after review by the Assistant Director of Graduate Admissions. Applicants once admitted and enrolled during the term of admission may request access to their student file at the Office of the Registrar. Letters of Recommendation that the applicant has waived the right to view (indicated on Request for Recommendation Form) are not to be given, copied or viewed by the applicant or third parties. Requests for degree/enrollment verification information should be referred to the Office of the Registrar.

The Office of Graduate Admissions graduate application files may be copied and released to USF staff conducting legitimate University business.

Additional Requirements of Majors (If applicable)

Many majors require additional application materials such as resumes, writing samples, or letters of recommendation. These items should be uploaded through the online application. Check with the graduate major to see if you should also send the paper documents directly to the appropriate department/major. These materials will be available electronically to the appropriate major if sent with the application packet.

Final Admission Classification

Applicants accepted for admission whose final, official documents (transcripts and/or test scores) have been received by the Office of Graduate Admissions are admitted as "Final." The admission file is complete.

Provisional Admission Classification

Applicants accepted for admission whose final, official documents (e.g. transcripts) have not been received by the Office of Graduate Admissions are admitted provisionally pending receipt of these missing items. The final, official transcripts documenting completion of the required degree prior to the start of graduate study at USF must be received before a second semester registration is permitted. During the first semester, the Office of Graduate Admissions will place a registration hold on the student's file. When the missing documents are provided to the Office of Graduate Admissions the registration hold will be removed.

Exception Admission Classification

The University may admit new enrollees as exceptions to the Board of Trustees minimum requirements and/or to the admission requirements for the Major. To be considered for an exception, applicants should present evidence that might account for the previous academic record and demonstrate potential for academic success. Examples of this evidence include excellent letters of recommendation from trusted academicians, performance in graduate courses taken as a post-bachelor's student, professional experience in the discipline for a period of time, etc. Each request for an exception must include a statement describing the special circumstances of the applicant and a brief justification for the exception. It is the discretion of the Major, College, and Office of Graduate Studies to accept exception application requests.

Conditional Admission Criteria

A major and/or college may admit students conditionally in anticipation of the applicant's successful completion of additional requirements separate from University minimum requirements. These conditions may include attendance in specific core or remedial courses and/or a specific earned GPA for those courses. Failure to satisfy those conditions by the deadline established by the major will result in academic dismissal from the major. The College/Graduate Major will submit a Dismissal Form (http://www.grad.usf.edu/student-forms.php) to the Office of Graduate Studies to initiate dismissal

Deferment of Admission Request

An applicant's acceptance is granted for the semester and the particular major specified in the official acceptance notification. In order to validate that acceptance, the applicant must enroll for that semester. Applicants who do not validate their admission may contact the Graduate Director and request a Deferment of Admission. This request must be made in writing within 12 months of the initial requested entry date and prior to the major's application deadline for the new term. If a request for Deferment of Admission is not activated within the 12 months, a new application and fee must be submitted for future consideration.

Applicants who were admitted provisionally upon receipt of official test scores and/or transcripts must supply those missing items prior to having their deferment decision processed by the Office of Graduate Admissions. International applicants must also provide a new financial statement dated no earlier than 12 months before the requested date of entry.

Special exemption to this policy may be granted to active duty U.S. military personnel who receive military orders that prevent them from beginning a graduate major during the requested term. These applicants may have their admission honored for up to 2 years, pending approval from their academic major, and proper documentation of their deployment. These extensions would be granted on a case-by-case basis.

Update of Admission Request

If an admission decision has not been offered and the applicant wants to be considered for a future semester, the applicant must request that the Office of Graduate Admissions update the application and specify the new enrollment date. This request must be made in writing within 12 months of the initial requested entry date and must be received no later than the major's application deadline for the semester desired. Applications are held for only 12 months. If a request for change in entry date is not received in the specified time, a new application and fee must be submitted. The Office of Graduate Admissions will not process any update requests without first receiving all official transcripts and required test scores.

Denial of Admission / Appeal for Reconsideration Criteria

Applicants denied admission will be given timely notice by email or postal service. Denied applicants who meet the minimum standards may request reconsideration in writing to the Graduate Director of the major to which they applied. This must be done within 30 days of the date of denial. The request should present additional evidence of potential for academic success at USF and contain reasons why reconsideration is warranted. Applicants denied admission to a major are eligible to apply as a non-degree seeking student and enroll as special (non-degree seeking) students, although course selection restrictions may apply. Non-degree applications must be submitted online to the Office of the Registrar.

Activation of Admission

An applicant's acceptance is granted for the semester and the particular major specified in the official acceptance notification. In order to validate the acceptance, the applicant must enroll for that semester. Applicants who do not validate their admission may contact the Graduate Director and request a Deferment of Admission. This request must be made in writing within 12 months of the initial requested entry date and before the major's application deadline for the new term. If a request for Deferment of Admission is not activated within the 12 months, a new application and fee must be submitted for future consideration.

Reinstatement and Re-application for Admission Policies

A graduate student who is not registered and enrolled for a minimum of six (6) credits in a 12-month period is automatically placed in inactive status (refer to the Continuous Enrollment Policy for more information). Students who wish to continue their studies must be reinstated or re-apply for admission to the major. Both of these are at the discretion of the Major and are not guaranteed. These policies do not apply to students who have been academically dismissed from the University for Academic Dishonesty.

Reinstatement

For students who the Major anticipates will complete their degree within their original time limit:

- Students must apply for reinstatement using the *Graduate Major Reinstatement Form*.
- Students who were on academic probation during their last enrollment should consult the Academic Probation Policy for guidance on requirements. Probation will resume on reinstatement.
- Students who were in Doctoral Candidacy will remain at that status.
- Students who are reinstated may choose the original or any subsequent Graduate Catalog
- Students must enroll for a minimum of six hours graduate credit in their first semester of re-enrollment.

For students who will exceed their time limit for degree completion, but will not be affected by course currency issues (i.e. will finish within ten years of initial admission date in the graduate major)

- Students must apply for reinstatement using the *Graduate Major Reinstatement Form* and also submit the *Time Limit Extension Request*, including benchmark information.
- Students who were on academic probation during their last enrollment should consult the Academic Probation Policy for guidance on requirements. Probation will resume on reinstatement.
- Students who were in Doctoral Candidacy will remain at that status.
- Students who are reinstated may choose the original or any subsequent Graduate Catalog.
- Students must enroll for a minimum of six hours graduate credit in their first semester of re-enrollment.
- Students who have been Academically Dismissed from the University for Academic Dishonesty may not apply to any graduate major at USF.

Re-application for Admission

Students who have exceeded their time limit for degree completion and/or course currency limits (i.e. ten years from their initial admission date in the graduate major) must re-apply for admission. This will require completion of all degree requirements as posted in the Graduate Catalog in effect at the semester of admission, including such elements as comprehensive exams, thesis/dissertation hours. The Major should evaluate the student's transcript to determine if any of the previous coursework may be transferred in as part of the admission process (note: only structured courses may be considered for transfer – see Transfer of Credit Policy). This will require documentation of course currency through a syllabus-by-syllabus comparison.

To be admitted, the application and all supporting materials must be submitted by the Major's posted application deadline as noted in the Graduate Catalog. These materials include:

- **Graduate Application:** to re-apply for admission, students must submit a new graduate application, application fee, and any required supporting materials by the application deadline for the major.
- **Admission Requirements:** Students must meet the Admission Requirements posted in the Graduate Catalog for the Major to which they are reapplying.
- **Catalog Year:** Students who are readmitted must meet the admission standards and degree requirements and policies in the Graduate Catalog in effect at the time of readmission.
- **Prior Coursework taken at USF:** Coursework taken at USF prior to readmission may be accepted toward the degree requirements at the discretion of the Department. Refer to the Course Currency Policy for time limits on coursework applied toward the degree. Students will be required to take new coursework.
- **Enrollment:** A decision to readmit is only applicable to the semester for which it was offered. Students who do not enroll for that term will have to resubmit an application for any future semester.
- **Doctoral Candidacy:** Students who are readmitted to a doctoral major who were previously admitted to doctoral candidacy must retake the Qualifying Exam and be Admitted to Doctoral Candidacy.

Change of Graduate Major

A change of graduate major allows a student to withdraw from his/her current graduate major and enter into a different graduate major. A change of graduate major:

- will NOT be considered for graduate students in their first semester of study
- is permissible only for a continuing graduate student enrolled for study in a particular major who wishes change to another major at the same or lower degree level
- requires a student to be in good academic standing
- is up to the discretion of the student's new major (note: some majors may require another admission application to be submitted and reviewed)
- may affect the student's financial aid status
- is eligible for Academic Renewal of grades for courses taken in the previousmajor (Refer to the Academic Renewal Policy for information)
- restarts the time limit with the admission to the new graduate major.
- requires the submission of a Change of Graduate Major Application and approval by the Office of Graduate Studies

- requires students to meet all requirements of the new Major as specified in the USF Graduate Catalog of their choice as per the Graduate Catalog policy. See policy for full information and restrictions.

* Students not in good academic standing must consult with the Office of Graduate Studies prior to initiating a Change of Graduate Major Application. Students who have less than a 3.00 as required to be in good standing may still be considered for a change of graduate major if the new graduate major is willing to accept them into the degree program.

Students may view the procedures and obtain the Change of Graduate Major Application at http://www.grad.usf.edu/inc/linked-files/GRADUATE_SCHOOL_Chg_of_Program_Application.pdf. Students must consult with the new major and Office of Graduate Studies before completing any paperwork.

Students with Disabilities Policy

Applicants with disabilities apply for admission under the same guidelines as other applicants. Applicants believing that a disability has had an impact on grades, course choice, or standardized admission test scores, should request consideration of this during the admissions process. Applicants requesting substitution of departmental guidelines will need to contact the appropriate department chairperson. Please submit supporting documentation when requesting a disability exception. Applicants bear the responsibility for providing documentation of their disabilities.

The University reviews documentation and determines if students are eligible for services and accommodations because of disabilities. The Office of Student Disability Services is charged with the task of determining eligibility. Accommodations and services are not provided on a retroactive basis. Approval must be given prior to receiving services or accommodations. The process begins when students provide documentation of disability and meet with a coordinator in the Office of Student Disability Services to request in writing services and accommodations. Any faculty members or students who have questions about this process are encouraged to contact the Office of Student Disability Services at (813) 974-4309 or visit the website at http://www.sds.usf.edu/

Registration and General Information

Parking Information and Campus Maps

For information on USF Parking Services, policies, and regulations, refer to:

USF Parking and Transportation Services website: http://www.usf.edu/administrative-services/parking/

Campus maps available: http://www.usf.edu/administrative-services/parking/maps/index.aspx

USF Regulations:
USF 4.0010 Parking General Guidelines, Registration, Penalties and Rates: http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.0010.pdf

Also reference 4.00211 through 4-00219 and 4-0023 through 4-0029, FAC, available at: http://regulationspolicies.usf.edu/regulations/

Office of the Registrar

Website: http://www.registrar.usf.edu/
E-mail: regquest@admin.usf.edu
Phone: 813-974-2000
TTY: 813-974-4488

The Office of the Registrar maintains the official academic records for all students and course registrations for currently enrolled students. Students are encouraged to contact the Office of the Registrar about general questions concerning academic policies and procedures of their current registration or academic record. Note: Each student must be aware of the University's academic policies and procedures insofar as they affect him/her.

OASIS

Students use a self-selected personal identification number (PIN) in the **University's Online Access Student Information System** (OASIS) to:

- view registration appointment information
- view registration hold information
- view the Schedule of Classes
- register and drop/add courses
- view their grades
- request address changes
- request privacy
- request transcripts

Registration Information

USF Regulation USF4-0101, http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.0101.pdf

Register for Classes

To register for classes students must login to the OASIS system. Current course offerings and registration requirements are listed in the Schedule of Classes. Note that some courses may require permits from the department for registration.

OASIS: https://www.usf.edu/registrar/register/
Schedule: http://www.registrar.usf.edu/ssearch/search.php

Late Registration

Degree-seeking students who do not register prior to the first day of classes may late-register the first week of classes. A late registration fee is charged during this week. To avoid cancellation of registration, fees and tuition are due and payable for all registered courses of record on the fifth day of classes (end of drop/add period). Students are responsible for verifying the accuracy of their course registration by the end of the drop/add period (i.e. by the fifth day of classes). In the event there are courses incorrectly listed or missing on the record, students should go into OASIS and make the necessary corrections. Course registration not corrected by the end of the fifth day of classes will result in liability of tuition and fees. If courses need to be added or dropped after the fifth day of classes, refer to the Add / Drop sections.

Medical Requirements for Registration

Immunization Policy: http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-33-002.pdf
Forms: http://www.usf.edu/student-affairs/student-health-services/immunizations/index.aspx

Student Health Services is charged with the responsibility of evaluating and maintaining medical requirements for registration for all University of South Florida students. Florida law (Section 1006.69 Florida statute) requires that all admitted Florida university students be aware of MENINGOCOCCAL MENINGITIS and HEPATITIS B, two diseases that may be prevented by vaccination. The vaccines for each of these diseases are available at the University of South Florida Student Health Services. Please refer to http://www.shs.usf.edu/immunizations.aspx for further information. In addition, students residing in on-campus housing must present (a) proof of vaccination against MENINGOCOCCAL MENINGITIS, and (b) proof of vaccination against HEPATITIS B or sign a declination of HEPATITIS B proof.

According to Florida Administrative Code Rule 6C-6.001(5) "Each student accepted for admissions shall, prior to registration, submit on a form, provided by the institution, a medical history signed by the student." As a prerequisite to matriculation or registration, the State University System of Florida requires all students born after 1956 to present documented proof of immunity to MEASLES (Rubeola) and RUBELLA (German measles).

In addition, new admits (international students and US citizens living abroad) must show proof of screening for Tuberculosis (TB) within the past year. New admits who have not taken the TB test may do so when they arrive, but will not be allowed to register until the test has been taken. (Reference USF Policy 33.003 - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-33-002.pdf

All students new to USF are required to submit a signed copy of the official USF Medical History form and submit immunization documentation for the following:

1. Medical History Form: Sign the Mandatory Immunization Health History Form
2. Measles 1, Measles 2, Rubella (MMR): Vaccination (2 doses after 1st birthday) OR Titer (lab work) Date &Result
3. Hepatitis B-1: Vaccination OR Check the declination box OR Titer (lab work) Date & Result
4. Meningitis: Menactra/MCV4 vaccination at AGE 16 OR OLDER (if living on campus) OR check the declination (if not living on campus)

5. TB Screening: Tuberculosis Screening required for all International Students and U.S. born students residing at an address outside the U.S. at the time of application.
In order to register, this form, including the required documentation, must be completed, signed, and returned to:

Student Health Services
University of South Florida
4202 East Fowler Avenue, SHS 100
Tampa, FL 33620-6750
Fax: (813) 974-5888
Telephone: (813) 974-4056

Administrative Holds

A student may be placed on administrative hold by failure to meet obligations to the University. When a student is on administrative hold, he/she may not be allowed to register, receive a diploma, or receive a transcript. Settlement of financial accounts must be made at the University Cashier's Office. Each student placed on administrative hold should determine from the Office of the Registrar which office placed him/her in this status and clear the obligation with that respective office. Information for how to remove a hold is online at https://www.usf.edu/student-affairs/student-health-services/holds/. For holds due to immunization requirements, go to: http://www.usf.edu/student-affairs/student-health-services/immunizations/immunhold.aspx

Cancellation of Registration for Non-Payment

USF Regulation USF4.010, http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.010.pdf

Equal Opportunity Policy

Equal Opportunity Policy Diversity and Equal Opportunity: Discrimination and Harassment Policy: http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-0-007.pdf
DEO website: http://usfweb2.usf.edu/eoa/
Phone: 813-974-4373

The University of South Florida system (USF system) is a diverse community that values and expects respect and fair treatment of all people. The USF system strives to provide a work and study environment for faculty, staff and students that is free from discrimination and harassment on the basis of race, color, marital status, sex, religion, national origin, disability or age, as provided by law. The USF system protects its faculty, staff, and students from discrimination and harassment based on sexual orientation. The USF system is also committed to the employment and advancement of qualified veterans with disabilities and veterans of the Vietnam era. Discrimination, harassment and retaliation are prohibited at the University, and complaints of such conduct must be filed with the Diversity and Equal Opportunity Office ("DEO"). DEO will review such complaints and provide appropriate response including counseling, mediation, and/or referral for disciplinary action, up to and including termination from employment and/or expulsion from the University. A student or employee who believes that he or she has not been treated in accordance with the University's Equal Educational and Employment Opportunity Policy or its Policy on Sexual Harassment may file an Equal Opportunity Complaint. Additional information about these procedures may be obtained from the Diversity and Equal Opportunity Office or by calling 974-4373 or 813-974-1510 (TDD). It is prohibited for any administrator, supervisor, or other employee of USF to take any retaliatory action against an individual who, in good faith, has made a charge, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing under provisions of applicable law.

Student Ombuds - BOG Regulation 6.011

Location: SVC 2057
Schedule an Appointment: (813) 974-0835
Web Address: http://www.usf.edu/student-affairs/ombuds/

The Ombuds Office at USF is a confidential, impartial, independent and informal resource for students who wish to convey concerns and/or resolve disputes related to the University. The mission of the Ombuds Office is to facilitate fair and equitable resolution processes that promote student success. The Ombuds Office is not an official office of notice for the University of South Florida. The Student Ombuds, as a neutral facilitator, will listen to concerns and help students develop a range of options in an informal attempt to achieve resolution. The Ombuds may also refer students to appropriate individuals and offices and clarify University policies and procedures. All information disclosed in the Ombuds Office will be held confidential unless otherwise authorized by the student or otherwise required by applicable law, including Chapter 119, Florida Statutes.

Center for Victim Advocacy

The Center for Victim Advocacy & Violence Prevention (part of the Division of Student Affairs) provides free and confidential services to students, faculty, and staff of all gender identities who have experienced crime, violence, or abuse for incidents occurring on or off campus, recently or in the past. Services are provided by professional Victims Services Practitioners and may include: crisis intervention, emotional support, personal and systems advocacy, court accompaniment, victim helpline, safety planning, and assistance filing for injunctions (protective orders) and crime victim's compensation claims. We also provide prevention and education presentations, programs and events.

Appointments are available in our office or other safe locations on campus. Walk-ins are welcomed, Monday – Friday, 8:00 a.m. to 5:00 p.m. After hours, weekends and holidays, an advocate is available for victims of violent crimes through the Victim Helpline.

Important Contact Information
Victim Helpline: (813) 974-5757; Office: (813) 974-5756; Student Services Building (SVC) 0067; www.sa.usf.edu/advocacy/

Students with Disabilities Services

In accordance with Section 504 0f the Rehabilitation Act, The Americans with Disabilities Act and The ADA Amendments Act, the University of South Florida provides reasonable classroom accommodations for otherwise qualified students who have documented disabilities. Students seeking accommodations must register with the Services for Students with Disabilities Office. See http://www.usf.edu/student-affairs/student-disabilities-services/ for a list of common accommodations and more information on the accommodations process. Admissions: Students with disabilities apply under the same guidelines as all students through the Offices of Undergraduate or Graduate Admissions.

Course Substitution: Students with disabilities requesting substitution of coursework for General Education, or Foreign language requirements should contact Students with Disabilities Services. Students with declared majors requesting substitution of departmental graduation requirements will need to contact the chair of their department. In either case, students will be requested to submit documentation to SDS to support their request for an exception. Parking: Students with state parking privileges need only supply their state card as documentation for eligibility to Parking and Transportation Services. Students without state privileges need medical documentation to be considered for on-campus parking. Contact: http://www.usf.edu/administrative-services/parking/ Housing: Accessible on-campus residence hall housing is available for students with special needs. Specific information is available through Housing and Residential Education. Contact: http://www.usf.edu/student-affairs/housing/

Diversity Inclusion and Equal Opportunity

Students with disabilities are encouraged to participate fully in all University events, programs, and other campus activities. Information on whom to contact to request accommodation or assistance should be listed on program information and advertisements. If unable to secure the requested assistance or if additional help with accessibility is needed, contact the ADA Coordinator in Diversity Inclusion and Equal Opportunity (DIEO) at http://www.usf.edu/diversity/

USF - Reasonable Academic Accommodations and Services for Students
Ms. Deborah McCarthy, Director
4202 E. Fowler Avenue, Student Services Building (SVC) 1133, Tampa, FL 33620- 6500
(813) 974-4309 (Voice), Email Contact: dmccarthy@usf.edu,
Web Contact: http://www.usf.edu/student-affairs/student-disabilities-services/

Office of Veteran Success

Location/Phone: John and Grace Allen Building (ALN) 130
(813) 974-2291

USF is approved for the education of veterans, eligible dependents/spouses, members of the selected reserve, and active-duty personnel who are eligible for benefits under public laws now in effect. All majors currently offered at USF are approved by the Department of Veterans Affairs. Students who may be eligible for benefits are urged to contact the Office of Veteran Success, (813) 974-2291 or vetserve@usf.edu, for information, procedures, and forms as early as possible.

USF Veteran Success website: http://www.usf.edu/student-affairs/veterans/
VA toll free number is 1-888-442-4551.

Location/Phone: Student Services Building (SVC) 2088; (813) 974-2171
Web Address: http://www.usf.edu/career-services/

Career Services provides USF students with comprehensive career planning and job search services. A staff of experienced professionals is available to help students choose a career; gain career-related work experience and plan their job search. Career Services also provides information on employment opportunities and creates venues where students can network and interview with local, state, national and international employers.

Tobacco and Smoke Free University

USF is committed to providing a safe, healthy and enjoyable learning, living and working environment. The USF Tampa Campus is entirely tobacco and smoke free. Smoking and use of tobacco products are not allowed in any indoor or outdoor area, including parking garages, grounds, sidewalks or recreational areas. This policy also includes the use of e-cigarettes.

Academic Term and Student Information

Semester System

USF operates on a semester system. Semesters begin in August and January with Summer Sessions beginning in May and June. See *Academic Calendar* for appropriate dates. For information on converting quarter hours to semester hours, for purposes such as transfer of credit and the required GPA for admissions, refer to: http://www.grad.usf.edu/inc/linked-files/gpa.pdf

Academic Load

See Enrollment Requirements in the Academic Policies Section

Academic Standing

Class Standing - A student's class standing is determined by the number of credits he/she has earned without relation to his/her GPA.

6M - Graduate student admitted to a major in a Master's Degree Program
6A - Graduate student admitted to a major in a Specialist Degree Program
6D - Graduate student admitted to a major in a Doctoral Degree Program (not eligible to register for dissertation hours)
6C - Graduate student admitted to Doctoral Candidacy (eligible to register for dissertation hours)
7A-7D 1st-4th year professional Degree Program (M.D.) or post-doctoral status

Also see "In good standing" in the Academic Policies Section

Student Definitions

Degree Seeking Students:
Students who have been accepted into a major within a degree program

Graduate Certificate Seeking Students:
Students who have been accepted into a Graduate Certificate. Students who are non-degree seeking, but who are admitted to a Graduate Certificate may register during the same registration period as Degree-Seeking Students. For more information about Graduate Certificates and specific requirements, refer to Graduate Certificates .

Non-Degree-Seeking Students:
Students who have not been accepted into a major within a degree program or Graduate Certificate. Non-Degree-Seeking students may enroll and enter classes on a space available basis by obtaining appropriate approval from the degree-granting college or academic unit in which the courses are offered. Non-Degree-Seeking students must meet all prerequisites for courses in which they wish to enroll. Certain classes are available only to degree-seeking students and may not be available for Non-Degree-Seeking students.

Should a student be accepted into a graduate degree major, refer to the Application of USF credit policy for information on what credits may be applied to satisfy graduate degree requirements. Prior to completing twelve (12) hours in a specific major it is strongly recommended that a Non-Degree-Seeking Student apply for admission and be accepted to the major to continue taking courses in the major. Majors may have additional requirements, so check with the major of interest for more information.

Transient Students:
USF 10.001 Transient Student Policy: http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-001.pdf

The SUS Transient Student program enables a graduate student to take advantage of resources available on other SUS campuses. A Transient Student, by mutual agreement of the appropriate academic authorities in both the sponsoring and hosting institutions, receives a waiver of admission requirements and application fee at the host institution and a guarantee of acceptance of earned credits by the sponsoring institution. A graduate advisor, who will initiate a visiting arrangement with the appropriate faculty of the host institution, must recommend a Transient Student. USF degree-seeking students who wish to enroll at another regionally accredited institution MUST HAVE PRIOR WRITTEN APPROVAL from their college academic advisor to receive credit for courses taken. For more information, contact the Registrar's Office at (813) 974-2000. **Transient Student Form**: http://www.registrar.usf.edu/forms/TSF2008-04-07_16_17_06.pdf

Graduate Assistantships (GA), Research Assistantships (RA), and Teaching Assistantships (TA): Graduate Assistantships are intended to recruit quality students to graduate study at USF and to enhance the graduate learning experience. Graduate assistantships exist within academic departments or other university offices on campus. Graduate assistants may teach, conduct research, or perform other tasks that contribute to the student's professional development. Graduate students may be classified as Graduate Assistants (GAs), Graduate Teaching Assistants/Associates (GTAs), Graduate Instructional Assistants (GIAs), and/or Graduate Research Assistants/Associates (GRAs). All graduate assistants at USF work under a contract negotiated by the Graduate Assistants United (GAU) and the USF Board of Trustees. The GAU is the labor union certified as the exclusive bargaining agent for graduate assistants at USF. To receive an assistantship, the graduate student must meet the following eligibility requirements:

- Accepted in a graduate major;
- Maintain an overall minimum grade point average (GPA) **and** major GPA of 3.00;
- Enrolled full-time during the semester(s) appointed as a graduate assistant;
- For teaching assistantships, demonstrate proficiency in spoken English (if student is not from an English speaking country).

Full-time enrollment is considered nine (9) graduate credit hours in the fall semester, nine (9) graduate credit hours in the spring semester, and six (6) graduate credit hours in the summer semester. If a graduate assistant is enrolled in the last semester of his/her program of study, the number of registered semester hours may be less than the full-time requirement. Graduate assistants must comply with all Office of Graduate Studies enrollment requirements to retain their assistantship as stated in the Graduate Catalog.

The TA Training offered by ATLE as a requirement of training for all new Teaching Assistants (9183/9184 job codes) is designed in two parts to deliver blended instruction on the essentials of teaching at USF. First, TAs complete a set of seven media-rich and interactive modules that comprises an 8-hour online course intended to equip USF Teaching Assistants with the skills needed to effectively plan and deliver compelling courses that will ensure student success. Second, this online knowledge base is complemented by either an 8 hour one-day face-to-face session (for information: http://www.usf.edu/atle/events/ta-training.aspx) or an 8 week course (for information: http://www.usf.edu/atle/events/pct-course.aspx) that is ideal for any graduate student teaching at the college level, either while here with us at USF or in their future career. The focus of this component is on teaching college classes, and doing it well, which examines best practices in a number of topics related to course design and course delivery, so that by the end of the major, Teaching Assistants feel like they are well-equipped to build and deliver a college-level class on their own and will receive a certificate. Those who elect the 8-week course will focus on instruction that is heavily tilted toward discussions, participation, and individual presentations called micro-teaching. Further, the micro-teaching lab will give each student the opportunity to present a short (7-10 minute) lecture from their discipline to fellow classmates, and receive informal feedback on their delivery. These students will also receive co-curricular transcript credit and a certificate.

For specifics regarding Graduate Assistantship requirements, guidelines, and policies, refer to the Graduate Assistantships Resource Center online at http://www.grad.usf.edu/assistantships.php, the Graduate Catalog Academic Policies Section, and also the Graduate Assistants Policies and Guidelines Handbook.

Student Identification Card (USFCard and ID Badge) Policy

Reference: USF 5.117 - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-0-517.pdf

University policy requires all students obtain and carry the **USFCard** while on campus. The USFCard is primarily used for identification, for verification of USF status, and for using University services, such as the Library, the purchase of parking decals, obtaining passes for University sporting and theatrical events, and other related events/services. USFCards may be obtained at the USFCard Center on each campus. Legal Identification (passport, driver's license, or State/ Government Photo Identification card) must be presented to obtain a USFCard. For the issuance of a family card, the student (with their USFCard) must accompany the family member(s) who must also provide legal identification. All privileges extended to the family(s) are discontinued when the Sponsor is no longer a student. Use of the USFCard by anyone other than the person to whom it was issued is strictly prohibited. The cardholder is responsible for any and all losses associated with their card. Fees for issuance of the first and replacement cards are in accordance with USF 5.018. Refer to the fee schedule for costs of each additional family member card. Financial services, long distance telephone services, and other features are options available at the user's discretion. USFCards are the property of the University of South Florida and must be returned on request.

Student Records Policy

Reference: USF2.0021 - http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf2.0021.pdf

Pursuant to the provisions of the Family Educational Rights and Privacy Act ("FERPA"; 20 USC Par. 1232g), 34 CFR Par. 99.1 et seq, Florida Statutes Sub. Par. 228.093 and 240.237 and USF Rule 6C4-2.0021, Florida Administrative Code, students have the right to:

1. Inspect and review their education records;
2. Privacy in their education records;
3. Challenge the accuracy of their education records; and
4. Report violations of FERPA to the FERPA Office, Department of Education, 400 Madison Avenue, SW, Washington, D.C. 20202 and/or bring actions in Florida Circuit Court for violations of USF 4-2.001, Florida Administrative Code.

Copies of the University's student records policy, USF 2.0021, may be obtained from the Office of the Registrar or the General Counsel.

Academic Record

The student's academic record shall not be changed after the student has graduated. Except in cases of administrative error, the student's academic record shall not be changed once the semester has rolled.

Release of Student Information

Pursuant to requirements of the Family Educational Rights and Privacy Act (FERPA), the following types of information, designated by law as "directory information," may be released via official media of USF (according to USF policy): *Student name, local and permanent addresses, telephone listing, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, full- and part-time status, and the most recent previous educational agency or institution attended, and other similar information.* The University Directory, published annually by the University, contains only the following information, however: *student name, local and permanent address, telephone listing, classification, and major field of study.* The Directory and other listings of "directory information" are circulated in the course of University business and, therefore, are accessible to the public, as well as to students, faculty, and staff. Students must inform the USF Office of the Registrar in writing (forms available for that purpose), if they wish directory information to be withheld. Such requests must be received within the first two (2) weeks of the semester and will remain in effect until the student has not been enrolled at USF for three (3) consecutive terms. Notification to the University of refusal to permit release of "directory information" via the University Directory must be received no later than the end of the first week of classes in the Fall Semester.

Exclusions

Members or former members of the faculty who hold or have held the rank of Assistant, Associate, or Full Professor are not eligible to be granted degrees from USF, except upon prior authorization of the Office of Graduate Studies and the Provost. In cases where a member of the immediate family of a faculty member is enrolled in a graduate major, the faculty member may not serve on any advisory or examination committee or be involved in any determination of academic or financial status of that individual.

Course Information

Academic Credit hours

Reference – USF Policy 10-065 - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-065.pdf
Florida Statute 6A-10.033 - https://www.flrules.org/gateway/ruleno.asp?id=6A-10.033

Academic credit provides the basis for quantifying the amount of engaged learning time expected of a typical student enrolled in traditional classroom settings, laboratories, studios, internships and other forms of experiential learning, and distance and correspondence education. Credit hours are a measure of learning, and support a wide range of activities, including the transfer of students from one institution to another, awarding financial aid, and credentialing for employment. Because of the significance of awarding credit hours, an institution is obligated to ensure that credit hours for courses and majors conform to the commonly accepted standards of higher education, as stated in the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) Federal Requirements 4.9 (Definition of Credit Hour) (http://sacscoc.org/pdf/081705/Credit%20Hours.pdf) and the SACSCOC Credit Hours Policy Statement. This Policy is intended to ensure that all credit-bearing courses and programs offered by the University of South Florida System (USF System) meet the requirements of the Federal definition of a credit hour and the Credit Hours Policy Statement issued by the SACSCOC.

In determining the maximum number of credits that may be assigned to a course, the following guidelines apply.

- For courses taught in a "traditional" classroom format in a 15-week semester, the maximum number of credits to be assigned is limited to the weekly number of 50-minute contact periods (or their equivalent) with the instructor. Underlying this statement is an assumption that each 50-minute contact period requires a minimum additional two hours of student work outside of the class involving reading, exercises, etc. Where this assumption does not hold true (as may be the case with some laboratories, for example), then the maximum number of credits may be significantly less than the weekly number of 50-minute contact periods.
  - For a lecture class, one unit is considered to be one hour of lecture class time and two hours per week of homework. For the typical three-unit class, a student spends three hours per week in class and should do six hours per week of homework. The total number of class contact hours per semester equals the credit hours multiplied by 15 weeks.
  - For a laboratory class, the hours per week are considered to be all in class with no outside assignments. Thus, one unit is three hours per week of laboratory time.
  - Where a course includes "by arrangement lab hours," these generally take the place of the hours assigned to homework, since the student is required to use supervised college facilities to do assignments related to homework. An example might be a 3-unit lecture course which requires the student also to work two hours per week in the computer lab. There would be only four hours per week of additional homework required.
- In all cases, but particularly in cases such as online learning where seat time is non-verifiable, credit hours are awarded on the basis of documented student learning outcomes that reflect the amount of academically engaged time for a typical student in a traditional format, and on the basis of documentation of the amount and type of work a typical student is expected to complete within a specified period of academically engaged time. The number of credit hours awarded is based on the number and/or rigor of student learning outcomes, with the higher number of credit hours awarded yielding greater number and/or rigor of outcomes.

Availability of Courses

USF does not commit itself to offer all the courses, majors, and majors listed in this catalog unless there is sufficient demand to justify them. Some courses may be offered only in alternate semesters or years, or even less frequently if there is little demand.

Mandatory First-Day Attendance Policy

All students are required to attend class the first day a class meets, for both online and on-campus courses. Students unable to attend must contact the instructor prior to the first day to ensure they are not dropped from the course. This policy is not applicable to courses in the following categories: Educational Outreach, FEEDS Program, Community Experiential Learning (CEL), Cooperative Education Training, and courses that do not have regularly scheduled meeting days/times (such as, directed reading/research or study, individual research, thesis, dissertation, internship, practica, etc.). **Students are responsible for dropping undesired courses in these categories by the 5th day of classes to avoid fee liability and academic penalty.** (See USF Regulation – Registration - 4.0101, http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.0101.pdf)

Attendance Policy for the Observance of Religious Days by Students

In accordance with Sections 1006.53 and 1001.74(10) (g) Florida Statutes and Board of Governors Regulation 6C-6.0115, the University of South Florida (University/USF) has established the following policy regarding religious observances: http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-045.pdf

Cross-listing 4000/6000 Courses

It is expected that the 4000 and 6000 courses will have distinct syllabi demonstrating different depth and breadth of the subject matter as reflected in the course requirements. The courses presuppose different audiences, and the intention is to offer them at distinct levels.

Course Currency

All courses, with the exception of those approved for transfer of credit, should meet the time limit specified for the degree and be academically relevant as determined by the faculty in the graduate major. Courses used for the graduate degree requirements can be no more than ten years old at the time the degree is conferred.

Course Descriptions

For a listing of the most current, approved course descriptions refer to the USF Course Inventory Database available online at http://ugs.usf.edu/course-inventory or in the course description listing in the Graduate Catalog.

Course Syllabi Policy

Refer to USF 11-008

Adds

After a student has completed his/her registration on the date assigned, he/she may add a course(s) during the drop/add week (i.e. through the fifth day of classes) through the OASIS system. Courses may be added with instructor approval and verification up to the last day to withdraw without academic penalty. See Academic Calendar for deadlines. Courses may not be added after the deadline to withdraw without academic penalty or retroactively except in cases of University Administrative error.

Drops/Withdrawals

Drop
A student may drop a course(s) during the drop/add periods (first five days of classes) in order for the course(s) not to appear on any permanent academic records. No tuition or fees will be assessed for course(s) dropped within that period. Courses may not be dropped after the last day of classes except in cases of University Administrative error.

Withdrawal - A student may withdraw from a course(s) between the second and tenth week of the semester (except for summer sessions - see the Summer Schedule of Classes for dates). However, tuition and fees will be assessed for any course(s) withdrawn by the student after the first week. The student's academic record will reflect a "W" grade for any course(s) withdrawal between the second and tenth week of the semester. Under specific conditions, consideration for refund of tuition and fees may be requested if a Fee Adjustment Request form accompanied by verifiable supporting documentation is submitted to the Office of the Registrar within six (6) months from the end of the semester to which any refund would be applicable. Students who withdraw may not continue to attend classes.

Effective Fall 2016, all graduate students will be limited to a total of two course withdrawals while enrolled as a degree-seeking or a non-degree seeking taking graduate courses at USF. Only in extenuating circumstances will approval be granted for more than two course withdrawals. Appeals for additional course withdrawals due to extenuating circumstances must be submitted to the Office of Graduate Studies via the Graduate Petition process.

Fee Adjustment Options

Students who receive approval to drop a course during the second through tenth week of classes are liable for tuition and fees. However, the student may apply for a Fee Adjustment through the Registrar's Office if the student has any of the exceptional circumstances noted above in item 3. The Fee Adjustment form may be submitted after the petition to drop is approved and processed. The Registrar will determine if a fee/tuition refund is applicable.

Deletes

A "delete" completely removes the course from the record with no history that it was ever part of the record. Courses will not be deleted from a student's record except in cases of University Administrative error. Requests for course deletions must be submitted only during the semester in which the error has occurred and only with written explanation from college faculty verifying the error. Such requests must be submitted by the last day of classes and approved by the College Dean or designee and the Office of Graduate Studies Dean or designee. Retroactive requests for course deletions will not be approved. Faculty and students are encouraged to review course enrollment to verify accuracy of registration. In the event of extenuating circumstances such as documented medical emergencies, military leave or University error, students may request special consideration for deletions or retroactive deletions in writing to the Dean of the Office of Graduate Studies.

Retroactive Actions

Requests for retroactive actions will no longer be considered/approved. *Also see Academic Record.*

Auditing Privileges and Fees

A student who wishes to sit in on a class to review the course material may do so; however, the student is not allowed to take exams, earn grades, or receive credit. The student's status for that class is an audit and his/her presence in the classroom is as a listener. Audit status must be obtained only during the first five days of the term by filing an Audit Form and a date-stamped permit from the college/department on the campus where the course is being offered, with the Registrar's Office. IN-STATE fees are assessed for all audit courses. Procedure and forms for requesting to audit are available on the Registrar's website.

Cancellation of Registration before First Class Meeting

Students may cancel their registration by notifying the Office of the Registrar in writing prior to the first day of classes. If fees have already been paid, the student may request a full refund of fees and tuition from the Office of Purchasing and Financial Services.

Voluntary Withdrawal (from the major)

A student may voluntarily withdraw from their graduate major. A Voluntary Withdrawal cannot be retroactive. The effective date of the withdrawal will be entered into the student's record by the Office of the Registrar as the first business day after the end of the semester. Students who wish to withdraw must submit a *Voluntary Withdrawal Form*, available from the Office of Graduate Studies (www.grad.usf.edu). Once processed, the student's status will be changed from Graduate Degree Seeking to Non-Degree Seeking. A change to Non-Degree Seeking status could adversely impact financial aid. Questions regarding this should be directed to the Financial Aid Department at (813) 974-4700. The student will remain financially and academically responsible for any course(s) they have registered for. The student may request to drop or delete courses they are registered for by submitting a *Office of Graduate Studies Petition.*

Academic Dismissal

Students may be academically dismissed from their graduate major for a variety of reasons. Once processed, the student's status will be changed from Graduate Degree Seeking to Non-Degree Seeking. A change to Non-Degree Seeking status could adversely impact financial aid. Dismissal cannot be retroactive. The effective date will be entered into the student's record by the Office of the Registrar as the First Business Day after the end of the Semester, except in cases of academic dismissal due to academic dishonesty or disruption of academic process. Some of the reasons for academic dismissal include*:

- Failure to successfully satisfy requirements to meet Conditional Admission by the deadline established by the major.
- Receiving an "FF" grade
- Failure to maintain "good standing"
- Failure to make satisfactory progress

**students may be dismissed for other reasons, such as violations of student conduct. Refer to the USF Policy – 6.0021 (http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf6.0021.pdf) for more information.*

To be readmitted, the student will need to reapply for admission, meeting the admission criteria in place at the time. Graduate students who are assigned an "FF" grade will be academically dismissed from the University and will not be eligible to apply to any graduate major at USF.

Tuition, Fees, and Financial Information

Tuition Information

Tuition and Fees Regulation: http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.0102.pdf

For tuition information refer to: http://usfweb2.usf.edu/finaid/. Tuition and fees are subject to change, without prior notice. For information on Residency for tuition purposes, refer to the Florida Residency Policy.

All registration fees and all courses added during the drop/add period must be paid in full by the payment deadline date specified in the current *Schedule of Classes*. Registration fee payment may be made in person or mailed to the Cashier's office. Students not on an authorized deferred payment plan and who have not paid their registration fees in full by the published deadline will have their registrations canceled. A student will not receive credit for any courses taken during that semester. Students who are allowed to register in error may have their registration canceled. Any fees paid will be refunded or credited against any charges due the University.

Student Financial Services

Houses the Cashier's office, student accounting, accounts receivable, and the Student Account Information desk. It is located in Student Service Building- SVC 1039, with the mailing address:

UCO-Student Accounting
University of South Florida
4202 E. Fowler Ave., ALN 147
Tampa, FL 33620.

Veteran Deferment Benefits

The tuition deferment program for Veterans is set up through USF and the VA. Due to VA payments being delayed at times, a tuition deferment gives the student and the VA an extra 90 days past the start of the semester to pay for a student's tuition and fees. See Veterans Benefits and Transition Act of 2018. Section 103PL 115-407. For more information, contact the USF Office of Veteran Success:

Office of Veteran Success
4202 E. Fowler Ave., ALN 130
Tampa, FL 33620
(813) 974-2291 or http://usfweb2.usf.edu/vetserve/

Financial Aid

Financial assistance is available through the Office of University Scholarships and Financial Aid Services. Students requiring such assistance should contact usf.edu/financial-aid/ for information. Students eligible for tuition waivers (through assistantships, or employee benefits, etc.) should contact the department and/or college providing the waiver for information. Also see USF Regulation USF 6-0121 and USF 6-012.

Office of University Scholarships and Financial Aid Services
4202 E. Fowler Ave., SVC 1102
Tampa, FL 33620
(813) 974-4700 or http://www.usf.edu/financial-aid/

Policy on Refunds and Repayments

USF Policy 30-013 at http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-013.pdf

Fees, Fines, and Penalties

USF Regulation USF4-017, at http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.0107.pdf

Academic Policies and Regulations

Academic Policy and Regulation Information

For USF Regulations refer to http://regulationspolicies.usf.edu/regulations/
For USF Policies refer to http://regulationspolicies.usf.edu/policies-and-procedures/policy-procedures.asp

Student Responsibilities

The University, the Colleges, and the majors have established certain academic requirements that must be met before a degree is granted. While advisors, directors, department chairpersons, and deans are available to assist the student meet these requirements, it is ultimately the responsibility of the student to be acquainted with all policies and regulations, and be responsible for completing requirements. If requirements for graduation have not been satisfied, the degree will not be granted. The information presented here represents the University Academic Policies. Colleges and departments may have additional requirements. Check with your College Graduate Coordinator or your Department Director for more information. Courses, majors, and requirements described in the Catalog may be suspended, deleted, restricted, supplemented, or changed at any time at the sole discretion of the University and the Board of Trustees. For a list of current course descriptions, refer to the USF Course Inventory database online at https://www.systemacademics.usf.edu/course-inventory/

Student Conduct

Members of the University community support high standards of individual conduct and human relations. Responsibility for one's own conduct and respect for the rights of others are essential conditions for academic and personal freedom within the University. USF reserves the right to deny admission or refuse enrollment to students whose actions are contrary to the purposes of the University or impair the welfare or freedom of other members of the University community. Disciplinary procedures are followed when a student fails to exercise responsibility in an acceptable manner or commits an offense as outlined in the Student Conduct Code. Refer to the USF 6.0021, Student Code of Conduct at http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf6.0021.pdf

Responsible Conduct of Research

Responsible Conduct of Research (RCR) is a critical element in training for scholarship. USF has information about RCR available online at: www.grad.usf.edu/rcr.php

Effective Spring 2013, the Office of Graduate Studies requires all new doctoral students to have basic RCR training by completing the Collaborative Institutional Training Initiative (CITI) module most relevant to the student's program of study. The CITI modules have been designed to introduce researchers to various elements of research conduct ranging from research misconduct to data management to mentoring. As this is a minimum requirement, specific doctoral majors may require training that goes beyond the basic components introduced in this module. Graduate Majors that have received Office of Graduate Studies approval for rigorous RCR training consistent with disciplinary standards and practices may exempt their students from the CITI requirement. Students must complete the module, or provide evidence of previous qualified RCR training to their Graduate Director and Office of Graduate Studies, in the first semester enrolled in a doctoral major. Previous RCR training should have been completed within the past year. Students will be unable to register for courses in a future semester until successful fulfillment of this RCR requirement. Once the training is completed, the Registration hold will be lifted.

Intellectual and Scholarship Integrity

Shared Authorship and Research Education Policy

USF contains a broad range of academic majors in diverse disciplines, and the USF faculty recognize that the conventions on shared authorship and credit for scholarship vary among disciplines. In general, sharing in authorship implies both substantive intellectual contributions to the work and also approval of the work as it appears in public. Right to authorship credit is not automatically conveyed by being the instructor of a course, being a student's major professor, or being a research assistant working with faculty and professional researchers; neither is credit automatically prohibited because of such status.

Each college/major that includes research education shall include an explicit discussion of shared authorship issues and disciplinary conventions as part of the formal curriculum addressing research methods and ethics, including the conventions of the discipline's publications. In addition, each college or major shall have a formal statement about shared authorship made available to students (such as on a college or major website) or given to students at the same time as they are given notice about other major and college expectations.

Each college/major shall also have a written procedure for resolving questions or conflicts about shared authorship where students are involved. The college and major may use the same procedure for resolving questions for non-student employees, but the procedure for resolving questions or conflicts involving students must address the educational needs of students (e.g., explicitly asking about the nature of the research methods and ethics education as experienced by a student involved in the case at hand).

This written procedure must be made available to students (such as on a college or major website) or given to students at the same time as they are given notice about other major and university expectations.

Academic Integrity of Students

Reference USF Regulation 3.027 - To read the entire Regulation, go to: http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf3.027.pdf Please note the sections that specifically pertain to graduate students.

Disruption of Academic Process

Reference: USF Regulation 3.025 - http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf3.025.pdf

Student Academic Grievance Procedure

Reference: USF 10.002 Student Academic Grievance Procedure- http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-002.pdf

For matters that are not academic in nature, reference *USF 30-053 Student Grievance Processes and Non-Academic Grievance Policy* - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-30-053.pdf

Graduate Catalog

Also reference: USF Policy 10-059 University of South Florida System Catalogs

The USF Graduate Catalog, including college and major requirements, and major and course descriptions, is available on the web at http://www.grad.usf.edu. Each Catalog is published and in effect for the academic term(s) noted on the title page.

Student's Major Degree Requirements

In order to graduate, students must meet all requirements specified in the USF Catalog of their choice, except as noted below. As the University is dynamic, changes and updates to the catalog are anticipated. In contract to major requirements, which are tied to a specific catalog, all students must comply with University policies and procedures that come into effect each catalog year.

- Students cannot choose a USF Catalog published prior to admission (or readmission) or during an academic year in which they did not complete at least two terms. If a student is dropped from the system and must be reinstated, the student's choice of Catalog is limited to the USF Catalog in effect at the time of readmission or any one Catalog published during their continuous re-enrollment.
- If state law or certification requirements change, the student must comply with the most current standard or criteria.
- If the College or Department makes fundamental changes to the major that necessitates changes in the degree requirements of enrolled students, the needs of those students will be explicitly addressed in the proposal for change and scrutinized by the Office of Graduate Studies.
- USF policies and procedures not related to degree requirements such as academic grievance procedures, student conduct code and other procedural processes and definitions may be updated each year and the student will be held to the most current catalog and procedures available.
- USF does not commit itself to offer all the courses, majors, and majors listed in this Catalog. If the student cannot meet all of the graduation requirements specified in the Catalog of choice as a result of decisions and changes made by the University, appropriate substitutions will be determined by the major to ensure that the student is not penalized.

Student/Advisor Relationship

Although it is ultimately the responsibility of the student to be acquainted with all policies and regulations, and be responsible for completing requirements, the Advisor's role is to guide students in all aspects of their academic major and to monitor and evaluate students' progress toward their degrees. He/she should be aware of any difficulties that students may be facing in their coursework or research experiences and should work with students in resolving these issues. It is recommended that the advisor and student understand each other's expectations and that effective means of communication are established. The advisor and student are encouraged to meet at appropriate intervals to critically evaluate the student's progress. These meetings may be requested by the student or the advisor. The advisor also has the obligation to express to the student any concerns he/she may have regarding the student's performance, to stipulate the level and quality of work expected, and to offer suggestions leading to student success. As such, the advisor neither gives the student excessive guidance nor allows the student to struggle needlessly. The goal of this relationship is to foster student independence, which results in successful completion of the program of study.

Student's Program of Study

In addition to the graduate major requirements as specified in the Graduate Catalog, each student should have a written, flexible program of study that includes the student's choice of Catalog year, choice of concentration, cognate, or other options available in the major, and a tentative identification of other appropriate choices available to the student in the program, which may (but does not need to) include specific courses. A program of study is not a guarantee that specific courses will be available in a specific semester or that statutory and regulatory requirements will not change during the student's enrollment in the major. As required or appropriate, the program of study should be revisited and modified by the student and the student's advisor/major professor(s).

Electronic Signatures

Where procedures described in this catalog require signatures, requirements for original signatures may be satisfied by University-approved electronic signatures or other secure methods of verifying approval by advisors, major professors, committee members, or other University administrators, faculty, and staff.

Assistantships

Graduate Assistantships (GA), Research Assistantships (RA), and Teaching Assistantships (TA) Graduate Assistantships are intended to recruit quality students to graduate study at USF and to enhance the graduate learning experience. Graduate assistantships exist within academic departments or other university offices on campus. Graduate assistants may teach, conduct research, or perform other tasks that contribute to the student's professional development. Graduate students may be classified as Graduate Assistants (GAs), Graduate Teaching Assistants/Associates (GTAs), Graduate Instructional Assistants (GIAs), and/or Graduate Research Assistants/Associates (GRAs). All graduate assistants at USF work under a contract negotiated by the Graduate Assistants United (GAU) and the USF Board of Trustees. The GAU is the labor union certified as the exclusive bargaining agent for graduate assistants at USF.

Eligibility

To receive an assistantship, the graduate student must meet the following eligibility requirements:

- Accepted in a graduate major ;
- Maintain an overall minimum grade point average (GPA) **and** major GPA of 3.00;
- Enrolled full-time during the semester(s) appointed as a graduate assistant.
- For Teaching Assistants, demonstrate proficiency in spoken English (if student is not from an English speaking country)

Appointments

Graduate Assistants may be appointed up to a maximum of 0.50 FTE for a single assistantship. Majors who desire to appoint a Graduate Student, in any classification, more than 0.50 FTE up to 0.75 FTE, for single or multiple appointments, must submit justification to the Office of Graduate Studies for approval. Students hired in non-GA positions on campus must also not exceed 0.75 FTE for the combined position and assistantship appointments. It is preferred that students refrain from employment outside of the assistantship appointment. Departments may determine the maximum number of semesters for teaching assistantship appointments.

Enrollment (Assistantships)

Full-time enrollment is considered nine (9) graduate credit hours in the fall semester, nine (9) graduate credit hours in the spring semester, and six (6) graduate credit hours in the summer semester. If a graduate assistant is enrolled in the last semester of his/her program of study, the number of registered semester hours may be less than the full-time requirement. Graduate assistants must comply with all Office of Graduate Studies enrollment requirements to retain their assistantship as stated in the Graduate Catalog. For specifics regarding Graduate Assistantship requirements, guidelines, and policies, refer to the Graduate Assistants Policies and Guidelines Handbook

Note - Criminal History Background Checks may be required depending on the appointment - reference USF Policy 0-615 - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-0-615.pdf

Enrollment Requirements

Students receiving Veterans' Administration benefits should confirm their enrollment requirements with the Office of Veterans' Services or Veterans' Coordinator.

Minimum University Regulations

USF Full-Time Student Definition

Students taking a minimum of nine (9) hours toward their degree in the fall or spring semester, or taking a minimum of six (6) hours in the summer semester, will be classified as Full-Time students for academic purposes. Students may take a maximum of eighteen (18) hours in any given semester; exceeding eighteen (18) hours requires a signed program of study or written approval from the College. **For financial aid enrollment requirements, refer to the Office of Financial Aid** - *http://usfweb2.usf.edu/finaid/other/enrollment.aspx.*

Continuous Enrollment for All Graduate Students

All graduate degree-seeking students must be continuously enrolled. Continuous enrollment is defined as completing, with grades assigned, a minimum of 6 hours of graduate credit every three continuous semesters. **Courses that receive a "W" grade do not fulfill continuous enrollment requirements.** Colleges and majors may have additional requirements. Students on an approved leave of absence are not subject to the enrollment requirement for the time approved for the leave. Students who have been Admitted to Doctoral Candidacy must follow the Dissertation Hour Enrollment in place of the Continuous Enrollment requirement as specified here for all graduate students (not in candidacy). See also the Time Limitations Policy.

Readmission Following Non-enrollment

A graduate student who is not registered and enrolled for a minimum of six (6) credits in a 12-month period is automatically placed in non-degree seeking (i.e. inactive) status. Students must be readmitted to the major to continue their studies. Readmission is at the discretion of the major and is not guaranteed. *Refer to the Readmission Policy in the Graduate Admissions Section for more information.*

Enrollment during Comprehensive Exams and Admission to Candidacy

During the term in which students take the comprehensive exams, students must be enrolled for a minimum of two (2) hours of graduate credit. If the exam is taken between semesters, the student must enroll for a minimum of two (2) hours of graduate credit in the semester before or following the exam. Students must also be enrolled for a minimum of two (2) hours of graduate work in the semester of admission to doctoral candidacy.

Dissertation Hours

Students working on a dissertation must enroll for a minimum of two (2) hours of dissertation every semester, starting with the semester following Admission to Doctoral Candidacy, up to and including the semester the dissertation is submitted to and approved by the Office of Graduate Studies. Dissertation hours may apply to the Continuous Enrollment Requirement. Colleges and majors may have additional requirements. Students who are dropped from degree-seeking status and formally readmitted to the major must enroll in a minimum of five (5) dissertation hours in the semester that the readmission is effective. *Refer to the Readmission Policy in the Graduate Admissions Section for more information. Note: students cannot be enrolled in thesis and dissertation at the same time.*

Enrollment during Semester of Thesis Submission

Students must be enrolled for a minimum of two (2) thesis hours during the semester that the thesis is submitted and approved by the Office of Graduate Studies, usually the semester of graduation. Students not enrolled for the minimum requirement will not have the thesis/dissertation approved and therefore may not be certified for graduation. *Note: students cannot be enrolled in thesis and dissertation at the same time.*

Enrollment during Semester of Graduation

Students must be enrolled for a minimum of two (2) graduate hours during the semester of graduation.

Enrollment for Graduate Teaching and Research Assistants

Graduate Teaching and Research Assistants should be full-time students. Exceptions must be approved by the College Dean and the Dean of the Office of Graduate Studies.

Leaves of Absence (LOA)

Leaves of absence may be granted to students under exceptional and unavoidable circumstances. Students requesting a LOA must specify the reasons for the leave, as well as the duration. Requested LOA may be approved for up to two years. Students requiring less than three (3) consecutive terms of absence do not need an approved LOA if they meet the continuous enrollment requirement.

Students with an approved LOA must be enrolled in the first semester after the leave expires. To request an LOA, the student must complete the form available from the Office of Graduate Studies website. The LOA must be approved by the Major Professor, the Major, the College, and the Office of Graduate Studies, and is noted in the student's record. If the LOA is granted, the time absent does not count against the student's time limit to obtain the degree.

Students returning from an approved LOA must reactivate their status by contacting the Office of Graduate Studies for procedures. Doctoral candidates returning from a LOA must also have their candidacy status reactivated.

Satisfactory Academic Progress (SAP)

For Academic Purposes

Satisfactory Academic Progress for academic purposes is determined by the progress the student has made in the Major towards degree completion, taking into account the curriculum requirements, as well as the time to degree allocations. This is a separate assessment from the Satisfactory Academic Progress requirement for financial aid.

For Financial Aid Recipients

Reference: http://www.usf.edu/financial-aid/sap/index.aspx,
Reference: https://studentaid.ed.gov/sa/eligibility/staying-eligible

Federal regulations require all schools participating in Title IV federal financial aid programs to have a Satisfactory Academic Progress (SAP) policy that conforms to specific grade-based and time-based requirements. These requirements apply to all students as one determinant of eligibility for financial aid and include three components:

- GPA
- Pace
- Maximum Time

Refer to the Financial Aid websites for information and requirements.

Academic Standards and Grades

Minimum University Requirements

In Good Standing

To be considered a "student in good standing," graduate students must

- Maintain an overall minimum grade point average (GPA) of 3.00 (on a 4.00 scale) in all courses taken as a graduate student, and
- Maintain an overall minimum grade point average (GPA) of 3.00 (on a 4.00 scale) in all courses taken in each of the student's degree-seeking majors.

Only courses with grades of "C" (2.00) or better will be accepted toward a graduate degree; no grade of **C-** or below will be accepted. Students must meet the requirements to be in good standing to graduate. All "I" and "M" grades must be cleared for graduation to be certified. Students who fail to maintain good standing may be placed on probation or academically dismissed.

Academic Renewal

When a student changes majors or degree levels, the GPA for this new major/degree level will exclude courses taken for previous majors or degree levels, unless faculty approve the course(s) for application of internal credit toward the requirements for the new major or degree level. On the transcript, the grades for the courses taken for a previous major are noted to indicate that the grade points for that course have been excluded from the GPA for the current major or degree level that the student is enrolled. Academic Renewal is not an option for students to use to eliminate a poor grade in a course. Refer to the Grade Point Average section for information on Grade Forgiveness.

Grade Point Average (GPA)

The GPA is computed by dividing the total number of quality points by the total number of graded (**A-F**) hours completed. The total quality points are figured by multiplying the number of credits assigned to each course by the quality point value of the grade given. The GPA is truncated to two decimals (3.48) and is not rounded up.

Credit hours for courses with grades of **I, IU, M, MU, N, S, U, W, Z** and grades which are preceded by **T** (Transfer) are subtracted from the total hours attempted before the GPA is calculated. Graduate students are not eligible for grade forgiveness. All grades earned, regardless of course level, will be posted on the transcript. If a student retakes a course, both grades will be used in the determination of the GPA. Courses taken at USF as non-degree-seeking are not computed in the GPA unless the courses are transferred in and applied to the degree requirements. The program and the college must approve such actions.

Grades for transfer credits accepted toward the major will not be counted in the GPA unless the coursework in question was taken as a non-degree-seeking student at USF and meets the requirements stated above (see Institution Based Credit/Transfer of Credit section).

Graduate Grading System

Plus/Minus Grading:
Effective fall semester 2000, graduate and undergraduate grades will be assigned quality points in the Grade Point Average (GPA) grading system. The +/- designation must be included in the syllabus provided at the beginning of the course. The use of the +/- grading system is at the discretion of the instructor. The syllabus policy is available in the office of the Provost.

Letter grade = number of grade points

A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.33
C	2.00
C-	1.67
D+	1.33
D	1.00
D-	.67
F	0.00
E	Course repeated, not included in GPA
FF	Failure due to academic dishonesty (Graduate Students who receive an FF will be academically dismissed from the University and will not be eligible to apply to any graduate program at USF. *See section on Academic Dishonesty and Graduate Studies Policy on Academic Integrity for more information.*)
CF	Cancelled Financially (Course was cancelled due to financial reasons)
CMU	Cancelled, Missing Grade that has turned to a "U"
IB	Incomplete, grade points not applicable
IC	Incomplete, grade points not applicable
ID	Incomplete, grade points not applicable
IF	Incomplete, grade points not applicable*

M Missing grade/no grade reported by instructor, grade points not applicable

N Audit, grade points not applicable

S/U Satisfactory/Unsatisfactory, grade points not applicable

W Withdrawal or drop from course without penalty, grade points not applicable

WC Withdrawal for extenuating circumstances

Z Continuing registration in multi-semester internship or Thesis/Dissertation courses, grade points not applicable

** Incomplete grade policy change effective fall 08. IF grades earned and posted prior to fall 2008 do calculate in the GPA; IF grades earned as of fall 2008 forward do not calculate in the GPA refer to Incomplete Grade Policy for more information.*

Satisfactory (S)/ Unsatisfactory (U)

Graduate students may not take courses in the major on an S/U (satisfactory / unsatisfactory) basis unless courses are specifically designated S/U in the Catalog. Students may take courses outside of the major on an S/U basis with prior approval of the course professor, major professor or advisor, and the Dean of the College in which the student is seeking a degree. The student may apply a maximum of six (6) hours of such credit (excluding those courses for which S/U is designated in the Catalog) toward a master's degree. Directed Research, Thesis, and Dissertation courses are designated as variable credit and are graded on an S/U basis only. Before a student begins work under Directed Research, a written agreement must be completed between the student and the professor concerned, setting forth in detail the requirements of the course.

Incomplete (I)

Definition: An Incomplete grade ("I") is exceptional and granted at the instructor's discretion only when students are unable to complete course requirements due to illness or other circumstances beyond their control. This applies to all gradable courses, including pass/fail (S/U).

Students may only be eligible for an "I" when:

- the majority of the student's work for a course has been completed before the end of the semester the work that has been completed must be qualitatively satisfactory
- the student has requested consideration for an "I" grade as soon as possible but no later than the last day of finals week.

The student must request consideration for an Incomplete grade and obtain an "I" Grade Contract from the instructor of record. Even though the student may meet the eligibility requirements for this grade, the course instructor retains the right to make the final decision on granting a student's request for an Incomplete. The course instructor and student must complete and sign the "I" Grade Contract Form that describes the work to be completed, the date it is due, and the grade the student would earn factoring in a zero for all incomplete assignments. The due date can be negotiated and extended by student/instructor as long as it does not exceed one semester from the original date grades were due for that course. The instructor must file a copy of the "I" Grade Contract in the department that offered the course and submitted through E-Grades by the date grades are due. The instructor must not require students to either re-register for the course or audit the course in order to complete the "I" grade. Students may register to audit the course, with the instructor's approval, but cannot re-take the course for credit until the "I" grade is cleared. The instructor will be required to complete the I-Grade Contract online when posting the semester grade at the end of the term, identifying the remaining coursework to be completed, the student's last day of attendance, and the percent of work accomplished to this point. This online contract will be automatically copied to the student's email and to the Registrar.

An "**I**" grade not cleared within the next academic semester (including summer semester) will revert to the grade noted on the contract. "**I**" grades are not computed in the GPA, but the grade noted on the contract will be computed in the GPA, retroactive to the semester the course was taken, if the contract is not fulfilled by the specified date. When the final grade is assigned, if applicable, the student will be placed on academic probation or academically dismissed (refer to Automated Academic Probation Procedures for information). Students cannot be admitted to doctoral candidacy or certified for graduation with an "**I**" grade.

Example:

- student has a "B" in the course, not including the grade for the missing assignment, therefore is eligible for an "I"
- student's grade, including a zero for the missed work, would be an "D"
- student and instructor complete the "I" Grade Contract, assigning an "ID" (Incomplete +D grade)

Deadline Agreed Upon in Contract (e.g. two weeks):*

If the student completes the work as agreed upon in the Contract by the noted deadline

- the instructor of record will submit a change of grade in e grades
- student earns final grade comprised of all completed course work

If the student does not complete the work as agreed upon in the Contract by the noted deadline

- "I" automatically drops off and the grade of "D" remains.
- GPA is recalculated for the current semester and retroactively recalculated for the semester in which the "I" was granted.

** Although the instructor establishes the deadline for completion of the work, the deadline may only extend through the end of the subsequent semester.*

Missing (M)

The University policy is to issue an **M** grade automatically when the instructor does not submit any grade for a graduate student. Until it is removed, the **M** is not computed in the GPA. To resolve the missing grade, students receiving an **M** grade must contact their instructor. If the instructor is not available, the student must contact the instructor's department chair. Courses with an **M** grade may not be applied to the major requirements. Students with an **M** grade will not be admitted to doctoral candidacy until the **M** grade is resolved.

Continuing Registration Grades (Z)

The **Z** grade shall be used to indicate continuing registration in multi-semester internship or thesis/dissertation courses where the final grade to be assigned will indicate the complete sequence of courses or satisfactory completion of the thesis/dissertation. Upon satisfactory completion of a multi-semester internship or thesis/dissertation, the final grade assigned will be an **S**. The Office of Graduate Studies submits the change of grade for the last registration of thesis/dissertation courses once the thesis/dissertation has been accepted for publication.

Note: Graduation will not be certified until all courses have been satisfactorily completed. No grade changes will be processed after the student has graduated except in the case of university error. Procedures requiring petitions are processed through the Office of Graduate Studies.

Probation

Any student who is not in good standing at the end of a semester shall be considered on probation as of the following semester. The college or major may also place students on probation for other reasons as designated by the college or major. Notification of probation shall be made to the student in writing by the department, with a copy to the College Dean. At the end of each probationary semester, the department shall recommend, in writing, to the College Dean one of the following:

1. Removal of probation
2. Continued probation; OR
3. Dismissal from the major.

Students on probation may only enroll in graduate courses (5000-7000 level) that are part of the approved degree major requirements as specified in the Graduate Catalog. Students with a GPA below 3.00 for two consecutive semesters will be prevented from registering for courses without the permission of the College Dean. The College Dean will notify the Dean of the Office of Graduate Studies in cases of academic dismissal. To be readmitted, the student will need to reapply for admission, meeting the admission criteria in place at the time. For information on the Automated Probation Process go to http://www.grad.usf.edu/inc/linked-files/probation-procedure.pdf

Voluntary Withdrawal

A student may withdraw from the university without grade penalty by the University deadline. Information on the different types of withdrawal (i.e., withdrawing from a single class – see the Drop section, an entire semester, or from the major itself) can be obtained from the Registrar's Office. Appropriate alternative calendar dates may apply. Students who withdraw may not continue to attend classes.

Transfer of Credit *(From Institutions External to USF Tampa)*

Students may transfer graduate-level structured coursework into their graduate major taken at regionally accredited institutions, including USF System Institutions (USF St. Petersburg, USF Sarasota-Manatee), with the approval of the graduate major, college, and Office of Graduate Studies. Individual Graduate Majors may have more restrictive requirements.

- May transfer only graduate-level (5000-7999) structured coursework with a grade of B (3.00) or better. Courses with Pass/Fail grades are not eligible for transfer. Grades from courses taken at other Institutions are not calculated in the USF GPA, although the courses are listed on the transcript.
- May transfer in up to 50% of a given graduate major's total minimum hours as reflected in the individual major listings in the USF Graduate Catalog in effect at the time of initial enrollment for that major. For doctoral majors, this percentage is based on the post-baccalaureate minimums. *Note – the 50% maximum includes the total of both external Transfer of Credit and Internal Application of credit.*
- Must not have been used for a completed degree. For students with coursework from a completed degree, the specific course requirements in common across both majors may be waived with the substitution of other approved coursework at the discretion of the major. For students entering a doctorate after completion of a master's degree, departments may count up to 50% of the structured graduate credits from the master's toward the post-baccalaureate requirements for the doctorate. The courses must be individually evaluated and transferred in. Block transfers are not permitted.
- Must not be older than ten years at the time of graduation or course currency is required.

Approval Process and Deadlines for Transfer of Credit

Acceptance of transfer of credit requires submission of the Transfer of Credit Form and approval of the:

- Graduate Director
- College Dean or designee
- Dean of the Office of Graduate Studies or designee

The Graduate Major / Department will be responsible for evaluating, approving, and initiating the transfer using established criteria to ensure academic integrity of the coursework. This must be completed and submitted to the Office of Graduate Studies no later than the end of the first semester the student is enrolled in the graduate major.

Application of USF Credit

Up to 50% of graduate-level (5000-7999) structured coursework with a grade of B (3.00) or better, taken as a non-degree seeking student at USF may be applied toward their graduate degree provided the courses are required for the major.

- The 50% is calculated based on the total minimum hours of the major as reflected in the individual major listings in the USF Graduate Catalog in effect at the time of initial enrollment for that major. For doctoral majors, this percentage is based on the post-baccalaureate minimums.
- Courses must not have been used for a completed degree. For students with coursework from a completed degree, the specific course requirements in common across both majors may be waived with the substitution of other approved coursework at the discretion of the major.
- Unstructured courses and courses with Pass/Fail grades are not eligible for application of credit. Grades from courses taken at USF are calculated in the USF GPA and are noted on the transcript.
- Courses must not be older than ten years at the time of graduation or course currency is required.

Exceptions:

All non-degree seeking coursework that is applicable to the major, taken from USF will be applied in the following situations, pending approval of the graduate major, College, and Office of Graduate Studies.

Structured graduate courses taken as

- an undergraduate student that were not used as part of the undergraduate degree requirements
- a Graduate Certificate student
- a degree-seeking student, where the student is approved for a Change of Major to another graduate major

Students in an existing Major who drop to non-degree seeking status and seek readmission to the same major do not qualify for the exception.

Approval Process and Deadlines for Application of Internal Credit

Acceptance requires completion of the Application of Credit Form and approval of the

- Graduate Director
- College Dean or designee
- Dean of the Office of Graduate Studies or designee

The Graduate Major / Department will be responsible for evaluating, approving, and initiating the application of credit using established criteria to ensure academic integrity of the coursework. This must be completed and submitted to the Office of Graduate Studies no later than the end of the first semester the student is enrolled in the graduate major.

Change of Graduate Major

See Change of Graduate Major in the Admissions Section.

Accelerated Majors Policy

Accelerated Majors allow highly qualified undergraduate students to complete a Bachelor's degree and a master's degree or a Bachelor's degree and a professional doctorate in a select few majors on an accelerated timeline. Accelerated Majors commonly offer a shorter duration to completion of both degrees. Students complete a portion of the required graduate coursework while classified as an undergraduate student and have it count towards both degrees. As soon as the student completes the undergraduate degree requirements, the student is converted to graduate student status, where the remaining graduate requirements are fulfilled. Students interested in pursuing an Accelerated Major must complete an Accelerated Major Application.

Note: *Although students may be in an Accelerated Major, pursuing a Bachelor's and Master's Degree at the same time, they cannot be in two levels at once.*

Accelerated Majors:

- Require that degrees are conferred sequentially
- Have an approved Program of Study, including a plan for academic advising and notation for financial aid impact
- May share up to twelve (12) hours of structured graduate credit between the graduate and undergraduate degree or between the graduate degree and the Honors College Curriculum Requirements tied to the undergraduate major. Refer to the specific major for total hours approved to be shared.

- Require approval from the Undergraduate Council, Graduate Council, and if applicable, SACSCOC. It is preferred that the total combined credits be at least 150 credits (120 bachelor's and 30 master's) after the shared coursework is counted. Accelerated Majors with less than 150 total combined credits may be considered for approval but require submission to SACSCOC as a Substantive Change to the Major.
- Require a 3.33 GPA overall and a 3.50 GPA in the undergraduate Major
- Require that the admission requirements for the graduate major be noted in the Accelerated Major requirements.
- Require a minimum of 15 hours in the undergraduate major to be completed before a student may apply for consideration for the Accelerated Major
- Require a "B" (3.00) in each graduate course taken as part of the shared credits applied to both undergraduate and graduate majors. Consequences for not obtaining a "B" will be noted in the specific Accelerated Major requirements

Application and Progression

Application - Students may be considered for an Accelerated Major following completion of a minimum of 15 hours in the undergraduate major and submission of an **Accelerated Major Application**. the student may be considered for acceptance into the Accelerated Major through faculty nomination or student self-nomination via submission of the Accelerated Major Application Form. Majors will review and approve the application.
Progression - Majors will verify graduate admission eligibility and submit the required paperwork (**Accelerated Graduate Major Progression Form**) to officially convert the student to graduate standing, no later than when the student has reached 90 hours or Bachelor's degree has been conferred. The application requires approval from the Graduate Major, College, and Office of Graduate Studies.

Concurrent Degrees

Students interested in Concurrent Degrees:

- Must apply for admission to the first major and validate admission through enrollment. In the semester following that enrollment, the student must apply for admission to the second major and concurrent degree approval.
- May share between 0% and 15% of the total combined minimum credit hours. Only structured graduate coursework may be shared.
- Will meet all other separate degree requirements (e.g. two dissertations, one thesis/one dissertation, projects, exams, etc.), unless the Concurrent Degree was approved with a combined requirement by Graduate Council through the formal Concurrent Degree Curriculum Approval.
- Must have a minimum of 60 total combined graduate hours after the shared hours are applied for concurrent master's majors, or a minimum of 102 total combined graduate hours for a concurrent master's/doctorate
- Degrees may be conferred sequentially or concurrently, as specified in the approved Major requirements
- Both Degrees must be conferred within the time-limit for the first degree to which the student is admitted.

Example: A student is enrolled in two master's majors, one requires 30 hours and the other requires 42 hours minimum. With approval, the student may share 9 hours (equal to or less than 15%) across the combined 72 total minimum credit hours required. The total minimum hours completed would then be 63. The student would also complete two separate theses. In concurrent degrees where the student is completing a thesis for one major and the other does not require a thesis, the thesis submitted to the Office of Graduate Studies reflects the Major for which it is required.

Concurrent Degree Curriculum Approval

A Concurrent Degree may be developed in the following ways:

- an established relationship between two majors formulated through the Department(s) and then formalized through the College(s), Office of Graduate Studies, and Graduate Council. A current list of formalized programs with Concurrent Degree designation may be found in the Graduate Catalog.
- formulated by an individual student who is interested in pursuing two majors that are not currently a formalized Concurrent Degree. Students must request approval from both majors of interest to pursue a Concurrent Degree with those majors. Any approved Concurrent Degrees must meet the minimum

accreditation requirements (e.g. 60 hours combined after sharing hours). For procedures and the necessary forms, refer to the Office of Graduate Studies website. Note: when a Major has this occur more than three times, the Major should follow the process to formalize that Concurrent Degree.

Interdisciplinary Majors

A student may pursue a single graduate degree that spans several academic areas.

An Interdisciplinary Major –
Defined as a student pursuing a single stand-alone graduate degree, which is offered across two or more graduate majors. (Note: where two separate degrees are preferred, refer to the Concurrent Degree information above).

Application to an Interdisciplinary Major

Students interested in applying for admission to an Interdisciplinary Major follow the established University, College, and Major admission requirements – refer to the Office of Graduate Studies website for specific information for that particular major.

Development of an Interdisciplinary Major

Interdisciplinary Majors are formalized through the College, Office of Graduate Studies, and Graduate Council and must follow the University requirements for development of a new degree program and/or major, including notation on the Workplan, if applicable. Procedures for developing an Interdisciplinary Major are available on the Office of Graduate Studies website. For information contact the Office of Graduate Studies.

Off-Campus Courses and Majors

Graduate courses and majors are offered at locations other than the Tampa, Sarasota, St. Petersburg, and Lakeland campuses. Information on course enrollment procedures for off-campus courses and majors may be obtained from the College in which the courses or majors are offered.

University Degree Requirements

Degree Requirements

The following sections describe the University requirements established by the Office of Graduate Studies for the Master's, Education Specialist, and Doctoral degrees. However, individual majors and colleges may establish additional or *more stringent* requirements.

Student Responsibilities

The University of South Florida and all colleges, departments and majors therein establish certain academic requirements that must be met before a degree is granted. These requirements concern such things as curricula and courses, majors and minors, and academic residence. Faculty and graduate directors are available to help the student understand and arrange to meet these requirements, but the student is responsible for fulfilling them. At the end of a student's course of study, if all requirements for graduation have not been satisfied, the degree will not be granted. For this reason, it is important for students to acquaint themselves with all regulations and to remain currently informed throughout their college careers. Courses, majors, and requirements described in the catalog may be suspended, deleted, restricted, supplemented, or changed in any other manner at any time at the sole discretion of the University and the USF Board of Trustees.

Graduate Faculty Definition

The University of South Florida recognizes Graduate Faculty and Affiliate Graduate Faculty. Only Graduate Faculty, and Affiliate Graduate Faculty approved for such purposes, may serve as the Instructor of Record for graduate level courses.

Graduate Faculty is defined to consist of all tenure-track or tenured faculty appointed at the Assistant, Associate, or Professor rank, who holds a terminal degree or equivalent in their discipline. Graduate Faculty members are eligible to teach graduate courses and may direct and serve on masters, specialist, and doctoral level committees. To chair a doctoral level committee, a Graduate Faculty member must engage in current and sustained scholarly, creative, or research activities, such as publications, performances, exhibitions, patents, inventions and research grants.

Affiliate Graduate Faculty membership may be granted by the Office of Graduate Studies Dean to individuals whose skills or expertise meet criteria established by the College. Affiliate Graduate Faculty membership is in effect for a specified period of time and specific purposes. Affiliate members may be eligible to serve on masters, specialist, and doctoral level committees, to direct master's and specialist's level committees, and to co-direct doctoral level committees, at the discretion of the College. Affiliate Graduate Faculty can only serve as the Instructor of Record when they have a terminal degree in the discipline and are approved to teach graduate courses in that field. Emeritus Professors and retired or recently resigned professors may also be appointed as Affiliate Graduate Faculty with the approval of the College and Office of Graduate Studies Dean.

Graduate Faculty Approval – Graduate faculty is defined as noted above; Colleges and Departments may have additional requirements. The Office of Graduate Studies will maintain a list of Graduate Faculty along with approval guidelines from the Colleges and Departments. Also reference USF Policy 10-115 – Faculty Credentials for Teaching Undergraduate and Graduate Courses - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-115.pdf. For a current list of Graduate Faculty and Affiliate Graduate Faculty in any major contact the graduate director or coordinator.

Master's Degree Requirements

Minimum Hours

A minimum of thirty (30) hours is required for a master's degree, at least sixteen (16) hours of which must be at the 6000 level or above; the remaining hours must be at the 5000 level or above.

At least twenty (20) hours must be in formal, regularly scheduled structured course work. Lower level undergraduate courses may not be used to satisfy master's course requirements but may be taken to meet specific prerequisites. All graduate and undergraduate courses taken as a graduate student count in the overall GPA, whether or not they count toward the minimum hours for the degree. Graduate students may not enroll for more than 18 hours in any semester without written permission from the College Dean. The minimum number of credit hours required for each individual master's major is noted in the degree requirements section of the Graduate Catalog for that major listing. Majors with formally approved concentrations must have core major requirements that all students must successfully complete.

Institutional Enrollment Requirement

At least 50% of credits toward a graduate degree must be earned through instruction offered by the home institution (e.g., USF Tampa, USF St. Petersburg, USF Sarasota-Manatee) granting the degree. For information about the minimum number of credit hours required for the major refer to the curriculum requirements in the catalog listing for that major. Students are responsible for consulting with their Graduate Director for information on courses that may be taken outside their graduate major, as well as the Transfer of Credit Policy for course transfer eligibility requirements. Although equivalent courses may be offered at other institutions including within the USF System), they may not satisfy degree requirements.

Students must matriculate for at least one semester following admission to the University before graduation may be approved. Students who want to change majors following admission into the University, must wait one semester before submitting the Change of Major request.

Students who change to a lower degree level (e.g. change from doctorate to master's), in the same major, may graduate the same semester that the change is approved, provided that it is not the first semester following admission to the University.

Time Limitations

Master's and Ed.S. degrees must be completed within five (5) years from the student's date of admission for graduate study. Courses taken prior to admission to the USF graduate major, for example as non-degree seeking or from other institutions, must be transferred in prior to graduation (preferably before the end of the student's second semester; see Course Currency Link). Master and Ed.S. degrees (including concurrent degrees) that require course work in excess of 50 credit hours may be granted a longer time limit by the University Graduate Council.

Time Limit Extensions

In the event that a student nears the end of the time limitation as specified above, but the student needs more time to complete the degree, the student may submit a request for an extension using the *Time Limit Extension Request Form*, available on the Office of Graduate Studies website http://www.grad.usf.edu/student-forms.php

Requests must include:

- the reasons for the delay in completion,
- the anticipated time needed for completion,
- endorsements from the graduate faculty advisor, graduate major, and College Dean or designee,

- a detailed plan of study denoting the pathway to completion and timeline for the remaining requirements for the degree

Note — for the time limit extension procedures, if the time limit extension will cause courses taken within the major to be older than 10 years, then a request for course concurrency may be required or the courses may be invalidated toward the degree requirements, per the time-limit policy.

If approved, the time-limit extension applies to courses applied toward the degree, with the exception of those transferred in or from completed majors. However, majors may require additional or repeat coursework as part of the condition of the time-limit extension. For requests exceeding a year of additional time, the Office of Graduate Studies will audit the student's progress each semester to ensure that the plan of study is adhered to and that progress towards degree completion is occurring.

Students who exceed the time limitations may have their registration placed on hold until a request for extension has been approved. Only one time-limit extension request is permitted. Students who are temporarily unable to continue the major should submit a Leave of Absence Request, which extends the time limit for the duration of the approved Leave for up to two years (see the section on Leave of Absence in the Enrollment Requirements section.)

Note - Time Limit Extensions are valid for a maximum period of two (2) years from the date of request. For more information and guidance, contact the Office of Graduate Studies.

Enrollment Requirements

Refer to the Academic Policies Section

Major Professor

The Major Professor serves as the student's advisor and mentor. Students should confer with the academic area to confirm the internal process and timeline for the selection and appointment of the Major Professor. The student must identify a major professor from the student's academic area, approved by the student's Department/School (or College if a College administsered major), and receive that person's agreement to serve as major professor. The selection of the Major Professor must be approved and appointed as soon as possible, but no later than the time the student has completed 50% of the major. Students must have a major professor in order to maintain Satisfactory Academic Progress.

If a major professor cannot be identified or in the event a major professor is unable or unwilling to continue serving on the student's committee, the student is responsible for finding another major professor from the Department (or equivalent). Students who are unable to find a replacement major professor should confer with the Graduate Director for available options (including converting to a non-thesis option if available.) If no other options exist, the student may be requested to voluntarily withdraw from the major or may be honorably withdrawn in good academic standing. The student and major professor should plan a program of study which, when completed, will satisfy the degree requirements specified. A copy of this program of study, signed by the student and professor, must be maintained in the student's department file.

Major Professors must meet the following requirements:

- Be from the student's academic area -- Be graduate faculty*, as defined by the University, from the student's academic area.
- Be engaged in current and sustained scholarly, creative, or research activities and have met departmental (or equivalent) requirements
- Have been approved by the student's Department Chair (or equivalent) to serve as a Major Professor or Co-Major Professor

**Affiliate Graduate Faculty may serve as a Co-Major Professor with a graduate faculty from the student's department. Co-Major Professors may be two graduate faculty or one graduate faculty and one approved Graduate Affiliate Faculty*

The membership of graduate faculty will be based upon criteria developed within the appropriate major or department and approved at the college level. These criteria must be forwarded to the Dean of the Office of Graduate Studies.

In the event a Major Professor leaves the University (i.e., for an appointment at another university, due to retirement, etc.) and the Major Professor is willing and able to continue serving on the student's committee, the Major Professor then becomes a Co-Major Professor on the Committee and another graduate faculty from the student's Department is appointed as the other Co-Major Professor. In the event that the other Co-Major is Affiliate Graduate Faculty, the faculty leaving the University may remain as a member, with another graduate faculty from within the student's Department appointed as the other Co-Major

Professor. To ensure that the student can make satisfactory progress, one of the Co-Major Professors must be accessible on the University campus for the student to make satisfactory progress on the thesis/dissertation. In the event a Major Professor is on temporary leave (e.g. sabbatical, research, etc.); the Major Professor shall coordinate with the Graduate Director to facilitate the needs of the student. In some instances, a student may choose to have two professors serve as Major Professor. In this situation the faculty are approved as "Co-Major Professors" and jointly serve in that role. Consequently, both faculty must sign approval on paperwork pertaining to the student's processing (i.e., committee form, change of committee form, etc.)

(Co-) Major Professor(s) of the Graduate Student Supervisory Committee Responsibilities

Approved by the Graduate Council on May 15, 2000; revised August 26, 2013:

- Approving and submitting the Graduate Student Supervisory Committee Form to the Program, and if necessary, the College
- Approving and submitting the Admission to Candidacy Form.
- Specifying the style manual to be used for the thesis/dissertation before the student begins writing the manuscript. The style manual should be appropriate to the discipline.
- Students should not be told to follow other theses/dissertations.
- Referring students to the Thesis and Dissertation Guidelines (http://www.grad.usf.edu/ETD-res-main.php) to obtain information on University Format Requirements.
- Verifying by signing the Certificate of Approval, that the student's thesis or dissertation is ready to be submitted to the OGS for publication.
- Verifying, by signing the Request for the Ph.D./Ed.D. Final Oral Examination Form, that the student is ready to defend the dissertation.
- Verifying, by signing the Successful Defense of the Ph.D./Ed.D. Form, that the doctoral student has successfully defended the dissertation.
- Reading and approving the final copy of the thesis/dissertation for content and format prior to signing the Certificate of Approval.

Thesis Committee

Students working toward a thesis degree will have the benefit of a committee of members of the graduate faculty. The committee will approve the course of study for the student and plan for research, supervise the research and any comprehensive qualifying exams, and read and approve the thesis for content and format.

Composition

The committee will consist of either:

- the major professor and at least two other members or
- two co-major professors and at least one other member

Committee members should be from the general research area in which the degree is sought. (Colleges and Majors may require additional committee members and specify characteristics.)

Member Definition

All graduate faculty, as defined by the University and the College/Department, and approved by their department and college, are assumed by the Office of Graduate Studies as qualified to be a member of and/or supervise a committee. Persons desiring to serve on a Graduate committee who are not defined as Graduate Faculty (i.e. visiting faculty, professionals, etc.) by the University and the College/Department must submit a curriculum vitae (CV) and be approved by the Department, College, and, as needed, the Office of Graduate Studies, for each committee.

Committee members must meet the following requirements:

- Be graduate or affiliate graduate faculty, as defined by the University
- Have the background and expertise that contributes to the success of the student.

In addition to the requirements specified in the Graduate Faculty definition, committee membership will be based upon criteria developed within the appropriate major or department and approved at the college level. These criteria must be forwarded to the Dean of the Office of Graduate Studies.

Approval

Once a committee has been determined, a Supervisory Committee Form needs to be completed by the student and submitted to the Committee Members for original signatures. Check with the College for instructions and forms. The original appointment form and two (2) copies should be submitted to the College Associate Dean's office for approval. A copy of the approved form should be kept in the student's file. An approved and current Committee Form must be on file in the major/college before graduation may be certified. Committee forms need to be processed as early in the major as possible, but no later than the semester prior to graduation. (Colleges and departments may institute additional requirements for membership on Supervisory Committees.)

Changes to Committee

Changes to a Supervisory Committee must be submitted on a Change of Committee Form. Check with the College for instructions and forms. Original signatures of faculty being added to the Committee, along with the approval signature of the (Co-) Major Professor(s), must be on the form. Faxed signatures are acceptable. Faculty who are removed from the Committee are not required to sign the form, provided that the (Co-) Major Professor(s) has signed. In such instances the signature of the (Co-) Major Professor(s) indicate(s) approval of the change, as well as acknowledgement and approval of the change by the removed member. Any non-faculty being added to a committee must submit a Curriculum Vitae (CV) for college approval. Change of Committee Forms should be submitted for approval as soon as the change takes place. Changes to a Committee are official only once approved and filed by the major and college.

Masters Comprehensive Examination

Prior to clearance for the degree, candidates must perform satisfactorily on a comprehensive examination or an alternative method designated by the academic unit to measure student competency in the major area. The Comprehensive Exam, or designated alternative method, must be completed while in residency (i.e. current active student) at USF, administered by USF faculty, covering content for the USF major. Students must be degree-seeking and enrolled for a minimum of two (2) hours of graduate credit during the semester when the comprehensive examination is taken. If the exam is taken between semesters, the student must be enrolled for a minimum of two (2) hours of graduate credit in the semester before or following the exam.

Thesis

If a thesis is required, it must conform to the guidelines of the University. Refer to the Thesis and Dissertation Guidelines, available on the web at http://www.grad.usf.edu/ETD-res-main.php for complete information about requirements, procedures, and deadlines. *For enrollment requirements, refer to the Academic Policies section.*

Thesis Format

The University accepts the standard format for the discipline of the major. Formats must be consistently applied and follow national standards for the discipline.

For the preliminary pages, which follow a standard University format, refer to the ETD website - http://www.grad.usf.edu/ETD-res-main.php

Directed Research

Directed Research hours may satisfy up to 50% of the thesis hour requirement.

Manuscript Processing Fee

USF Regulation USF4-0107, http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.0107.pdf Students participating in the thesis/dissertation process are required to pay a processing fee. More information is available on the Thesis and Dissertation website.

Exchange of Thesis for Non-Thesis Credit

If a student changes from thesis to non-thesis during a semester and is currently enrolled in thesis credit, the current thesis credits may be exchanged without academic penalty if a Office of Graduate Studies Petition is filed with the Office of Graduate Studies no later than the last day to withdraw without Academic Penalty. If a student enrolled in a thesis required major has taken thesis credits but elects to change to non-thesis track, the accumulated thesis credits may not be exchanged or converted to another non-structured credit. The thesis hours will remain on the transcript and will retain the "Z" grade.

Thesis Defense

Policies and procedures for the thesis defense are handled within the College and Major. Contact the College and Major for requirements.

Thesis Final Submission Guidelines

Information on requirements for submission of the finished and approved manuscript copies is available online at the Thesis and Dissertation website http://www.grad.usf.edu/ETD-res-main.php . Students who fail to submit the final copy of a thesis by the posted submission deadline will be considered for graduation in the following semester and must therefore apply for graduation by the posted deadline, enroll in a minimum of two (2) thesis hours for that subsequent semester, and meet the submission requirements as posted on the Thesis/Dissertation website. Only after the Office of Graduate Studies has approved the manuscript can the student be certified for the degree.

Mandatory Electronic Submission

Students are required to submit the thesis in an electronic format (ETD). Requirements and procedures are available at the Office of Graduate Studies website http://www.grad.usf.edu/ETD-res-main.php

Submission for Official Publication and Archiving

All theses/dissertations will be submitted to the Office of Graduate Studies designated System for official publication and archiving.

Changes after Publication

Once a thesis is approved and accepted by the Office of Graduate Studies for publication, it cannot be changed.

Release of Thesis Publications

The University recognizes the benefits from collaboration with sponsors on research projects but also recognizes the possibility of conflicts of interest in the disclosure of the results of the collaborations. While the sponsor's economic interests in the restriction of disclosure should be considered, the University has a primary mission to extend knowledge and disseminate it to the public and the broader academic community. The University's "Statement of Policy Regarding Inventions and Works" acknowledges the possible need for delays in publication of sponsored research to protect the sponsor's interests, but it provides no definite guidelines for the restrictions of publication beyond the statement: "Disclosure delays mutually acceptable to the Inventor, the Vice President for Research, and the sponsor, if any, are authorized in order to allow patent applications to be filled prior to publication, thereby preserving patent rights..." (April Burke, "University Policies on Conflict of Interest and Delay of Publications," Report of the Clearinghouse on University-Industry Relations, Association of American Universities, February, 1985.)

To protect the University's primary goal from un-due compromise, the University has adopted the following guidelines:

1. The recommendations of sponsors, regarding publication of research results should be considered advisory rather than mandatory.
2. In support of academic discourse and the mission to promote and share academic works, Theses will be released for worldwide access once submitted to and approved by the USF Office of Graduate Studies. In the event that a patent or copyright application provides reason to delay the release of the Thesis, a petition to request a one-year delay may be submitted to the Office of Graduate Studies for consideration. Such requests must be received by the format check of the thesis.
3. Students should not be delayed in the final defense of their theses by agreements involving publication delays.

Duty to Disclose New Inventions and Works

USF 0-300 http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-0-300.pdf and USF 12.003 http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf12.003.pdf.
For information about the requirements of this policy contact the Division of Patents and Licensing at (813) 974-0994.

Thesis Change of Grade

In the semester in which the final manuscript has been received, reviewed, and certified for permanent filing in the University Library, the Office of Graduate Studies submits the change of grade from "Z" to "S" for the last registration of thesis courses to the office of the registrar when all grades are due at the end of the semester.

Conferring a Master's Degree for Student in a Doctoral Degree Program

Doctoral Degree Programs that admit students with Bachelor's degrees may choose to award a Master's degree during the completion of the requirements for the Doctoral degree.In this case, a student making satisfactory progress in a Doctoral, program and who meets all of the Master's degree requirements, may be eligible to be awarded a Master's degree in the same discipline.

Students must:

- Complete at least twenty (20) hours of formal, regularly scheduled structured coursework.
- Meet the specific curriculum requirements for the requested Master's Degree, as specified in the Graduate Catalog posted at the time of the request.
- Perform satisfactorily on a comprehensive examination or an alternative method designated by the academic unit.
- Complete the requirements of the thesis or non-thesis option, as outlined in the Graduate Catalog. Master's degree programs that require a thesis must conform to the Thesis and Dissertation Guidelines. If the student chooses the thesis option, he/she must register for thesis hours and complete the thesis before Admission to Doctoral Candidacy and registration of dissertation hours.
- Register for a minimum of two (2) graduate credits in the semester the Master's degree will be awarded.

The two degrees are not considered part of a formal "concurrent degree" program and, therefore, are not subject to the policies governing concurrent degree programs.However, the College must identify which courses are used to meet each of the Master's and Doctoral degree requirements.

The Master's degree requirements may not be fulfilled using from credits from a previously earned Master's degree.

Requests for conferring a Master's degree for a student in a Doctoral Degree Program require approval from the Department, College Dean or designee, and the Office of Graduate Studies Dean or designee.

Education Specialist Degree (Ed.S.) Requirements

Ed.S. Thesis

Students who are required to submit an Ed.S. Thesis must meet all of the requirements for the thesis, as specified in the Master's Degree section of this publication. For specific major information, refer to the College of Education.

Ed.S. Project

Students who are required to submit an Ed.S. Non-Thesis project must meet all of the requirements as specified by the College of Education. A project does not need to meet the requirements of a thesis and is not submitted to the Office of Graduate Studies for approval and archiving.

Doctoral Degree Requirements

The doctoral degree is granted in recognition of high attainment in a specific field of knowledge. It is a research degree and is not conferred solely upon the earning of credit, the completion of courses, or the acquiring of a number of terms of residency, but also the successful completion of scholarly work. The length of residency and the requirements below are minimums; majors/colleges may elect to establish more rigorous requirements. The degree will be granted after the student has shown proficiency and distinctive achievement in a specified field, has demonstrated the ability to do original, independent investigation, and has presented these findings with a high degree of literary skill in a dissertation. A major professor will be appointed as soon as possible but no later than the time the student has completed 50% of the major. The advisor will advise on any specific subject matter deficiencies and assist in the choice of a major professor and area of research.

Responsible Conduct of Research

Responsible Conduct of Research (RCR) is a critical element in training for scholarship. USF has information about RCR available online at: www.grad.usf.edu/rcr.php

Effective Spring 2013, Office of Graduate Studies requires all new doctoral students to have basic RCR training by completing the Collaborative Institutional Training Initiative (CITI) module most relevant to the student's program of study. The CITI modules have been designed to introduce researchers to various elements of research conduct ranging from research misconduct to data management to mentoring. As this is a minimum requirement, specific doctoral majors may require training that goes beyond the basic components introduced in this module. Graduate Majors that have received Office of Graduate Studies approval for rigorous RCR training consistent with disciplinary standards and practices may exempt their students from the CITI requirement. Students must complete the module, or provide evidence of previous qualified RCR training to their Major Director and Office of Graduate Studies, in the first semester enrolled in a doctoral major. Previous RCR training should have been completed within the past year. Students will be unable to register for courses in a future semester until successful fulfillment of this RCR requirement. Once the training is completed, the Registration hold will be lifted.

Doctoral Minimum Hours

The doctoral degree is earned on the basis of advancement to doctoral candidacy status and satisfactory completion of the dissertation. *Note- for professional doctorates (e.g. Au.D., D.N.P., Dr.P.H., D.P.T., M.D.), a dissertation may not be required. Refer to the major listing for more information.* The minimum number of credit hours to earn the doctorate is 72, post-bachelors, including dissertation (or project). The minimum number of credit hours required for each individual doctorate major is noted in the degree requirements section of the Graduate Catalog for that major listing. Some graduate majors may require more than 72 hours. Majors with formally approved concentrations must have core major requirements that all students must successfully complete.

Students must comply with general enrollment requirements and also institutional residency requirements. All doctoral students must have at least one gradable (A-F) graduate course taken at USF to satisfy the GPA minimum requirements. No undergraduate course may be used to satisfy the gradable minimal course requirement for the doctoral degree. Lower level undergraduate courses may not be used to satisfy doctoral major requirements, but may be taken to meet specific prerequisites. All graduate and undergraduate courses taken as a graduate student count in the overall GPA, whether or not they count toward the minimum hours for the degree.

Time Limitations

Doctoral degrees must be completed within seven (7) years from the student's original date of admission for doctoral study. . All courses applied to the doctoral degree must be completed within ten (10) years, including courses taken

1. prior to admission to the USF doctoral major,
2. taken as non-degree seeking, or
3. transferred in from other institutions.

There is no time limitation for courses from a completed master's degree used toward a doctoral degree. For students who are readmitted, see Readmission Policy. Typically, a student will reach candidacy within four years, but this may vary per discipline.

Time Limit Extensions

In the event that a student nears the end of the time limitation as specified above, but the student needs more time to complete the degree, the student may submit a request for an extension using the *Time Limit Extension Request Form*, available on the Office of Graduate Studies website http://www.grad.usf.edu/student-forms.php .

Requests must include

- the reasons for the delay in completion,
- the anticipated time needed for completion,
- and endorsements from the graduate faculty advisor, graduate major, and College Dean or designee,
- a detailed plan of study denoting the pathway to completion and timeline for the remaining requirements for the degree

Note — for the time limit extension procedures, if the time limit extension will cause courses taken within the major to be older than 10 years, then a request for course concurrency may be required or the courses may be invalidated toward the degree requirements, per the time-limit policy.

If approved, the time-limit extension applies to courses applied toward the degree, with the exception of those transferred in or from completed majors. However, majors may require additional or repeat coursework as part of the condition of the time-limit extension. For requests exceeding a year of additional time, the Office of Graduate Studies will audit the student's progress each semester to ensure that the plan of study is adhered to and that progress towards degree completion is occurring.

Students who exceed the time limitations may have their registration placed on hold until a request for extension has been approved. Only one time-limit extension request is permitted. Students who are temporarily unable to continue the major should submit a Leave of Absence Request, which extends the time limit for the duration of the approved Leave for up to two years (see the section on Leave of Absence in the Enrollment Requirements section.)

Note - Time Limit Extensions are valid for a maximum period of two (2) years from the date of request. For more information and guidance, contact the Office of Graduate Studies.

Enrollment Requirements

See Academic Policies Section

Institutional Enrollment Requirement

The majority of credits toward a graduate degree must be earned through instruction offered by the home institution (e.g., USF Tampa, USF St. Petersburg, USF Sarasota-Manatee) granting the degree. For information about the minimum number of credit hours required for the degree refer to the degree requirements in the major listing. Students are responsible for consulting with their graduate coordinator for information on courses that may be taken outside their graduate major, as well as the Transfer of Credit Policy for course transfer eligibility requirements. Although equivalent courses may be offered at other institutions (including within the USF System), they may not satisfy degree requirements.

Conferring a Master's Degree for Student in a Doctoral Degree Program

Doctoral Degree Programs that admit students with Bachelor's degrees may choose to award a Master's degree during the completion of the requirements for the Doctoral degree.In this case, a student making satisfactory progress in a Doctoral, program and who meets all of the Master's degree requirements, may be eligible to be awarded a Master's degree in the same discipline.

Students must:

- Complete at least twenty (20) hours of formal, regularly scheduled structured coursework.
- Meet the specific curriculum requirements for the requested Master's Degree, as specified in the Graduate Catalog posted at the time of the request.
- Perform satisfactorily on a comprehensive examination or an alternative method designated by the academic unit.
- Complete the requirements of the thesis or non-thesis option, as outlined in the Graduate Catalog. Master's degree programs that require a thesis must conform to the Thesis and Dissertation Guidelines. If the student chooses the thesis option, he/she must register for thesis hours and complete the thesis before Admission to Doctoral Candidacy and registration of dissertation hours.
- Register for a minimum of two (2) graduate credits in the semester the Master's degree will be awarded.

The two degrees are not considered part of a formal "concurrent degree" program and, therefore, are not subject to the policies governing concurrent degree programs.However, the College must identify which courses are used to meet each of the Master's and Doctoral degree requirements.

The Master's degree requirements may not be fulfilled using from credits from a previously earned Master's degree.

Requests for conferring a Master's degree for a student in a Doctoral Degree Program require approval from the Department, College Dean or designee, and the Office of Graduate Studies Dean or designee.

Major Professor

The Major Professor serves as the student's advisor and mentor. Students should confer with the Department (equivalent) to confirm the internal process and timeline for the selection and appointment of the Major Professor. The student must identify a major professor from the student's academic area, approved by the student's Department/School (or College if a College administered major), and receive that person's agreement to serve as major professor. The selection of the Major Professor must be approved and appointed as soon as possible, but no later than the time the student has completed 50% of the major. Students must have a major professor in order to maintain Satisfactory Academic Progress.

If a Major Professor cannot be identified or in the event a Major Professor is unable or unwilling to continue serving on the student's committee, the student is responsible for finding another Major Professor. Students who are unable to find a replacement Major Professor should confer with the Graduate Director for available options. If no other options exist the student may be requested to voluntarily withdraw from the major or may be honorably withdrawn in good academic standing. The student and Major Professor should plan a program of study which, when completed, will satisfy the degree requirements specified. A copy of this program of study, signed by the student and professor, should be maintained in the student's department file.

Major Professors must meet the following requirements:

- Be from the student's academic area -- Be graduate faculty*, as defined by the University, from the student's academic area
- Be engaged in current and sustained scholarly, creative, or research activities and have met departmental (or equivalent) requirements
- Be active in scholarly pursuits as evidenced by at least one refereed publication in the last three years.
- Have been approved by the student's Department Chair (or equivalent) to serve as a Major Professor or Co-Major Professor.

**Affiliate Graduate Faculty may serve as a Co-Major Professor with a graduate faculty from the student's department. Co-Major Professors may be two graduate faculty or one graduate faculty and one approved Graduate Affiliate Faculty*

The membership of graduate faculty will be based upon criteria developed within the appropriate major or department and approved at the college level. These criteria must be forwarded to the Dean of the Office of Graduate Studies.

In the event a Major Professor leaves the University (i.e., for an appointment at another university, due to retirement, etc.) and the Major Professor is willing and able to continue serving on the student's committee, the Major Professor then becomes a Co-Major Professor on the Committee and another graduate faculty from the student's Department is appointed as the other Co-Major Professor. In the event that the other Co-Major is Affiliate Graduate Faculty, the faculty leaving the University may remain as a member, with another graduate faculty from within the student's Department appointed as the other Co-Major Professor. It is important that one of the Co-Major Professors be accessible on the university campus for the student to make satisfactory progress on the thesis/dissertation. In the event a Major Professor is on temporary leave (e.g. sabbatical, research, etc.); the Major Professor shall coordinate with the Graduate Director to facilitate the needs of the student. In some instances, a student may choose to have two professors serve as Major Professor. In this situation the faculty are approved as "Co-Major Professors" and jointly serve in that role. Consequently, both faculty must sign approval on paperwork pertaining to the student's processing (i.e. committee form, change of committee form, admission to candidacy, etc.)

(Co-) Major Professor(s) of the Graduate Student Supervisory Committee Responsibilities

Approved by the Graduate Council on May 15, 2000; revised August 26, 2013:

- Approving and submitting the Graduate Student Supervisory Committee Form to the Program, and if necessary, the College
- Approving and submitting the Admission to Candidacy Form.
- Specifying the style manual to be used for the thesis/dissertation before the student begins writing the manuscript. The style manual should be appropriate to the discipline.
- Students should not be told to follow other theses/dissertations.
- Referring students to the Thesis and Dissertation Guidelines (http://www.grad.usf.edu/ETD-res-main.php) to obtain information on University Format Requirements.
- Verifying by signing the Certificate of Approval, that the student's thesis or dissertation is ready to be submitted to the OGS for publication.
- Verifying, by signing the Request for the Ph.D./Ed.D. Final Oral Examination Form, that the student is ready to defend the dissertation.
- Verifying, by signing the Successful Defense of the Ph.D./Ed.D. Form, that the doctoral student has successfully defended the dissertation.
- Reading and approving the final copy of the thesis/dissertation for content and format prior to signing the Certificate of Approval.

Doctoral Committees

Some Colleges have a Graduate Committee comprised of graduate faculty, who advise the student from admission up to doctoral candidacy, when the formal Doctoral Dissertation Committee is formed. As soon as an area of research is determined and a major professor is selected, a Doctoral Dissertation Committee will be appointed and approved for the student. The Department will request approval of the Doctoral Committee from the Dean of the College and, as needed, the Dean of the Office of Graduate Studies.

Role of Doctoral Committees

Depending on the College, either the Graduate Committee or the Doctoral Dissertation Committee is responsible for

- approving the student's course of study
- grading the written comprehensive qualifying examination

Doctoral Dissertation Committee

Doctoral Dissertation Committees will,

- approve the plan for research
- supervise the research
- read and approve the dissertation, and
- conduct the dissertation defense.

Member Definition

All graduate faculty, as defined by the University and the College/Department, and approved by their department and college, are assumed by the Office of Graduate Studies as qualified to be a member of and/or supervise a doctoral committee. Persons desiring to serve on a committee who are not defined as Graduate Faculty (i.e. visiting faculty, professionals, etc.) by the University and the College/Department must submit a curriculum vitae and be approved by the Department, College, and Office of Graduate Studies, for each committee.

Committee members must meet the following requirements:

- Be graduate or affiliate graduate faculty, as defined by the University
- Have the background and expertise that contributes to the success of the student.

In addition to the requirements specified in the Graduate Faculty definition, committee membership will be based upon criteria developed within the appropriate major or department and approved at the college level. These criteria must be forwarded to the Dean of the Office of Graduate Studies.

Composition

The Doctoral Dissertation Committee will consist of at least four members:

- the Major Professor must be from the student's academic area-- two additional members must come from the academic area (i.e. discipline) of the student
- at least one external member (from outside the Department, School, or equivalent, hosting the doctoral major, but may be within the academic discipline)

- Faculty holding joint or adjunct appointments in the degree-granting academic unit (i.e. Department or equivalent) cannot be external members on a student's committee.

Approval

Once a committee has been determined, a *Doctoral Dissertation Committee Form* needs to be completed by the student and submitted to the Committee Members for original signature. Check with the College for instructions and forms. To insure uniformity of excellence across the colleges, the (Co-)Major Professor(s) of Doctoral Dissertation Committees will need to submit a current curriculum vita (equivalent to an NIH Bio, approximately two pages long with the last three (3) years of scholarly activity included) with the committee appointment form to the College Dean or designee. This approval is in addition to the approval from their department chairperson. (Colleges and departments may institute additional requirements for membership on Doctoral Dissertation Committees.) Once approved, the original form and the approved Curriculum Vitae (CV) are placed in the student's file. An approved and current Form must be on file in the major/college before graduation may be certified. *Doctoral Dissertation Committee Forms* need to be processed as early in the major as possible, but no later than the semester prior to graduation.

Changes to Committee

Changes to a Doctoral Dissertation Committee must be submitted on a *Change of Committee Form.* Check with the College for instructions and forms. Original signatures of faculty being added to the Committee, along with the approval signature of the (Co-) Major Professor(s), must be on the form. Faxed signatures are acceptable. Faculty who are removed from the Committee are not required to sign the form, provided that the (Co-) Major Professor(s) has signed. In such instances the signature of the (Co-) Major Professor(s) indicate(s) approval of the change, as well as acknowledgement and approval of the change by the removed member. Any non-faculty being added to a committee must submit a CV for approval. If a faculty member is being added as a Co-Major Professor, or if there is an appointment change to the Major Professor position, a CV must be included for the faculty member who is being added to that position. Change of Committee Forms should be submitted for approval as soon as the change takes place. Changes to a Committee are official only once approved and filed by the major and college. An approved and current *Doctoral Dissertation Committee Form* must be on file before graduation may be certified.

Doctoral Qualifying Examination

As soon as the substantial majority of the course work is completed, the student must pass a written Qualifying Examination covering the subject matter in the major and related fields. This Examination may be supplemented by an oral examination. The Qualifying Exam must be taken while in residency (i.e. current active student) at USF, administered by USF faculty, covering content for the USF major. Students must be degree-seeking and enrolled a minimum of two (2) hours of graduate credit in their discipline at the time they take the Qualifying Examination. If the Exam is taken between semesters, students must be enrolled for a minimum of two (2) hours of graduate credit in the semester before or following the Exam.

Admission to Candidacy

In order to be admitted to doctoral candidacy, students must meet the following requirements at USF:

- admission to a doctoral major
- appointment and approval of a Doctoral Committee,
- attainment of an overall and major Grade Point Average (GPA) of 3.00 at USF at the time of candidacy. All "I" and "M" grades, including "IF" and "MF", must be cleared before candidacy may be finalized.
- successful completion of a qualifying examination
- certification by the Doctoral Committee that the above qualifications have been successfully completed
- must meet enrollment requirements for completion of the exam and submission of the form (See Enrollment Requirements)

The Admission to Candidacy form should be submitted for approval during the semester that the Qualifying Exams were completed, but no later than the semester following the successful completion of the Exam. The form will be approved by the Dean of the College and forwarded to the Office of Graduate Studies

for final approval. Doctoral Candidacy is effective in the semester following processing and approval by the Office of Graduate Studies. At this time, the student's status changes to 6C. For procedures and processing deadlines refer to the Office of Graduate Studies website at www.grad.usf.edu.

Once candidacy status is approved, students with approved candidacy are eligible to enroll in dissertation hours (7980) in the semester that immediately follows the semester in which the Candidacy form is submitted and approved. For example, students approved during the Fall approval window may enroll in the Spring. Students approved during the Spring approval window may enroll in the summer and students approved during the Summer approval window may enroll in the Fall. **Students may NOT enroll in dissertation hours prior to being admitted to doctoral candidacy.**

Each major has a required number of dissertation hours for completion of the degree. Departments, with College approval, may apply Directed Research hours toward the total number of dissertation hours required. Directed Research hours shall not exceed 50% of the dissertation hour requirement. No directed research hours will be converted to dissertation hours (i.e. a directed research course dropped and a dissertation course added) prior to or during the approval window. *For more information, refer to Enrollment Requirements in the Academic Policies section.*

Dissertation

Dissertation requirements are for the academic degrees of Ph.D. and Ed.D., and for students in professional doctorate programs (e.g. DNP, DBA, Au.D., DrPH., DPT) who choose to complete a dissertation. Students in professional doctorate degree programs may choose to complete a doctoral project instead of a dissertation. Please contact the professional school for doctoral project requirements.

Dissertation Format

The University accepts the standard format for the discipline of the major. Formats must be consistently applied and follow national standards for the discipline. For the preliminary pages, which follow a standard University format, refer to the ETD website. http://www.grad.usf.edu/ETD-res-main.php

Directed Research

Directed Research hours taken with the (Co) Major Professor(s) prior to approval to doctoral candidacy by the Office of Graduate Studies may satisfy up to 50% of the dissertation hour requirement, with program approval.

Manuscript Processing Fee

USF Regulation USF4-0107, http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf4.0107.pdf Students participating in the thesis/dissertation process are required to pay a processing fee. More information is available on the website at http://www.grad.usf.edu/ETD-res-main.php

Doctoral Dissertation Defense (Final Oral Examination)

Scheduling and Announcement

After the Doctoral Dissertation Committee has determined that the final draft of the dissertation is suitable for presentation, the Committee will request the scheduling and announcement of the Dissertation Defense (also called Final Oral Examination or Oral Defense.) A copy of the announcement should be sent to the Office of Graduate Studies, preferably two weeks in advance of the defense date. The announcement must also be posted in a public forum for a minimum of twenty-four hours to comply with statute requirements for a public meeting. The College and Department may specify additional procedures for this process.

Attendance

It is desirable for all members of the final oral examination committee to be present physically during the entire examination. If this is impossible, video conferencing may be approved by the College Dean and the Office of Graduate Studies. If video conferencing is approved, the student, the Major Professor (or, if Co-Major Professors, at least one), and the Outside Chair for the defense must be physically present. Other faculty members and graduate students may physically or virtually attend the examination.

Video Conferencing

Graduate programs must adhere to the following if the final oral examination involves video conferencing. Departments can enforce stricter guidelines. Video conferencing may not be ideal in all circumstances.

Facilities and Support Requirements

The video conferencing room must allow the candidate and all members of the examination committee to see and hear one another during the entire examination. There must be appropriate software/hardware available for the transmission of any text, graphics, photographs, or writing referred to or generated during the examination.

Audio-only communications are not permitted.

Prior to the defense, the student must agree to the video conferencing set-up. The student and Major Professor must confirm in advance that the video conferencing setup is satisfactory. On the day of the defense, if the video conferencing capabilities differ significantly from the initial agreement as noted on the Request for Defense Form, then the student may cancel the examination without penalty.

Any technical support staff required to operate equipment must observe strict confidentiality.

The video conference must be scheduled for a three and a half hour time period to allow for any delays resulting from technical issues during the dissertation defense.

Should a technical failure arise, the Outside Chair in consultation with the Major Professor and other committee members will determine if the examination should continue. If the examination is cancelled, the examination will be rescheduled and there will be no penalty to the student.

All committee members must record their vote on the Successful Defense form. Off-site committee members must sign a copy of the Successful Defense form (completed within the College) and send it back to the Major Professor as soon as possible, but no later than a week after the defense date.

Doctoral Dissertation Defense Chair

The Doctoral Dissertation Defense (Final Oral Examination) shall be presided by

- an external committee member from outside the Department, School, or equivalent, hosting the doctoral major, but may be within the academic discipline.

OR,

- a non-committee member (a.k.a. Outside Chair), (Refer to the individual Program's Degree Requirements in the Graduate Catalog for information). If the Chair is from another institution, this individual must be approved for Affiliate Graduate Faculty status.

The Doctoral Dissertation Defense Chair's role includes overseeing the proceedings as well as serving as the student's advocate, by ensuring fairness of the process. Faculty holding joint, courtesy, or adjunct appointments in the degree-granting academic unit (i.e. Department or equivalent) cannot serve as the Defense Chair.

Procedures for Conducting the Doctoral Dissertation Defense (Final Oral Examination)

1. The Doctoral Dissertation defense (final oral examination) should be conducted within a timeline to allow for the student to make any necessary corrections following the defense and still meet the final copy deadline for turning in the Dissertation to the Office of Graduate Studies.
2. The presentation should be considered an important function in the Department and all graduate students and faculty be encouraged to attend.
3. The presentation and defense are open to the public and as such, must meet the requirements of the Sunshine Laws for the State of Florida. The Doctoral Dissertation Committee deliberation is not public.
4. The room selected for the examination should have adequate seating with an alternate room selected in case of problems.
5. It is required that all members of the Doctoral Dissertation Committee be present for the examination unless an absence is approved prior to the defense taking place by the Office of Graduate Studies Dean. In the event that a member cannot attend in person, participation maybe permissible via video conference with approval from the Office of Graduate Studies. The student and Major Professor must be in attendance in person and may not participate via remote access. A minimum of three members, including the Major Professor is required to proceed with the defense. If a non-committee member (Outside Chair) chairs the Defense, this individual does not count as one of the three required members in attendance. If an unforeseeable situation arises, that would prevent compliance with this requirement the Major Professor or Doctoral Dissertation Defense Chair should contact the Office of Graduate Studies for guidance and approval to proceed with the defense.
6. The length of the examination period will generally not exceed three hours. Throughout this time the Doctoral Dissertation Defense Chair is to be in charge of all proceedings and, ideally, is expected to play a balancing role between advocacy and contention.
7. The Doctoral Dissertation Defense Chair, at any time during the course of the examination, may request all visitors to leave.
8. **Presentation**
   - The Doctoral Dissertation Defense Chair should open the proceedings by introducing the candidate and the Doctoral Dissertation Committee.
   - The examination should begin with a presentation by the candidate designed to summarize the dissertation.
9. **Questions**

Following the presentation, the Defense may be moved to a different setting for the main examination. The College determines the order of the proceedings described below:

   - The examination will consist of questions about the research by the Doctoral Dissertation Defense Chair and the Doctoral Dissertation Committee. All committee members are expected to participate fully in questioning during the course of the examination and in the discussion of and decision on the result.
   - It is suggested that questioning should be limited to about 15 minutes for each Doctoral Dissertation Committee member with subsequent rounds of questioning as necessary.
   - Questions from the faculty-at-large and/or the public may be allowed following the presentation. It is suggested that questioning from the general audience be limited up to 5minutes per person.

10. **Deliberations and Voting**

Following the completion of these proceedings, the Doctoral Dissertation Defense Chair

   - will ask all visitors and the candidate to leave and will reconvene the Doctoral Dissertation Committee only.
   - will preside over the deliberations and voting of the Committee (Note: if a non-committee member (Outside chair) is used he/she will not participate in the voting)
   - is responsible for tallying the votes and informing the candidate of the final decision. The voting is to be limited to "pass" and "fail" votes. *The vote of the Doctoral Dissertation Committee must be unanimous.* If unanimous agreement cannot be reached, the Doctoral Dissertation Defense Chair notifies the student's Department Chair (or appropriate equivalent) who will endeavor to resolve the dispute in an expedient fashion.
   - records the vote on the Successful Defense Form and conveys the decision of the Doctoral Dissertation Committee (Successful Defense Form) to the Department/College Graduate Office to be kept in the student's file.

11. **Approval of the Final Dissertation**

All committee members must approve the final version of the dissertation via the Certificate of Approval Form. If the Committee is unable to **unanimously** approve a final draft of the dissertation, the student's Department Chair and College Dean will work with the Doctoral Dissertation Committee to seek an equitable resolution.

Dissertation Final Submission Guidelines

Information on requirements for submission of the finished and approved manuscript copies is available online at the Thesis and Dissertation website at http://www.grad.usf.edu/ETD-res-main.php. Students who fail to submit the final copy of a dissertation by the posted submission deadline will not be considered for graduation. The student may be considered for graduation in the following semester and must therefore apply for the degree (graduation) by the posted deadline, enroll in a minimum of two (2)dissertation hours for that subsequent semester, and meet the submission requirements as posted on the Thesis/Dissertation website. Only after the Office of Graduate Studies has approved the manuscript can the student be certified for the degree.

Mandatory Electronic Submission

Students are required to submit the dissertation in an electronic format (ETD). Requirements and procedures are available at the Office of Graduate Studies website at http://www.grad.usf.edu/ETD-res-main.php

Submission for Official Publication and Archiving

All theses/dissertations will be submitted to the Office of Graduate Studies designated System for official publication and archiving.

Changes after Publication

Once a dissertation is approved and accepted by the Office of Graduate Studies for publication, it cannot be changed.

Release of Dissertation Publications

The University recognizes the benefits from collaboration with sponsors on research projects but also recognizes the possibility of conflicts of interest in the disclosure of the results of the collaborations. While the sponsor's economic interests in the restriction of disclosure should be considered, the University has a primary mission to extend knowledge and disseminate it to the public and the broader academic community. The University's "Statement of Policy Regarding Inventions and Works" acknowledges the possible need for delays in publication of sponsored research to protect the sponsor's interests, but it provides no definite guidelines for the restrictions of publication beyond the statement: "Disclosure delays mutually acceptable to the Inventor, the Vice President for Research, and the sponsor, if any, are authorized in order to allow patent applications to be filled prior to publication, thereby preserving patent rights..." (April Burke, "University Policies on Conflict of Interest and Delay of Publications," Report of the Clearinghouse on University-Industry Relations, Association of American Universities, February, 1985.)

To protect the University's primary goal from un-due compromise, the University has adopted the following guidelines:

1. The recommendations of sponsors, regarding publication of research results should be considered advisory rather than mandatory.
2. In support of academic discourse and the mission to promote and share academic works, Dissertations will be released for worldwide access once submitted to and approved by the USF Office of Graduate Studies. In the event that a patent or copyright application provides reason to delay the release of the Dissertation, a petition to request a one year delay may be submitted to the Office of Graduate Studies for consideration. Such requests must be received by the format check of the dissertation.
3. Students should not be delayed in the final defense of their dissertations by agreements involving publication delays.

Duty to Disclose New Inventions and Works

USF 0-300 http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-0-300.pdf and USF 12.003 http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf12.003.pdf
For information about the requirements of this policy contact the Division of Patents and Licensing at (813) 974-0994.

Dissertation Change of Grade

In the semester in which the final manuscript has been received, reviewed, and certified for permanent filing in the University Library, the Office of Graduate Studies submits the change of grade from "Z" to "S" for the last registration of dissertation courses to the office of the registrar when all grades are due at the end of the semester.

The Use of "Ph.D." in Credentials and Publication

Students may only use the credential of "Ph.D." after degree conferral is granted. It is inappropriate to use the credential until it is officially and formally granted. The use of the abbreviation "Ph.D." in university publications, correspondence, etc., including websites and other electronic media, shall be upper case "P", lower case "h" followed by a period, an upper case "D" and another period. It shall not be used in the format of all upper case letters without periods, as in "PHD".

Graduation Information and Post-Doctoral Affairs

Application for Degree (Graduation)

To graduate, a student must submit the Application for Degree through their College. This application must be submitted in the term of expected graduation by the deadline noted in the academic calendar. If a student applies for graduation and is not approved, a new Application for Degree must be submitted by the deadline in a new term. In order for the degree statement to appear on a student's academic record, the student must file the aforementioned application whether or not participation in the commencement ceremony is desired.

The application for a graduate degree is online at http://www.usf.edu/registrar/resources/graduation.aspx

The application must be submitted to the College advising office prior to the graduation application deadline. Inquiries concerning approval or denial of graduation should be made to the appropriate college. It is the student's responsibility to clear all "I" (Incomplete) and "M" (Missing) grades in all courses and to provide official transcripts of all transferred course work needed for graduation at least three weeks prior to the end of the term in which he/she expects to graduate.

Graduation Requirements

It is the student's responsibility to make sure that he/she has met all degree requirements (e.g. be *In good standing*) as specified in the Policies and Degree Requirements sections of this publication, as well as any College and Major requirements for the degree.

Commencement

Graduate students **may not** participate in commencement exercises **until all requirements** for the degree sought have been fulfilled. Students graduating from majors based from the Tampa campus (despite location, i.e. may be located in St. Petersburg, Sarasota, etc., such as students in Marine Science) participate in commencement exercises on the Tampa campus. All doctoral graduates receive degree conferral from the Tampa campus and therefore participate in commencement exercises in Tampa.

Diplomas

Diplomas are mailed to the student's permanent address approximately six (6) weeks after commencement. Students with a change of address need to fill out a change of address form at the Registrar's office. Questions regarding diplomas and degree certification should be directed to the Registrar's office at 974-2000.

Letters of Certification

Letters of Certification Students in need of verification of the degree prior to receiving their diploma may request a Letter of Certification. This letter specifies that the student has finished all of the requirements for the degree and the date the degree will be conferred on. The letter must include the student's U-ID Number, name of major and official name of the degree. The Major Professor, the College Dean (or designee), the Department Chair or Graduate Director (or designee), the Dean (or Designee) in the Office of Graduate Studies, and the Registrar must sign the Letter of Certification. A template for the Certification Letter is available on the Office of Graduate Studies website at http://www.grad.usf.edu/student-forms.php

Posthumous Degrees or Degrees in Memoriam

Reference – USF Policy 10-047 - http://regulationspolicies.usf.edu/policies-and-procedures/pdfs/policy-10-047.pdf

Award of Posthumous Degrees

The University of South Florida System (USF System) institutions may award a posthumous baccalaureate, master's or doctoral and medical degree to a student who was in good academic standing at the time of his or her death and who had completed all substantive requirements for the degree. To award a non-thesis degree, the student would need to have completed all courses required for the degree. Courses required for the degree, in which students are enrolled at the time of his or her death, must have been completed to the satisfaction of the faculty so that passing grades might be posted. All other degree requirements must have been satisfied as well. To award a thesis or dissertation degree, all courses must be completed as described above and the thesis/dissertation must be sufficiently complete to the satisfaction of the faculty so that certification of completion may be posted to the student's record.

Award of Degrees in Memoriam

USF System institutions may award baccalaureate, master's, doctoral and medical degrees in memoriam to students who were in good academic standing at the time of his or her death.

Procedures for Award of Posthumous Degrees or Degrees in Memoriam

Departmental Chairs, or appropriate faculty members, on their own initiative or upon request of a student's family, may recommend a posthumous, or an in memoriam degree, by forwarding the recommendation to the respective Dean of the appropriate college. If approved by the Dean, the request, accompanied by supporting documentation, will be forwarded to the Dean of Undergraduate or Graduate Studies (respective to the degree type at USF or to the Chief Academic Officer at USF St. Petersburg or USF Sarasota/Manatee for approval. If the Dean or Chief Academic Officer approves the recommendation, the institution's Office of the Registrar will be notified. Posthumous degrees and in memoriam Degrees may also be presented to the student's family in an appropriate setting, which may include the ceremony held in fall and spring terms. A posthumous degree may be awarded at a commencement ceremony.

Note:
Diplomas for posthumous degrees will be identical to other degrees awarded in the same colleges and majors. Diplomas for Degrees in Memoriam will be prepared to read "Master of Arts in Memoriam, Master of Science in Memoriam," "Doctor of Philosophy in Memoriam," etc., depending upon the degree the student was pursuing at the time of his or her death.

Transcripts

Transcripts of a student's USF academic record may be requested by the student through the Office of the Registrar. A student's academic record can only be released upon authorization of the student. Students requesting transcripts may do so in person or by writing to the Office of the Registrar. By law, the request must include the student's signature and date. For transcripts to be issued, the student must have no financial obligations to the University. Procedures for requesting a transcript are available on the Office of the Registrar's website at http://www.registrar.usf.edu/. Degree statements are posted approximately five weeks after the graduation ceremony. Current term grades are posted approximately one week after the final exams end. If grades for the current term are needed, clearly indicate that the transcript request is to be held for grades.

Office of Postdoctoral Affairs

The Office of Postdoctoral Affairs (OPA) serves as an administrative and academic center of excellence for postdoctoral scholars, and ensures they have an exemplary professional and personal development experience while at USF. It fosters a robust postdoctoral community, provides opportunities to enhance the postdoctoral experience and future success of its constituents, and serves as a dedicated resource for postdoctoral scholars, faculty, and administrators.

Objectives of the OPA:

- Provide guidance to colleges and postdoctoral scholars throughout the hiring process.
- Establish, maintain, and evaluate postdoctoral policies.
- Build collaboration among postdoctoral scholars, colleges, and graduate students.
- Offer professional development workshops for postdoctoral scholars and their mentors.
- Maintain a detailed database of current and alumni postdoctoral scholars.
- Submit postdoctoral data for university, state, national, and international reports.
- Facilitate the development of a USF Postdoctoral Association.

For more information, please see www.grad.usf.edu/postdoc

Degree, Majors, and Concentrations

New graduate degree programs, majors and concentrations are continually under development. Check the website for recently approved curriculum and for information on which majors are currently accepting applications and which are currently closed for admission. For the most current list of authorized degrees programs, majors and concentrations, Accelerated Degree Programs, and Concurrent Degrees, go to http://www.grad.usf.edu/majors. As of the date of this publication, the University is authorized to offer over 50 different degrees with graduate majors offered as follows:

116	Master's	199	Concentrations at the Master's level
2	Education Specialist	15	Concentrations at the Specialist level
52	Doctoral (Ph.D., Ed.D., Au.D., D.N.P., D.P.H., D.B.A.)	89	Concentrations at the Doctoral level
3	Professional doctoral (including M.D., D.P.T., PharmD)	1	Concentration at the Professional level

USF Curriculum Definitions

– reference USF 3.038 Academic Curricular Offerings for definitions of Degree Program, Major, Concentration, etc.
https://www.systemacademics.usf.edu/curriculum/definitions.php

Other Offerings:

Accelerated Majors

Accelerated Majors allow academically qualified students to complete an undergraduate Bachelor's degree and a graduate degree (typically master's degree) on an accelerated timeline, graduating sooner than in traditional majors. Typically, students will complete a portion of the required graduate coursework while classified as an undergraduate student and have it count towards both degrees. As soon as the student completes the undergraduate degree requirements, the student is converted to graduate status, where the remaining graduate requirements are fulfilled. Refer to the policy in the Academic Policies and Regulations section for more information. For specific curriculum requirements and to see how many hours are shared, refer to the Accelerated Majors section of the Graduate Catalog. The Application and Progression Forms are available online at: http://www.grad.usf.edu/accelerated.php

Concurrent Degree Options

Concurrent Degrees allow academically qualified students to complete two separate graduate degrees. For more information, refer to the Academic Policies and Regulations. To view current options, go to the Concurrent Degrees section of the Graduate Catalog.

Accelerated Majors

Accelerated Majors allow academically qualified students to complete an undergraduate Bachelor's degree and a graduate degree (typically master's degree) on an accelerated timeline, graduating sooner than in traditional programs. Typically, students will complete a portion of the required graduate coursework while classified as an undergraduate student and have it count towards both degrees. As soon as the student completes the undergraduate degree requirements, the student is converted to graduate status, where the remaining graduate requirements are fulfilled. For more information review the Accelerated Majors Policy in the Academic Policies and Regulations section and on the Accelerated Majors website: https://www.usf.edu/graduate-studies/academics/accelerated-majors.aspx

General requirements:

- 15 Credit Hours must be completed in the undergraduate major before a student may apply
- 3.33 GPA overall and a 3.50 GPA in the undergraduate major
- Must meet admission requirements for graduate major to progress to the graduate level
- Have met with Undergraduate Advisor and Graduate Director to develop an approved Program of Study, including plan for advising and notation for financial aid impact
- May share up to 12 Credit Hours of structured graduate coursework
- Total combine credits must be at least 150 credit Credit Hours (120 bachelor's and 30 master's) after sharing coursework.
- B (3.00) required in each graduate course taken as part of the shared credits
- Degrees are conferred sequentially (bachelor's should be conferred as soon as requirements are met)
- Students pay graduate tuition when taking graduate courses.

The shared requirements for each Accelerated Major are listed below alphabetically by graduate major.

View the full list of Accelerated Majors listed by Undergraduate Major or view the full list Accelerated Majors listed by Graduate Major. For information on the admission and curriculum requirements for each major, refer to the listing in their respective Catalogs. Contact the Department(s) offering the Accelerated Major for more information and advising.

Accelerated Majors

Listed Alphabetically by Graduate Major.
For fasting searching, type Control F and enter the major name.

ADVERTISING M.S.

Advertising B.S. (120 Credit Hours) to Advertising M.S. (36 Credit Hours)

Approved – 201901
Shared: 6 Credit Hours
Total Combined after sharing: 150 Credit Hours

Grade Policy
Students who receive lower than a "B" (3.00) in a graduate course must re-take the course to obtain a minimum grade of "B."
Shared– 6 Credit Hours

- MAR 6815 Marketing Management satisfies MAR 3823 Marketing Management
- MAR 7555 Consumer Behavior Insights satisfies MAR elective COB International Course

ART HISTORY M.A.

Art History B.A. (120 Credit Hours) to Art History M.A. (42 Credit Hours)

Approved - 201801
Shared: 12 Credit Hours
Total Combined after sharing: 150 Credit Hours

Admission

- must have completed at least 24 Credit Hours in the Art History undergraduate major.
- Admission is by faculty invitation. Students will be contacted by faculty and invited to apply, and to provide documentation affirming satisfaction of minimum requirements.

Shared – 12 Credit Hours
12 Credit Hours of graduate courses in art history (5000-level or above) satisfies:

- 6 Credit Hours of Art History Survey (ARH 4170, ARH 5200, ARH 4301, ARH 4310, ARH 4312, ARH 4333, ARH 4350, ARH 4430, ARH 4450, ARH 4475C, ARH 4520, ARH 4530, ARH 4571, ARH 4930)
- And 6 Credit Hours of ARH 4800 Critical Studies in Art History

BIOMEDICAL ENGINEERING M.S.B.E.

Chemical Engineering B.S.C.H. (130 Credit Hours) to Biomedical Engineering M.S.B.E. (30 Credit Hours)

Approved – 201705
Shared: 9 Credit Hours
Total Combined after sharing: 151 Credit Hours

Shared– 9 Credit Hours
Three (3) of the following five (5) core graduate courses replace nine (9) credit Hours of upper-level departmental electives in Chemical Engineering:

BME 6000 Biomedical Engineering Credit(s): 3
BME 6931 Selected Topics in Biomedical Engineering Credit(s): 1-3 (II)

GMS 6440 Basic Medical Physiology Credit(s): 3
OR BME 6410 Engineering Physiology Credit(s): 3

GMS 6605 Basic Medical Anatomy Credit(s): 3
PHC 6051 Biostatistics II Credit(s): 3

Chemistry B.S. (120 Credit Hours) to Biomedical Engineering M.S.B.E. (30 Credit Hours)

Approved 201508
Shared: 9 Credit Hours
Total Combined after sharing: 141 Credit Hours (pending SACSCOC approval)

Shared – 9 Credit Hours
Students choose three (3) of the following five (5) courses to be shared between the two degrees:
BME 6000 Biomedical Engineering Credit(s): 3
BME 6931 Selected Topics in Biomedical Engineering Credit(s): 1-3 (II)

GMS 6440 Basic Medical Physiology Credit(s): 3
OR BME 6410 Engineering Physiology Credit(s): 3

GMS 6605 Basic Medical Anatomy Credit(s): 3
PHC 6051 Biostatistics II Credit(s): 3

Industrial Engineering B.S.I.E. (128 Credit Hours) to Biomedical Engineering M.S.B.E. (30 Credit Hours)

Approved – 201705
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours
Two (2) of the following five (5) core graduate courses replace six (6) credit Hours of upper-level departmental (Technical) electives:

BME 6000 Biomedical Engineering Credit(s): 3
BME 6931 Selected Topics in Biomedical Engineering Credit(s): 1-3 (II)

GMS 6440 Basic Medical Physiology Credit(s): 3
OR BME 6410 Engineering Physiology Credit(s): 3

GMS 6605 Basic Medical Anatomy Credit(s): 3
PHC 6051 Biostatistics II Credit(s): 3

Mechanical Engineering B.S.I.E. (128 Credit Hours) to Biomedical Engineering M.S.B.E. (30 Credit Hours)

Approved – 201705
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours
Two (2) of the following five (5) core graduate courses replace six (6) Credit Hours of undergrad technical electives in Mechanical Engineering:

BME 6000 Biomedical Engineering Credit(s): 3
BME 6931 Selected Topics in Biomedical Engineering Credit(s): 1-3 (II)

GMS 6440 Basic Medical Physiology Credit(s): 3
OR BME 6410 Engineering Physiology Credit(s): 3

GMS 6605 Basic Medical Anatomy Credit(s): 3
PHC 6051 Biostatistics II Credit(s): 3

BUSINESS ANALYTICS AND INFORMATION SYSTEMS M.S.

Business Analytics and Information Systems B.S. (120 Credit Hours) to Business Analytics and Information Systems M.S. (33 Credit Hours)

Approved – 201105 (name changed 201605)
Shared: 12 Credit Hours
Total Combined after sharing: 141 Credit Hours *(pending SACSCOC approval)*

Admission:

- minimum 3.25 GPA

- Interested students will be required to present a "portfolio" of the following credentials to the integrated program committee prior to being admitted to the major:
  - Three letters of recommendation, at least two from faculty
  - Statement of intent—a personal statement about why the student wishes to apply for the integrated program.
  - Undergraduate transcripts.
  - Other supporting documents (e.g., projects and papers, software, work experience, internships, etc.) should be included where possible.
- The GMAT or GRE should be taken sometime before or during the Fall semester of the Junior year of study.
- The application to the accelerated program will be considered as a complete package and therefore obtaining a high undergraduate GPA is not a guarantee of admission. Grades in the undergraduate BAIS core courses will be taken in consideration and will have a significant impact on the M.S./BAIS acceptance decision.

Shared– 12 Credit Hours

9 Credit Hours of graduate credit can be taken in place of the 9 Credit Hours of elective undergraduate credits. The student must earn a minimum grade of B in each graduate course that is to be counted for both degrees.

3 Credit Hours - ISM 6436 Operations and Supply Chain Processes can be taken in place of the comparable undergraduate course ISM 3431.

CHEMICAL ENGINEERING M.S.C.H.

Chemical Engineering B.S.C.H. (131 Credit Hours) to Chemical Engineering M.S.C.H. (30 Credit Hours)

Approved – 201701
Shared: 6 Credit Hours
Total Combined after sharing: 155 Credit Hours

Shared - 6 Credit Hours

Two (2) ECH courses (6 Credit Hours) at the 6000-level to count toward 6 Credit hours of upper-level Chemical Engineering electives.

CIVIL ENGINEERING M.S.C.E.

Civil Engineering B.S.C.E. (131 Credit Hours) to Civil Engineering M.S.C.E. (30 Credit Hours)

Approved – 201708
Shared: 6 Credit Hours
Total Combined after sharing: 155 Credit Hours

Shared Courses - 6 Credit Hours

Students may choose two (2) of the following five (5) 6000-level course options to meet the upper-level undergraduate Technical elective requirement:

- Any 6000-level TTE prefixed course (3 Credits) satisfies TTE 4005 Transportation Engineering II
- Any 6000-level CEG prefixed course (3 Credits) satisfies CEG 4012 Geotechnical Engineering II
- ENV 6564 Environmental Engineering Design satisfies CWR 4812 Capstone Water Resources/Environmental Engineering Design
- Any 6000-level CEG, TTE, CES, CGN or CWR course (3 Credits) satisfies Free Technical elective
- Any 6000-level CEG, TTE, CES, CGN or CWR course (3 Credits) satisfies Free Technical elective

COMPUTER ENGINEERING M.S.C.P.

Computer Engineering B.S.C.P. (128 Credit Hours) to Computer Engineering M.S.C.P. (30 Credit Hours)

Approved 201705
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared - 6 Credit Hours
Two (2) of the following three (3) core graduate courses replace six (6) Credit Hours of upper-level departmental (Technical) electives, including Independent Study and Industry Internship:

- EEL 6764 Principles Of Computer Architecture Credit(s): 3
- COP 6611 Operating Systems Credit(s): 3
- COT 6405 Introduction to the Theory of Algorithms Credit(s): 3

COMPUTER SCIENCE M.S.C.S.

Computer Engineering B.S.C.P. (128 Credit Hours) to Computer Science M.S.C.S. (30 Credit Hours)

Approved 201705
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared - 6 Credit Hours
Two (2) of the following three (3) core graduate courses replace six (6) credit Hours of upper-level departmental (Technical) electives, including Independent Study, Supervised Research, and Industry Internship:

- EEL 6764 Principles Of Computer Architecture Credit(s): 3
- COP 6611 Operating Systems Credit(s): 3
- COT 6405 Introduction to the Theory of Algorithms Credit(s): 3

Electrical Engineering M.S.E.E.

Electrical Engineering B.S.E.E. (128 Credit Hours) to Electrical Engineering M.S.E.E. (30 Credit Hours)

Approved 201708
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared - 6 Credit Hours
Upper division EE elective courses (2) typically taken Semesters 7 and 8 will be replaced by EE MS program core courses chosen from the list below:

- EGN 5421 Engineering Applications for Vector Analysis Credit(s): 3
- EGN 5422 Engineering Applications of Partial Differential Equations Credit(s): 3
- EGN 5423 Neural Networks and Mathematics for Communication Credit(s): 3
- EGN 5424 Engineering Applications of Complex Analysis Credit(s): 3
- EGN 5425 - Matrix Theory Credit(s): 3
- EEL 6542 - Random Processes Credit(s): 3
- PHC 6050 Biostatistics I Credit(s): 3

ENGINEERING MANAGEMENT M.S.E.M.

Chemical Engineering B.S.C.E. (131 Credit Hours) to Engineering Management M.S.E.M. (30 Credit Hours)

Approved 201705
Shared: 6 Credit Hours
Total Combined after sharing: 155 Credit Hours

Shared – 6 Credit Hours
The following courses will satisfy six (6) Credit Hours of Industrial Engineering elective coursework:

- EIN 5182 Principles of Engineering Management Credit(s):3
- EIN 6386 Management of Technological Change Credit(s): 3

Civil Engineering B.S.C.E. (131 Credit Hours) to Engineering Management M.S.E.M. (30 Credit Hours)

Approved 201708
Shared: 6 Credit Hours
Total Combined after sharing: 155 Credit Hours

Shared – 6 Credit Hours
Students can take two approved EGX-prefixed courses at the 6000-level that meet the upper-level Technical elective requirement.

Electrical Engineering B.S.E.E. (128 Credit Hours) to Engineering Management M.S.E.M. (30 Credit Hours)

Approved 201708
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours
Students can take two approved EEL-prefixed courses at the 6000-level that meet the upper-level Technical elective requirement.

Industrial Engineering B.S.I.E. (128 Credit Hours) to Engineering Management M.S.E.M. (30 Credit Hours)

Approved 201705
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours
The following courses will satisfy six (6) Credit Hours of Industrial Engineering elective coursework:

- EIN 5182 Principles of Engineering Management Credit(s):3
- EIN 6386 Management of Technological Change Credit(s): 3

Mechanical Engineering B.S.M.E. (128 Credit Hours) to Engineering Management M.S.E.M. (30 Credit Hours)

Approved 201705
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours
The following courses will satisfy six (6) credit Credit Hours of Industrial Engineering elective coursework:

- EIN 5182 Principles of Engineering Management Credit(s):3
- EIN 6386 Management of Technological Change Credit(s): 3

ENGLISH M.A.

Literary Studies B.A. (120 Credit Hours) to English with a Concentration in Literature M.A. (36 Credit Hours)

Approved
Shared: 3 Credit Hours
Total Combined after sharing: 153

Grade Policy

No grade lower than a B will be accepted in a graduate course in this program. Students earning less than a B in a graduate course must retake the course and earn a B or higher, to apply it to their graduate degree.

Admission

- Must have completed ENG 3014 as part of the 15 Credit Hours of undergraduate coursework required for admission.
- Application may be made by any student who has satisfied the minimum requirements.
- Applications should be addressed to the Department Undergraduate and Graduate Directors and should include a statement by the student affirming satisfaction of minimum requirements (with supporting documentation) and a letter of recommendation from a Literary Studies faculty member familiar with the student's academic performance.

Shared – 3 Credit Hours

Three (3) Credit Hours of graduate credit may be shared as follows:
ENG 6018 Studies in Criticism and Theory I or ENG 6019 Studies in Criticism and Theory II will satisfy the ENG 4013 Literary Criticism requirement.

ENVIRONMENTAL ENGINEERING M.S.E.V.

Civil Engineering B.S.C.E. (131 Credit Hours) to Environmental Engineering M.S.E.V. (30 Credit Hours)

Approved – 201708
Shared: 6 Credit Hours
Total Combined after sharing: 155

Shared – 6 Credit Hours

Students may choose two (2) of the following three (3) 6000-level course options to meet the upper-level undergraduate Technical elective requirement:

- ENV 6564 Environmental Engineering Design satisfies CWR 4812 Capstone Water Resources/Environmental Design
- Any (3credit) 6000-level ENV course satisfies a Free Technical elective.
- Any (3credit) 6000-level ENV course satisfies a Free Technical elective.

FOREIGN LANGUAGE EDUCATION M.A.T.

Foreign Language Education BA/BS (120 Credit Hours) to Foreign Language Education MAT (42 Credit Hours)

Approved
Shared: 12 Credit Hours
Total combined after sharing: 150 Credit Hours

Admission

- Are admitted to one of the participating undergraduate majors in the College of Arts and Sciences (French, Spanish, or Latin programs) OR the equivalent bachelors and/or graduate degrees from a foreign institution
- Have completed at least 90 semester Credit Hours of coursework in one of the participating programs
- Have no arrest record or have disclosed any record of previous arrests and/or convictions

- Provide an official copy of the General Knowledge Test (GKT) score report verifying passing scores on all four sections of the exam when submitting the Accelerated Major Application. For more information about the GKT, please visit the following link: http://www.fl.nesinc.com/FL_testselection.asp. NOTE: The GKT information can be found under the "Florida Teacher Certification" of this webpage. The test code for the GKT is 082.

Shared – 12 Credit Hours

- TSL 6390 Instructional Methods and Strategies 3
- FLE 5895 Dual Language Education 3
- FLE 5946 Practicum in FL Teaching in the Secondary School 3
- FLE 5291 Applications of Technology to FLE3

INFORMATION TECHNOLOGY M.S.I.T.

Computer Engineering B.S.C.P. (128 Credit Hours) to Information Technology M.S.I.T. (30 Credit Hours)

Approved 201705
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours

Two (2) of the following three (3) core graduate courses replace six (6) Credit Hours of upper-level departmental (Technical) electives, including Independent Study and Industry Internship:

- CEN 6084 Advances in Object Oriented Programming for IT Credit(s): 3
- CIS 6930 Special Topics Credit(s): 1-5 (Ethical Hacking for IT)
- ISM 6218 Advanced Database Management Credit(s): 3

Information Technology B.S.I.T. (120 Credit Hours) to Information Technology M.S.I.T. (30 Credit Hours)

Approved 201708
Shared: 6 Credit Hours
Total Combined after sharing: 144 Credit Hours *(pending SACSCOC approval)*

Shared – 6 Credit Hours
Students can take two approved courses at the 6000-level that meet the upper level Technical elective requirement.

LIBERAL ARTS (FILM STUDIES CONCENTRATION) M.A.

Humanities & Cultural Studies: Film & Media Studies Concentration B.A. (120 Credit hours) to Liberal Arts: Film Studies Concentration M.A. (33 Credit Hours)

Approved
Shared: 12 Credit Hours
Total Combined after sharing: 141 Credit Hours (SACSCOC approved)

Admission
Must have completed FIL 1002 with a B or higher as part of the 15 Credit Hours of undergraduate coursework required for admission.

Shared – 12 Credit Hours

- HUM 6584 Global Cinema and New Media since 1960 satisfies FIL 3077
- HUM 6586 Film Theory or HUM 6801 Theories and Methods of Cultural Studies satisfies HUM 4581
- An additional six (6) graduate Credit Hours may be earned by taking any course offered by HCS that is at the 6000 level.

MATERIAL SCIENCE AND ENGINEERING M.S.M.S.E.

Chemical Engineering B.S.C.H. (131 Credit Hours) to Materials Science and Engineering M.S.M.S.E. (30 Credit Hours)

Approved 201705
Shared: 6 Credit Hours
Total Combined after sharing: 155 Credit Hours

Shared – 6 Credit Hours
The following courses will satisfy six (6) credit Credit Hours of Chemical Engineering undergraduate elective coursework:

- EML 6105 Advanced Thermodynamics and Statistical Mechanics Credit(s): 3
- EML 6713 Advanced Fluid Mechanics Credit(s): 3

Civil Engineering B.S.C.E. (131 Credit Hours) to Materials Science and Engineering M.S.M.S.E. (30 Credit Hours)

Approved 201708
Shared: 6 Credit Hours
Total Combined after sharing: 155 Credit Hours

Shared – 6 Credit Hours
Students can take two approved ECE-prefixed courses at the 6000-level that meet the upper-level Technical elective requirement.

Electrical Engineering B.S.E.E. (128 Credit Hours) to Materials Science and Engineering M.S.M.S.E. (30 Credit Hours)

Approved 201708
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours
Students can take approved EEL-prefixed courses at the 6000-level that meet the upper-level Technical elective requirement.

Mechanical Engineering B.S.M.E. (128 Credit Hours) to Materials Science and Engineering M.S.M.S.E. (30 Credit Hours)

Approved
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours

- EML 6105 Advanced Thermodynamics and Statistical Mechanics Credit(s): 3
- EML 6713 Advanced Fluid Mechanics Credit(s): 3

MATHEMATICS M.A.

Mathematics B.A. (120 Credit Hours) to Mathematics M.A. (30 Credit Hours)

Approved
Shared: none
Total Combined after sharing: 150 Credit Hours

Shared – 0 Credit Hours
Students must fulfill all requirements of the undergraduate Mathematics Major Pure Concentration and all requirements of the Mathematics Masters. There are no shared courses.

MECHANICAL ENGINEERING M.S.M.E.

Mechanical Engineering B.S.M.E. (128 Credit Hours) to Mechanical Engineering M.S.M.E. (30 Credit Hours)

Approved 201705
Shared: 6 Credit Hours
Total Combined after sharing: 152 Credit Hours

Shared – 6 Credit Hours
The following courses will satisfy six (6) credit Credit Hours of Mechanical Engineering elective coursework:

- EML 6653 Applied Elasticity Credit(s): 3
- EML 6713 Advanced Fluid Mechanics Credit(s): 3

MEDICINE M.D.

Honors College B.S. – Undergraduate Bachelor's -120 Credit Hours to Medicine M.D. (369 Credit Hours; 4-year Professional Program)

Approved
Shared: 12 Credit Hours
Total Combined after sharing: 477 Credit Hours

Shared – 12 Credit Hours

PHARMACY Pharm.D.

Biomedical Sciences B.S. (120 Credit Hours) to Pharmacy Pharm.D. (148 Credit Hours)

Approved 201801
Shared: 10 Credit Hours
Total Combined after sharing: 258 Credit Hours

Requires students to complete the first year (36 credits) of the PharmD during their senior year of their B.S. All BMS students will complete FLENT and Summer Enrollment requirements as well as graduation requirements listed in the Undergraduate Catalog.

Admission
For initial eligibility a student must:

- be admitted to the Honors College as a first-year student (at least a 1360 CR+M SAT or 29 ACT and 3.80 High School weighted GPA as calculated by USF's Office of Admissions;
- hold US citizenship or permanent resident status.

Shared – 10 Credit Hours
According to the BOG Articulation Regulation 6A-10.030; earn a minimum of 48 semester Credit Hours of upper-level work (courses numbered 3000 and above), therefore, the B.S. in Biomedical Sciences students will take up to 21 credits of additional 3000+ level coursework in addition to their required major and exit courses listed below. Out of these 21 credits, up to 10 credits will be shared with the Pharm.D.. program. The shared courses are listed below:

- PHA 6451 Clinical Biochemistry Credit(s): 2
- PHA 6792C Drug Information/Literature Evaluation Credit(s): 2
- PHA 6577 Biochemical and Molecular Principles of Drug Action Credit(s): 4
- PHA 6755 Medical Microbiology and Immunology Credit(s):2

Non-medical Community Service Volunteering:
Completion of a minimum of 60 contact Credit Hours of volunteering is required. Community service is defined as involvement in a service activity without receiving monetary compensation. Service performed as part of employment or a service learning course will NOT satisfy this requirement. This requirement is must be completed by the end of the second year. Contact the College of Pharmacy for application requirements.
Conferring of BS Degree (fourth year; first professional year of Pharmacy)
Students must successfully complete all requirements of the Doctor of Pharmacy curriculum to graduate. Successful completion of the academic program of study contained within the first professional pharmacy year is required for the completion of the bachelor's degree in the accelerated (3+4) program and to continue in the pharmacy program.

PUBLIC HEALTH M.P.H.

Public Health MPH (42 Credit Hours) to Honors College – Undergraduate Bachelor's BS (120 Credit Hours)

Approved
Shared: 12 Credit Hours
Total Combined after sharing: 150 Credit Hours

Shared
Fast-track program.

SCIENCE EDUCATION M.A.T.

The following Accelerated Majors are offered through a collaborative program between the College of Arts and Science and the College of Education. Students completing this option will be eligible for high school and/or middle school science teacher certification. Summer sessions may be included in the Plan of Study.

Grade Policy
Students must earn a minimum of a "B" (3.00) in all graduate courses. Failure to earn at least a "B" in a graduate course will result in academic review by the graduate program. Failure to maintain a minimum 3.0 GPA will result in academic probation, according to the procedures of the USF Office of Graduate Studies.

Admission
For all Science Education M.A.T. options:

- 15 hours completed in the specific undergraduate major
- Evidence of successfully completing all sections of the General Knowledge Test (GKT) is also required for full admission to the graduate major.

- Completion of coursework as specified below

Biomedical Sciences B.S. (120 Credit Hours) to Science Education M.A.T. (39 Credit Hours)

Approved
Shared: 9 Credit Hours
Total Combined after sharing: 150 Credit Hours

Admission
Upon application completed thirty (30) semester Credit Hours in science as follows:

- twenty-one (21) semester Credit Hours in a science concentration (e.g. chemistry, biology, physics)
- nine (9) Credit Hours in minor science content area) with associated laboratory experiences to be fully admitted as a graduate student in the M.A.T.

Shared - 9 Credit Hours
According to the BOG Articulation Regulation 6A-10.030; earn a minimum of 48 semester Credit Hours of upper-level work (courses numbered 3000 and above), therefore, the B.S. in Biomedical Sciences students will take 21 credits of additional 3000+ level coursework in addition to their required major and exit courses. Out of these 21 credits, 9 credits will be shared with the MAT Science Education program. The shared courses are listed below:

- SCE 5325 Methods of Middle Grades Science Education Credit(s): 3
- SCE 5337 Methods of Secondary Science Education Credit(s): 3
- SCE 6456 Teaching Secondary School Physical and Earth Science Credit(s): 3

Chemistry B.S. (120 Credit Hours) to Science Education M.A.T. (39 Credit Hours)

Admission
Upon application completed thirty (30) semester Credit Hours in science as follows:

- twenty-one (21) semester Credit Hours in chemistry
- nine (9) Credit Hours in minor science content area) with associated laboratory experiences to be fully admitted as a graduate student in the M.A.T.

Approved
Shared: 9 Credit Hours
Total Combined after sharing: 150 Credit Hours

Shared – 9 Credit Hours
According to the BOG Articulation Regulation 6A-10.030; earn a minimum of 48 semester Credit Hours of upper-level work (courses numbered 3000 and above), therefore, the Chemistry, B.A. students will take 21 credits of additional 3000+ level coursework in addition to their required major and exit courses. Of these 21 credits, 9 credits will be shared with the M.A.T. Science Education program. The shared courses are listed below:

- SCE 5325 Methods of Middle Grades Science Education Credit(s): 3
- SCE 5337 Methods of Secondary Science Education Credit(s): 3
- SCE 6456 Teaching Secondary School Physical and Earth Science Credit(s): 3

Environmental Biology B.S. (120 Credit Hours) to Science Education M.A.T. (39 Credit Hours)

Admission
Upon application completed thirty (30) semester Credit Hours in science as follows:

- Twenty-five (25) semester Credit Hours in biology
- Five (5) Credit Hours of upper level work in math or supporting science content area) with associated laboratory experiences to be fully admitted as a graduate student in the M.A.T.

Approved
Shared: 9 Credit Hours
Total Combined after sharing: 150 Credit Hours

Shared – 9 Credit Hours
Nine credits of upper level unassigned 3000 or 4000 level electives will be replaced by the following:

- SCE 5325 Methods of Middle Grades Science Education Credit(s): 3
- SCE 5337 Methods of Secondary Science Education Credit(s): 3
- SCE 6456 Teaching Secondary School Physical and Earth Science Credit(s): 3

Environmental Microbiology B.S. (120 Credit Hours) to Science Education M.A.T. (39 Credit Hours)

Admission
Upon application completed thirty (30) semester Credit Hours in science as follows:

- Twenty-five (25) semester Credit Hours in biology
- Five (5) Credit Hours of upper level work in math or supporting science content area) with associated laboratory experiences to be fully admitted as a graduate student in the M.A.T.

Approved
Shared: 9 Credit Hours
Total Combined after sharing: 150 Credit Hours

Shared – 9 Credit Hours
Nine credits of upper level unassigned 3000 or 4000 level electives will be replaced by the following:

- SCE 5325 Methods of Middle Grades Science Education Credit(s): 3
- SCE 5337 Methods of Secondary Science Education Credit(s): 3
- SCE 6456 Teaching Secondary School Physical and Earth Science Credit(s): 3

Integrative Animal Biology B.S. (120 Credit Hours) to Science Education M.A.T. (39 Credit Hours)

Admission
Upon application completed thirty (30) semester Credit Hours in science as follows:

- Twenty-five (25) semester Credit Hours in biology
- Five (5) Credit Hours of upper level work in math or supporting science content area) with associated laboratory experiences to be fully admitted as a graduate student in the M.A.T.

Approved
Shared: 9 Credit Hours
Total Combined after sharing: 150 Credit Hours

Shared – 9 Credit Hours
Nine credits of upper level unassigned 3000 or 4000 level electives will be replaced by the following:

- SCE 5325 Methods of Middle Grades Science Education Credit(s): 3
- SCE 5337 Methods of Secondary Science Education Credit(s): 3
- SCE 6456 Teaching Secondary School Physical and Earth Science Credit(s): 3

Interdisciplinary Natural Science B.S. (120 Credit Hours) to Science Education M.A.T. (39 Credit Hours)

Admission
Upon application completed thirty (30) semester Credit Hours in science as follows:

- Twenty-One (21) semester Credit Hours in in a science concentration (e.g. chemistry, biology, physics)
- Nine (9) Credit Hours in minor science content area with associated laboratory experiences to be fully admitted as a graduate student in the M.A.T.

Approved
Shared: 9 Credit Hours
Total Combined after sharing: 150 Credit Hours

Shared – Credit Hours
According to the BOG Articulation Regulation 6A-10.030; earn a minimum of 48 semester Credit Hours of upper-level work (courses numbered 3000 and above), therefore, the B.S. in Interdisciplinary Sciences students will take 18 credits of additional 3000+ level coursework in addition to their required major and exit courses. Of these 18 credits, 9 credits will be shared with the MAT Science Education program. The shared courses are listed below:

- SCE 5325 Methods of Middle Grades Science Education Credit(s): 3
- SCE 5337 Methods of Secondary Science Education Credit(s): 3
- SCE 6456 Teaching Secondary School Physical and Earth Science Credit(s): 3

Marine Biology B.S. (120 Credit Hours) to Science Education M.A.T. (39 Credit Hours)

Admission
Upon application completed thirty (30) semester Credit Hours in science as follows:

- Twenty-five (25) semester Credit Hours in biology

- Five (5) Credit Hours of upper level work in math or supporting science content area) with associated laboratory experiences to be fully admitted as a graduate student in the M.A.T.

Approved
Shared: 9 Credit hours
Total Combined after sharing: 150 Credit Hours

Shared: - 9 Credit Hours
Nine credits of upper level unassigned 3000 or 4000 level electives will be replaced by the following:

- SCE 5325 Methods of Middle Grades Science Education Credit(s): 3
- SCE 5337 Methods of Secondary Science Education Credit(s): 3
- SCE 6456 Teaching Secondary School Physical and Earth Science Credit(s): 3

Physics B.A. (120 Credit Hours) to Science Education M.A.T. (39 Credit Hours)

Admission
Upon application completed thirty (30) semester Credit Hours in science as follows:

- Twenty-five (25) semester Credit Hours in physics
- Five (5) Credit Hours of upper level work in math or supporting science content area) with associated laboratory experiences to be fully admitted as a graduate student in the M.A.T.

Approved
Shared: 9 Credit Hours
Total Combined after sharing: 150 Credit Hours

Shared – 9 Credit Hours
Nine credits of upper level unassigned 3000 or 4000 level electives will be replaced by the following:

- SCE 5325 Methods of Middle Grades Science Education Credit(s): 3
- SCE 5337 Methods of Secondary Science Education Credit(s): 3
- SCE 6456 Teaching Secondary School Physical and Earth Science Credit(s): 3

Concurrent Degrees

Concurrent degrees allow a student to pursue two majors simultaneously and share between 0%-15% of the total combined minimum credit hours. Only structured graduate coursework may be shared. Students must be in good standing at the time of application to a Concurrent Degree. Refer to the Concurrent Degree Policy in the Academic Policies and Regulations section for the full listing of requirements. the Concurrent Degree application is online at: http://www.grad.usf.edu/inc/linked-files/dualma.pdf

Graduate Majors with a Concurrent Degree Option

Click on the Concurrent Degree of interest to view requirements.

Applied Anthropology, M.A.
Applied Anthropology M.A. and Public Health, M.P.H.
Applied Anthropology M.A. and Public Health, Ph.D.

Applied Anthropology Ph.D.
Applied Anthropology Ph.D. and Public Health, M.P.H.

Audiology, Au.D.
Audiology Au.D. and Communication Sciences and Disorders, Ph.D.

Biomedical Engineering, M.S.B.E.
Biomedical Engineering, M.S.B.E. and Entrepreneurship in Applied Technologies, M.S.

Biomedical Engineering Ph.D.
Biomedical Engineering Ph.D. and Medicine, M.D.

Biotechnology, M.S.B.
Biotechnology, M.S.B. and Entrepreneurship in Applied Technologies, M.S.

Business Administration, M.B.A.
Business Administration, M.B.A. and Medicine, M.D.
Business Administration, M.B.A. and Pharmacy, Pharm.D.
Business Administration, M.B.A. and Sport and Entertainment Management, M.S.

Communication Sciences and Disorders, Ph.D.
Communication Sciences and Disorders, Ph.D. and Audiology, Au.D.

Entrepreneurship in Applied Technologies, M.S.
Entrepreneurship in Applied Technologies, M.S. and Biomedical Engineering, M.S.B.E.
Entrepreneurship in Applied Technologies, M.S. and Biotechnology, M.S.B.
Entrepreneurship in Applied Technologies, M.S. and Global Sustainability, M.A.

French, M.A.
French, M.A. and Linguistics: English as a Second Language, M.A.

Global Sustainability, M.A.
Global Sustainability, M.A. and Entrepreneurship in Applied Technologies, M.S.

Health Administration, M.H.A.
Health Administration, M.H.A. and Public Health, M.P.H.

Linguistics: English as a Second Language, M.A.
Linguistics: English as a Second Language, M.A. and French, M.A.
Linguistics: English as a Second Language, M.A. and Spanish, M.A.

Medical Sciences, Ph.D.
Medical Sciences, Ph.D. and Medicine, M.D.

Medicine, M.D.
Medicine, M.D. and Biomedical Engineering, Ph.D.
Medicine, M.D. and Business Administration, M.B.A.
Medicine, M.D. and Medical Sciences, Ph.D.
Medicine, M.D. and Law, J.D. (Stetson)
Medicine, M.D. and Public Health, M.P.H.

Nursing, M.S.
Nursing, M.S. and Public Health, M.P.H.

Pharmaceutical Nanotechnology, M.S.
Pharmaceutical Nanotechnology, M.S. and Pharmacy, Pharm.D.

Pharmacy, Pharm.D.
Pharmacy, Pharm.D. and Pharmaceutical Nanotechnology, M.S.
Pharmacy, Pharm.D. and Business Administration, M.B.A.
Pharmacy, Pharm.D. and Public Health, M.P.H.

Physical Therapy, D.P.T.
Physical Therapy, D.P.T. and Public Health, M.P.H.

Public Health, M.P.H.
Public Health, M.P.H. and Applied Anthropology, M.A.
Public Health, M.P.H. and Applied Anthropology, Ph.D.
Public Health, M.P.H. and Health Administration, M.H.A.
Public Health, M.P.H. and Medicine, M.D.
Public Health, M.P.H. and Nursing, M.S.
Public Health, M.P.H. and Pharmacy, Pharm.D.
Public Health, M.P.H. and Physical Therapy, D.P.T.
Public Health, M.P.H. and Social Work, M.S.W.

Public Health, Ph.D.
Public Health, Ph.D. and Applied Anthropology, M.A.

Social Work, M.S.W.
Social Work, M.S.W. and Public Health, M.P.H.

Spanish, M.A.
Spanish, M.A. and Linguistics: English as a Second Language, M.A.

Sport and Entertainment Management, M.S.

Sport and Entertainment Management, M.S. and Business Administration, M.B.A.

Concurrent Degree Requirements

The coursework that is approved to be shared and apply toward both degrees is listed below. For all other curriculum requirements, including Thesis/non-Thesis, Internship, Comprehensive Examination, etc., refer to the Catalog listing for that major.

Anthropology, M.A. and Public Health, M.P.H.

Applied Anthropology (APA) – 40 Credit Hours
Bio-cultural Medical Anthropology (BCM) Concentration
Public Health (MPH) – 42 Credit Hours
Epidemiology (EPY), Maternal and Child Health (PMC), Public Health Education (PHN), Global Health Practice (GLO) Concentrations

Approved 201205
Total minimum hours combined: 82 Credit Hours
Shared – 12 Credit Hours
Total hours combined after sharing – 70 Credit Hours

Admission
In choosing which major to apply to first, students should take into consideration the following: major requirements differ between Anthropology and Public Health; the student's interests and future career plans. Concurrent degree students in Anthropology select a track and an optional concentration in Bio-Cultural Medical Anthropology. Concurrent degree students in Public Health select one of the above concentrations.

Shared – 12 Credit Hours
In consultation with their major advisors, students will select two courses as electives in Anthropology and two courses as electives in Public Health. The two courses in Public Health will be selected from a concentration listed above. The two courses in Anthropology will be selected from electives. The student may choose from the following list of courses. Other courses may be selected in consultation with the advisor.

Anthropology
- ANG 6585 Theories in Applied Bioanthropology Credit Hours: 3
- ANG 6469 Selected Topics in Medical Anthropology Credit Hours: 3
- ANG 6570 Nutritional Assessment Credit Hours: 3
- ANG 6730 Socio Cultural Aspects of HIV/AIDS Credit Hours: 3
- ANG 6733 Issues in Migrant Health Credit Hours: 3
- ANG 6735 Reproductive Health Credit Hours: 3
- ANG 6533 Anthropology of Human Growth and Development Credit Hours: 3
- ANG 6731 Health and Disasters Credit Hours: 3
- ANG 6732 Global Health from an Anthropological Perspective Credit Hours: 3

Public Health
- PHC 6053 Categorical Data Analysis Credit Hours: 3
- PHC 6701 Computer Applications for Public Health Researchers Credit Hours: 3
- PHC 6764 Global Health Principles and Contemporary Issues Credit Hours: 3
- PHC 6761 Global Health Assessment Strategies Credit Hours: 3
- PHC 6505 Program Planning in Community Health Credit Hours: 3
- PHC 6412 Health Disparities and Social Determinants Credit Hours: 3
- PHC 6725 Focus Group Research Strategies Credit Hours: 3
- PHC 6530 Issues and Concepts in Maternal and Child Health Credit Hours: 3
- PHC 6532 Women's' Health Issues in Public Health Credit Hours: 3

Anthropology, M.A. - Public Health, Ph.D.

Applied Anthropology (APA) -40 Credit Hours
Biocultural Medical Anthropology (BCM) Concentration
Public Health (PPH)- 55 Credit Hours Post-Master's
Community and Family Health (CFH), Epidemiology (EPY), Global Communicable Disease (TCD) Concentrations

Approved 201205
Total minimum hours combined: 95 Credit Hours
Shared – 12 Credit Hours
Total hours combined after sharing – 83 Credit Hours

Admission
In choosing which major to apply to first, students should take into consideration the following: major requirements differ between Anthropology and Public Health; the student's interests and future career plans. Concurrent degree students in Anthropology select a track and an optional concentration in Bio-Cultural Medical Anthropology. Concurrent degree students in Public Health select one of the above concentrations.

Shared - 12 Credit Hours
In consultation with their major advisors, students will select two courses as electives in Anthropology and two courses as electives in Public Health. The two courses in Public Health will be selected from a concentration listed above. The two courses in Anthropology will be selected from electives. The student may choose from the following list of courses. Other courses may be selected in consultation with the advisor.

Anthropology
- ANG 6585 Theories in Applied Bioanthropology Credit Hours: 3
- ANG 6469 Selected Topics in Medical Anthropology Credit Hours: 3
- ANG 6570 Nutritional Assessment Credit Hours: 3
- ANG 6730 Socio Cultural Aspects of HIV/AIDS Credit Hours: 3
- ANG 6733 Issues in Migrant Health Credit Hours: 3
- ANG 6735 Reproductive Health Credit Hours: 3
- ANG 6533 Anthropology of Human Growth and Development Credit Hours: 3
- ANG 6731 Health and Disasters Credit Hours: 3
- ANG 6732 Global Health from an Anthropological Perspective Credit Hours: 3

Public Health
- PHC 6053 Categorical Data Analysis Credit Hours: 3
- PHC 6701 Computer Applications for Public Health Researchers Credit Hours: 3
- PHC 6764 Global Health Principles and Contemporary Issues Credit Hours: 3
- PHC 6761 Global Health Assessment Strategies Credit Hours: 3
- PHC 6505 Program Planning in Community Health Credit Hours: 3
- PHC 6412 Health Disparities and Social Determinants Credit Hours: 3
- PHC 6725 Focus Group Research Strategies Credit Hours: 3
- PHC 6530 Issues and Concepts in Maternal and Child Health Credit Hours: 3
- PHC 6532 Women's' Health Issues in Public Health Credit Hours: 3

Anthropology, Ph.D. - Public Health, M.P.H.

Applied Anthropology (APA) – 46 Credit Hours Post-Master's
Biocultural Medical Anthropology (BCM) Concentration

Public Health (MPH) – 42 Credit Hours
Epidemiology (EPY), Maternal and Child Health (PMC), Public Health Education (PHN), Global Health Practice (GLO) Concentrations

Approved 201205
To hours combined: 88 Credit Hours
Shared – 12 Credit Hours
Total hours combined after sharing – 76 Credit Hours

Admission
In choosing which major to apply to first, students should take into consideration the following: admission requirements differ in Anthropology and Public Health, student interests and future career plans. Concurrent degree students in Anthropology select a track and an optional concentration in Bio-Cultural Medical Anthropology. Concurrent degree students in Public Health select one of the above concentrations.

Shared - 12 Credit Hours
In consultation with their major advisors, students will select two courses as electives in Anthropology and two courses as electives in Public Health. The two courses in Public Health will be selected from a concentration listed above. The two courses in Anthropology will be selected from electives. The student may choose from the following list of courses. Other courses may be selected in consultation with the advisor.

Anthropology
- ANG 6585 Theories in Applied Bioanthropology Credit Hours: 3
- ANG 6469 Selected Topics in Medical Anthropology Credit Hours: 3
- ANG 6570 Nutritional Assessment Credit Hours: 3
- ANG 6730 Socio Cultural Aspects of HIV/AIDS Credit Hours: 3
- ANG 6733 Issues in Migrant Health Credit Hours: 3
- ANG 6735 Reproductive Health Credit Hours: 3
- ANG 6533 Anthropology of Human Growth and Development Credit Hours: 3
- ANG 6731 Health and Disasters Credit Hours: 3
- ANG 6732 Global Health from an Anthropological Perspective Credit Hours: 3

Public Health
- PHC 6053 Categorical Data Analysis Credit Hours: 3
- PHC 6701 Computer Applications for Public Health Researchers Credit Hours: 3
- PHC 6764 Global Health Principles and Contemporary Issues Credit Hours: 3
- PHC 6761 Global Health Assessment Strategies Credit Hours: 3
- PHC 6505 Program Planning in Community Health Credit Hours: 3
- PHC 6412 Health Disparities and Social Determinants Credit Hours: 3
- PHC 6725 Focus Group Research Strategies Credit Hours: 3
- PHC 6530 Issues and Concepts in Maternal and Child Health Credit Hours: 3
- PHC 6532 Women's' Health Issues in Public Health Credit Hours: 3

Audiology, Au.D. – Communication Sciences and Disorders, Ph.D.

Audiology (AYD) – 120 Credit Hours
Communication Sciences and Disorders (CSD) - 42 Credit Hours (post-master's)

Approved 200601
Total hours combined: 162 Credit Hours
Shared – 0 Credit Hours
Total hours combined after sharing – 162 Credit Hours

The concurrent Au.D. /Ph.D. degrees option is designed to offer a path for those interested in Clinical Research to earn both doctoral degrees within approximately six years. The primary objective is to produce research audiologists competent to perform the wide array of diagnostic, remedial and other services associated with the practice of audiology as well as conduct independent research in the area of hearing and balance disorders.

Admission

- Admission to the Au.D. Major
- One (1) letter of recommendation from a member of the USF Audiology research faculty.
- A 1-2 page letter of intent.
- Demonstration of competency in communication skills as determined by the chairperson or delegate.

Shared– None

Due to the individual requirements for each degree program, there are no shared courses.

Biomedical Engineering, M.S.B.E. - Entrepreneurship in Applied Technologies, M.S.

Biomedical Engineering (EBI) – 30 Credit Hours
Entrepreneurship in Applied Technologies (EAT) – 30 Credit Hours

Approved 200701
Total hours combined: 60 Credit Hours
Shared – 9 Credit Hours
Total hours combined after sharing – 51 Credit Hours

Designed to prepare students who can effectively function in the complex world of Biotechnology companies ("Biotechs"). The program's objectives are to provide a strong Biomedical foundation for technical product development and research and development along with the skill set to effectively participate in the entrepreneurship, venture capital, business, and financial aspects of Biotechs.

Shared – 9 Credit Hours

- BME 6000 Biomedical Engineering Credit(s): 3
- ENT 6312 Principles of Intellectual Property: 3
- EIN 6392 New Product Development:3

Biomedical Engineering, Ph.D. – Medicine, M.D.

Biomedical Engineering (EBI) – 60 Credit Hours Post-Master's
Medicine (MED) – 369 Credit hours; 4 year professional program

Approved 200701
Total hours combined: 429 Credit Hours

Objectives of the M.D./Ph.D. Concurrent Degree are

1. Produce Highly Trained Professionals who can work effective in the area of Biomedical Translational Research, more specifically Engineer-Physicians who can conduct research in a Biomedical Engineering Area that addresses a significant clinical problem, and bring that research through to Clinical application; and
2. provide an integrated educational experience leading to both the M.D. degree and the Ph.D. (BME) Degree. In order to accomplish the first objective, advances in health care increasingly involves the application of emerging science and technology (I.E., Engineering) to clinical problems, including problems in diagnostics treatment and the health care system itself.

In order to conduct effective biomedical translational research, the investigator must be trained in both clinical science (i.e. the MD Degree) and Engineering (Specifically Biomedical Engineering). This need has been delineated by both academics and industry and is validated by the growing number of MD/PH.D. (BME) majors nationally. USF has the necessary educational components and research infrastructure for this endeavor; both degrees are currently available.

Admission
Students apply for the BME degree through the Office of Graduate Studies; Students apply seperately for the M.D. Degree through the College of Medicine. Admissions are on the same time schedule as that for general M.D. students. Applicants should contact a major advisor prior to application.

Curriculum
This is a seven (7) year major. Students initially complete a non-thesis M.S. in Biomedical Engineering. Then proceed to complete the first three (3) years of the Medical School Curriculum. The following two (2) years focus on the Ph.D. requirements, specifically the completion of coursework, qualifying exams, and dissertation research. In the seventh (7th) year, students complete the fourth (4th) year of Medical School and also complete any Ph.D. requirements as needed. Students must have at least one publication in an appropriate peer-reviewed journal prior to graduation.

Students establish a Graduate Committee immediately after starting the major, with members from both Engineering and Medicine. This committee guides the student through the major until a formal Ph.D. committee is established, typically in year four or five.

Biotechnology, M.S.B. - Entrepreneurship in Applied Technologies, M.S.

Biotechnology (MSB) – 36 Credit Hours
Entrepreneurship in Applied Technology (EAT) – 30 Credit Hours

Approved 200808
Total hours combined: 69 Credit Hours
Shared – 9 Credit Hours
Total hours combined after sharing – 57 Credit Hours

The combination of majors educates students to understand the scientific process and its challenges and at the same time provides the training that will enable them to facilitate the translation of scientific data from mind to market. This makes graduate students outstandingly versatile and thereby lays an essential step-stone for their future success. The Biotechnology Major has also been recognized as a "Professional Science Master's Program" by the U.S. Council of Graduate Schools.

Admission
Once the student has been admitted to both majors, he/she seeks permission from the Graduate Directors of both majors for concurrent crediting of the nine (9) credit hours.

Shared - 9 Credit Hours
A total of 57 credits is required for graduation with a Concurrent Master's in Biotechnology and Entrepreneurship. Beyond the shared crediting of 9 credit hours, all graduation requirements of the individual majors apply.

Course Requirements:
- GMS 6200C - Biochemistry, Molecular & Cellular Biology Credit(s): 5
- BSC 6436 Introduction to Biotechnology Credit Hours: 3
- BCH 6888 Bioinformatics Credit Hours: 3
- GMS 6092 - Principles of Intellectual Property Credit(s): 3
- GMS 6069 - Translational Biotechnology Credit(s): 3
- BSC 6437 - Biotechnology and Bioethics Credit(s): 3
- Elective from Biotechnology Major Credit(s): 3
- GMS 7939 Graduate Seminar Credit Hours: 1
- EIN 6106 Technology and Law Credit Hours: 3
- ENT 6016 - New Venture Formation Credit(s): 3
- ENT 6415 Fund of Venture Cap Priv Equity:3

- EIN 6392 - New Product Development Credit(s): 3
- GMS 6943 Biotechnology Internship Credit Hours: 3 (140 contact hrs minimum)
- ENT 6126 Strategies in Entrepreneurship: 3
- EIN 6430 Overview of Regulated Industries Credit Hours: 3
- ENT 6186 Strategies in Market Assessment - 3
- GEB 6445 Social, Ethical, Legal Systems Credit(s): 3
- ENT 6116 Business Plan Development Credit(s): 3
- ENT 6947 Adv Topics in Entrepreneurship/Internship: 3
- GMS 6873 Biomedical Ethics Credit(s): 3
- GMS 6141 Basic Medical Immunology and Microbiology Credit Hours: 3
- GMS 6115 Medical Parasitology and Mycology Credit Hours: 3
- GMS 6110 Microbial Pathogenesis and Host-Parasite Interactions Credit Hours: 3

Business Administration, M.B.A. – Medicine, M.D.

Business Administration (BUS) - 32 Credit Hours
Medicine (MED) – 369 Credit Hours; 4-year professional program

Total hours combined: 401 Credit Hours
Shared – 0 Credit Hours
Total hours combined after sharing – 401 Credit Hours

Shared – 0 Credit Hours
No courses are shared, but students in the MD degree program may opt to complete the MBA with a healthcare specialization with approval from both majors.

Suggested Schedule for M.D. students
Students joining the M.D. program could earn an M.D. degree, an M.B.A. degree as well the Business Foundations Certificate in five years, if they successfully complete courses as per the following schedule.

Year 1 – M.D. Courses
Summer 1 – Business Foundation Courses
Year 2 – M.D. Courses
Summer 2 – Business Foundation Courses; Earn Business Foundations Certificate
Year 3 – M.D. Courses
Summer 3 – M.D. Courses
Year 4 – M.B.A. Courses
Summer 4 – M.B.A. Courses; Earn M.B.A. Degree
Year 5 – M.D. Courses; Earn M.D. Degree

Business Administration, M.B.A. - Pharmacy, Pharm.D.

Business Administration (BUS) - 32 Credit Hours
Pharmacy (PRY) – 154 Credit Hours

Approved 201808
To hours combined: 186 Credit Hours
Shared – 9 Credit Hours
Total hours combined after sharing – 177 Credit Hours

Shared – 9 Credit Hours
PHA 6261 Healthcare Administration and Economics (3 credit hours)
Electives (6 credit hours are shared)

Suggested Schedule for Pharm.D. students
Students admitted to the PharmD degree program could earn a PharmD, an M.B.A. degree as well the Business Foundations Certificate in four years, if they successfully complete courses as per the following schedule:

Year 1 PharmD Courses
Summer 1 Business Foundation Course
Year 2 PharmD Courses
Summer 2 Business Foundation Courses; Earn Business Foundations Certific
Year 3 PharmD Courses; students will complete two (2) M.B.A courses in lieu of PharmD elective course
Summer 3 PharmD Courses
Year 4 PharmD Courses; Earn PharmD Degree
Summer 4 M.B.A. Courses
Year 5 M.B.A. Courses; Earn M.B.A. Degree

Business Administration (M.B.A.) and Sports and Entertainment Management (M.S.)

Business Administration (BUS) - 32 Credit Hours minimum
Sports and Entertainment Management (SMG) – 36 Credit Hours

Approved 201305
To hours combined: 68 Credit Hours
Shared – none
Total hours combined after sharing –

The Business Administration major with a Concentration in Sport Business is a 33 credit hour program comprising 18 hours of advanced tools and 15 hours of sport and entertainment-focused coursework. The MS in Sport and Entertainment Management is a 36 credit hour program.

Shared – none
The two programs share the following courses. Students must consult with the Graduate Program Director for advising on the required course sequence.
- SPB 6719 Sport and Entertainment Marketing Strategy Credit Hours: 3
- SPB 6406 Sport and Entertainment Law Credit Hours: 3
- SPB 6706 Sport Business Analytics Credit Hours: 3

Entrepreneurship in Applied Technologies M.S. - Global Sustainability M.A.

Entrepreneurship in Applied Technologies (EAT) – 30 Credit Hours
Global Sustainability (GBS) – 30 Credit hours

Approved 201105
To hours combined: 60 Credit Hours
Shared – 9 Credit Hours
Total hours combined after sharing – 51 Credit Hours

The combination of a Master's in Global Sustainability with a Master's in Entrepreneurship provides students with a comprehensive understanding of concepts, tools, and skills of sustainability, and students will be able to apply these areas in a problem-solving context. Students shall have the opportunity to focus on the areas of green technology and development, transport, energy, and sustainable enterprise.

Shared – 9 Credit Hours
All Concurrent Degree Master's in Global Sustainability and Entrepreneurship students must complete ENT 6016 New Venture Formation, ENT 6186 Strategic Market Assessment and ENT 6947 Advanced Topics in Entrepreneurship.

- ENT 6016 New Venture Formation Credit Hours: 3
- ENT 6116 Business Plan Development Credit Hours: 3
- ENT 6312 - Principles of Intellectual Property Credit(s): 3
- ENT 6186 Strategic Market Assessment Credit Hours: 3
- ENT 6947 Advanced Topics in Entrepreneurship Credit Hours: 3
- ENT 6606 New Product Development Credit Hours: 3
- ENT 6415 Fundamentals of Venture Capital and Private Equity Credit Hours: 3

Internship
All Concurrent Degree Global Sustainability and Entrepreneurship students must complete a six (6) credit hour internship.

French, M.A. - Linguistics: English as a Second Language, M.A.

French (FRE) - 33 Credit Hours
Linguistics: English as a Second Language (ESL) – 36 Credit Hours

To hours combined: 69 Credit Hours
Shared – 9 Credit Hours
Total hours combined after sharing – 60 Credit Hours

Shared – 9 Credit Hours
The following courses are approved to be shared with both majors:

- TSL 5371 Methods of Teaching English As A Second Language Credit Hours: 3 (required for Linguistics; elective for French)
- LIN 5700 Applied Linguistics Credit Hours: 3 (required for Linguistics; elective for French)
- FRW 5829 An Introduction to Modern French Literary Criticism Credit Hours: 3 (required for French; elective for Linguistics)

Health Administration, M.H.A. and Public Health, M.P.H.

Health Administration (MHA)
Public Health (MPH) - *Health Policies and Program Concentration*

Approved 201101
Total hours combined: 69 Credit Hours after sharing
Shared – 12 Credit Hours

The M.H.A./M.P.H. concurrent degree provides a unique opportunity for students who are interested in both health administration and health policy to pursue both interests, recognizing that the health care marketplace has professional opportunities that require both skill sets. For specific information on each degree, refer to that degree program's listing in the Catalog.

Plan of Study (69 Credit Hours Minimum)

M.H.A. Only Courses (27 Credit Hours)

- PHC 6147 Managing Quality in Health Care Credit Hours: 3
- PHC 6148 Strategic Planning and Health Care Marketing Credit Hours: 3
- PHC 6180 Health Services Management Credit Hours: 3
- PHC 6160 Health Care Financial Management Credit Hours: 3
- PHC 6161 Health Finance Applications Credit Hours: 3
- PHC 6196 Information Systems in Health Care Management Credit Hours: 3
- PHC 6191 Quantitative Analysis in Health Services Credit Hours: 3
- PHC 6166 Advanced Seminar in Health Care Management Credit Hours: 2
- PHC 6941 MHA Internship: 2
- PHC 6917 MHA Internship Report: 2

M.P.H. in Health Policies and Programs Only Courses (30 Credit Hours)

- PHC 6104 Management of Public Health Programs Credit Hours: 3
- PHC 6063 Public Health Data, Information and Decision Making Credit Hours: 3
- PHC 6145 Translation to Public Health Practice: 3
- PHC 6949 Applied Practice Experience: 3
- PHC 6943 Integrated Learning Experience: 3
- PHC 6435 Comparative Health Insurance Systems: 3
- PHC 6151 Health Policies and Politics: 3
- PHC 6430 Health Economics I: 3
- PHC 6760 Research Methods in Public Health Programs: 3
- PHC 6181 Organizational Behavior in Health Sciences: 3
- CPH Exam

Shared - 12 Credit Hours

- PHC 6588 History & Systems of Public Health Credit Hours: 1
- PHC 6756 Population Assessment: Part 1 Credit Hours: 5
- PHC 6757 Population Assessment: Part 2 Credit Hours: 3
- PHC 6420 Health Care Law, Regulation, and Ethics Credit Hours: 3*

**PHC 6420 Health Care Law, Regulation and Ethics (MHA requirement) substitutes for PHC 6421 Public Health Law and Ethics (MPH requirement).*

Linguistics: English as a Second Language, M.A. – Spanish, M.A.

Linguistics: English as a Second Language (ESL) – 36 Credit Hours
Spanish (SPA) - 36 Credit Hours

To hours combined: 72 Credit Hours
Shared – 9 Credit Hours
Total hours combined after sharing – 63 Credit Hours

Shared – 9 Credit Hours

TSL 5371 Methods of Teaching English as a Second Language – (required for Linguistics; elective for Spanish): 3
LIN 5700 Applied Linguistics – (required for Linguistics; elective for Spanish): 3
SPW 6806 Introduction to Hispanic Graduate Studies (required for Spanish; elective for Linguistics): 3

Medical Sciences Ph.D. and Medicine M.D.

Medical Sciences (MSG) – 59 Credit Hours Post-Master's
Medicine (MED) – 369 hours; 4-year professional program

Approved 200608
Total hours combined: 428 Credit Hours

The combined M.D./Ph.D. concurrent degree is designed to provide well-qualified students who are interested in careers in translational medicine with a broad knowledge in the basic biomedical and clinical sciences that is integrated with the advanced experimental training that is critical for their development as productive and versatile researchers.

To meet these objectives, student's complete courses in both the basic and clinical sciences, participate in patient-care activities and seminars, and receive individual research training in one of the many research concentrations available within the College. Graduate advisory committees counsel the entering students on planning their curriculum and selecting a research mentor. During the first two years, students complete the basic science course work and participation in research rotations that assist in the selection of a dissertation mentor. Following the successful completion of the second year of medical training and the selection of a major professor, a formal dissertation committee is appointed which assists the student in planning the research and course of study, evaluates the student's progress and supervises the comprehensive examination.

The successful completion of this examination leads to formal admission to candidacy for the Ph.D. degree. The remainder of this phase of the major emphasizes research and independent study and leads to a written dissertation and its oral defense. Following the completion and defense of their Ph.D. dissertation, students embark on the final two years of their medical training. The major culminates in the award of both M.D. and Ph.D. degrees. Departments within the Morsani College of Medicine may have additional requirements that pertain to their respective portions of the training program. Contact the department for information.

Admission
In additional meeting admission requirements for each major, applicants must also meet the following:

- Applications must be submitted through AMCAS.
- Minimum overall grade-point average of 3.70 out of a possible 4.00 with a minimum grade-point average of 3.70 in the sciences
- Medical College Admissions Test score of 30 (The MCAT substitutes for the GRE).
- Additional completed pre-requisites in:
  - Quantitative analysis (1 course)
  - Mathematics including integral and differential calculus

Medicine, M.D. and Law, J.D. (Stetson)

Medicine (MED) – 369 Credit Hours; 4-year professional program
Law

Approved 2007
This is a dual degree with Stetson Law School. Contact the College of Medicine for information.

Medicine M.D. and Public Health M.P.H.

Medicine (MED) – 369 Credit Hours; 4-year professional program
Public Health (MPH) – 42 Credit hours

To hours combined: 411 Credit Hours
Shared – 9 Credit Hours
Total hours combined after sharing – 402 Credit Hours

The concurrent M.P.H/M.D. degree provides a unique opportunity for medical students who are interested in blending their field of medicine with the discipline of public health. The students recognize the value of inter-professional education within health as well as the professional opportunities that require dual skill sets.

The two majors review applicants independently and admission to one major in no way guarantees admission into the other major. Medical students must be admitted and in good standing when applying for the M.P.H. degree.

Shared- 9 Credit Hours
The following courses are approved to be shared with both majors:
Transferred from M.D. degree
BMS 5005 Professions of Health: 2 credits
BMS 6825 Doctoring I: 7 out of 12 credits

Nursing M.S. and Public Health M.P.H.

Nursing (NUR) – 40 Credit Hours Post-Master's
Public Health (MPH) – 42 Credit hours
-Environmental and Occupational Health (EOH)

To hours combined: 82 Credit Hours
Shared – 12 Credit Hours
Total hours combined after sharing – 70 Credit Hours

The College of Nursing and the College of Public Health offer an Interdisciplinary Concurrent Degree. This program provides training to prepare advanced occupational health nurses for practice at diverse work settings, including direct clinical practice and occupational health program development, administration and management. The student concurrently earns two degrees: a Master of Science (MS) in Nursing with a Concentration in Occupational Health Nurse Practitioner and Adult Nurse Practitioner (ANP) and a Master of Public Health (MPH) with a Concentration in Environmental and Occupational Health. The Program is open to RN's with a baccalaureate degree in nursing or another discipline.

Shared – 12 Credit Hours
NGR 6650 Occupational Health Nursing I – 2 Credit Hours
NGR 6651 Occupational Health Nursing III – 2 Credit Hours
NGR 6207C Health Management of Adults and Older Adults III – 6 Credit Hours*

**The required nursing course,* NGR 6207C *Health Management of Adults and Older Adults III – 6 Credits (3 credits – 180 clock hours of preceptor supervised clinical practicum as an occupational health nurse practitioner and 3 credits – 45 class hours of class) are accepted in lieu of PHC 6949 Applied Practice Experiences (3 credits) and PHC 6943 – Integrated Learning Experience (ILE)*

Pharmaceutical Nanotechnologies M.S. - Pharmacy Pharm.D.

Pharmaceutical Nanotechnologies (PNT) - 32 Credit Hours
Pharmacy (PRY) – 154 Credit hours

To hours combined: 186 Credit Hours
Shared – 9 Credit Hours
Total hours combined after sharing – 177 Credit Hours

Shared – 9 Credit Hours
The following courses are approved to be shared with both majors:
PHA 6124 Principles of Pharmacokinetics/ Pharmacodynamics I"

PHA 6148 Nanoformulations and Nanopharmaceutics: 3
PHA 6185 Drug Discovery and Frontier: 3

Pharmacy, Pharm.D. and Public Health M.P.H.

Pharmacy (PRY) – 154 Credit hours
Public Health (MPH) – 42 Credit Hours

To hours combined: 196 Credit Hours
Shared – 17 Credit Hours
Total hours combined after sharing – 179 Credit Hours

Shared– 17 Credit Hours
The following courses are approved to be shared with both majors:
PHA 6898 Foundations of Public Health: 3
PHA 6756 Population Assessment: Part 1: 5
PHC 6757 Population Assessment: Part 2: 3
PHC 6943 Integrated Learning Experience: 3
PHC 6949 Applied Practice Experiences: 3

Physical Therapy, D.P.T. - Public Health, M.P.H.

Physical Therapy (MPT) - 107 Credit Hours minimum; professional degree program
Public Health (MPH) – 42 Credit hours

To hours combined: 149 Credit Hours

Admissions
Rolling Admissions. One class admitted each August.

Students enrolled in the D.P.T. program may seek admission to the College of Public Health, and if accepted may pursue a M.P.H. degree in concert with the D.P.T. degree. Students enrolled in the D.P.T./M.P.H. should be able to complete both programs within five years. Students will begin taking courses in the College of Public Health in year 2 of the D.P.T. program. Students will also need to complete one hour of field experience through the College of Public Health that most likely will be merged with the required service learning in the D.P.T. program. The COPH special project will be earned through the final critical inquiry project for the D.P.T. Students in this concurrent degree program will be assigned advisors in the College of Public Health and in the School of Physical Therapy.

Shared
Students must complete 107 credit hours of professional coursework and meet the general graduation requirements of the School of Physical Therapy and Rehabilitation Sciences, the Morsani College of Medicine, and the College of Public Health for admission and graduation.

Public Health, M.P.H. - Social Work, M.S.W.

Public Health (MPH) – 42 Credit Hours
-Maternal and Child Health (PMC) or Behavioral Health (BHH) Concentrations

Social Work (SOK) – 35 Credit hours*

To hours combined: 77 Credit Hours
Shared – 9 hours
Total hours combined after sharing – 68 Credit Hours

Admission

*Students can begin the concurrent degree program only after completing the first 25 credits in the M.S.W. program, including: SOW 6105 , SOW 6305 , SOW 6348 , SOW 6186 , SOW 6235 ,SOW 6534 , SOW 6405 , SOW 6535 and SOW 6931 or if they have a B.S.W. in Social Work and are admitted to Social Work as an Advanced Standing M.S.W. student.

For social work students seeking the concurrent -degree, expanded study in public health encourages a well-balanced macro-micro orientation to clinical practice. Such expansion can provide the social work student with specific skills that result in comprehensive and effective client interventions in health care settings. The fundamental methodological tools of public health, such as biostatistics, epidemiology, and health management and evaluation, further assist the social worker in targeting the needs of individuals and communities. The M.S.W./M.P.H. concurrent -degree option is a two to three-year full-time course of study.

Shared – 9 Credit Hours

9 credit hours of graduate electives

Graduate Certificates

Office of Graduate Certificates

University of South Florida
4202 E. Fowler Ave., LIB 608
Tampa, FL 33620-8470

Web address: http://www.usf.edu/innovative-education/programs/graduate-certificates/
Phone: 813-974-8031
Fax: 813-974-7061

Graduate Certificate Policies

The areas of study for the Graduate Certificates are created within the mission of graduate education. Students will be awarded certificates upon completion of specific course work, which has been approved by the Graduate Council. The Graduate Certificate is not defined as a degree by the Office of Graduate Studies; rather, it is a focused collection of courses that, when completed, affords the student some record of distinct academic accomplishment in a given discipline or set of related disciplines. Moreover, the Graduate Certificate is not viewed as a guaranteed means of entry into a graduate major. While the courses comprising a graduate certificate may be used as evidence in support of a student's application for admission to a graduate major, the certificate itself is not considered to be a prerequisite.

Process of Approval for New Graduate Certificates

Prior to submission of a new Graduate Certificate Proposal, a Concept Proposal form must be submitted through the College Dean to the Academic Program Advisory Council (APAC) for a 14-day posting. Once cleared through APAC the faculty sponsor may proceed with submission of the proposal through normal curriculum processing procedures. Proposals for new areas of study for graduate certificates are created and submitted by the academic unit that wishes to offer such a certificate. Proposals must be accompanied by endorsement from the department heads and deans of the colleges/schools in which the contributing course work is offered as well as from the academic unit or units whose students or majors could be impacted by the creation of the graduate certificate. The Graduate Council will consider all the proposals for new graduate certificates to assure proposal guidelines have been followed and that repetition and redundancy across areas of study for certificates are not evident. Those meeting the criteria set forth by the Graduate Council will then be recommended for approval.

Criteria for Approval

The general principles applied to the assessment of the academic quality of proposals for new graduate areas of study for certificates include:

1. The sequence of course work must offer a clear and appropriate educational objective at the post-baccalaureate level.
2. The curriculum will consist of at least two structured core graduate courses taken at USF, specific to the area of study. Substitutions to the core courses are not permitted. A minimum of nine unique credit hours is required for the certificate curriculum.
3. The curriculum will achieve its educational objective in an efficient and well-defined manner.
4. A perceived need for such a certificate should exist. This provision might be defined in terms of either external markets (i.e., external demand for the skills associated with such a certificate) or internal academic means (i.e., the need for a critical mass of students in a given discipline).

5. An appropriate number of credit hours must comprise the area of study for the certificate, with the typical range being 12-15 hours. The number of graduate credits cannot be less than nine (9) or more than one-half of the credits necessary for a related master's degree offered at USF.
6. If the area of study for a certificate requires new courses, those courses must be approved by the appropriate College bodies or offices and the Graduate Council.

Student Eligibility and Admission Criteria

Students must apply and be accepted into the Graduate Certificate to be eligible to receive a certificate. The prerequisites and general criteria of eligibility for admission to any graduate certificate area of study include:

1. An earned baccalaureate degree or its equivalent from a regionally accredited college or university or enrollment in a USF Accelerated Major is required. Students in Accelerated Majors may be admitted upon completion of 120 semester hours.
2. Each Graduate Certificate specifies the requirements for admission, including minimum grade point average, standardized test scores, and other similar criteria as part of the application. However, prospective non-degree seeking graduate certificate students must meet University Graduate Admissions grade point average requirements.
3. Graduate Certificate students will be held to the academic standards for all graduate students as specified in the Graduate Catalog, except for any additional requirements as noted in the section in the Graduate Catalog regarding Graduate Certificates.

Students who wish to pursue a Graduate Certificate must apply to the Graduate Certificate Office (http://www.usf.edu/innovative-education/programs/graduate-certificates/) and be admitted to the Graduate Certificate. Students are encouraged to contact the coordinator prior to applying.

- Non-Degree Seeking Students

All non-degree seeking students who wish to pursue approved graduate certificates should apply for admission to the Graduate Certificate program through the Graduate Certificate Office as soon as possible for maximum benefit, but must apply to the Certificate and complete required coursework within five years of taking the first course applicable to the certificate.

Students must submit a Completion Form to the department for approval and submission to the Office of Graduate Certificates for the Graduate Certificate to be awarded. Certificate-seeking-students will be classified as "Graduate Certificate Students." As such, they are not eligible for financial aid and will receive a later registration date than degree-seeking students.

- Degree Seeking Students
  - Admission - All degree seeking students who wish to pursue approved graduate certificates must apply for admission to the Graduate Certificate program through the Graduate Certificate Office. Students must apply for admission to the certificate prior to the deadline to apply for graduation by the fourth week of the semester in which the student plans to graduate.

Completion

For Graduate Certificates within the Major, students must submit the Completion form by the fourth week of the semester in which the student plans to graduate. For Graduate Certificates in a discipline outside the Major, students must submit the Completion form no later than ten years after starting the first course applied to the Certificate.

1. Students pursuing a graduate certificate are required to meet the same academic requirements as those defined for degree-seeking students to remain in "good standing".
2. All graduate certificate students may apply one graduate course to a maximum of two graduate certificates.
3. All graduate certificate students must meet all prerequisites for courses in which they wish to enroll.
4. Should a graduate certificate student subsequently apply and be accepted to a graduate major, the University's Application of Internal Credit Policy applies. Any application of such credit must be approved by the degree-granting college and must be appropriate to the major. No courses taken outside of USF may be transferred into a Graduate Certificate at USF.
5. Students must have been awarded a bachelor's or higher degree to be eligible.

Graduate Certificates

- Academic Advising Graduate Certificate
- Addictions and Substance Abuse Counseling Graduate Certificate
- Advanced Pain Management Fellowship Graduate Certificate
- Africana Studies Graduate Certificate
- Aging & Neuroscience Graduate Certificate
- American Culture & Society Graduate Certificate
- Analytics and Business Intelligence Graduate Certificate
- Anatomy Graduate Certificate
- Applied Biostatistics Graduate Certificate
- Applied Linguistics Graduate Certificate
- Assessing Chemical Toxicity and Public Health Risks Graduate Certificate
- Autism Spectrum Disorder Graduate Certificate
- Bioinformatics Graduate Certificate
- Biostatistics Graduate Certificate
- Biotechnology Graduate Certificate
- Building Sustainable Enterprise Graduate Certificate
- Business Analytics Graduate Certificate
- Business Foundations Graduate Certificate
- Children's Mental Health Graduate Certificate
- Climate Change and Sustainability Graduate Certificate
- Clinical Aging Sciences
- Clinical Investigation Graduate Certificate
- College Teaching Graduate Certificate
- Community Development Graduate Certificate
- Comparative Literary Studies Graduate Certificate
- Compliance, Risk, & Anti-Money Laundering Graduate Certificate
- Concepts & Tools of Epidemiology Graduate Certificate

- Creative Writing Graduate Certificate
- Crime Scene Investigation for Violent Crimes Graduate Certificate
- Criminal Justice Administration Graduate Certificate
- Cyber Intelligence Graduate Certificate
- Cybersecurity Awareness and Education Graduate Certificate
- Data Science for Public Administration Graduate Certificate
- Digital Forensics Graduate Certificate
- Digital Humanities Graduate Certificate
- Disabilities Education: Severe/Profound Graduate Certificate
- Disaster Management Graduate Certificate
- Diversity in Education Graduate Certificate
- elearning Design and Development Graduate Certificate
- Energy Sustainability Graduate Certificate
- Entrepreneurship Graduate Certificate
- Environmental Policy & Management Graduate Certificate
- Epidemiology of Infectious Diseases Graduate Certificate
- ESOL Graduate Certificate
- Evaluation Graduate Certificate
- Exceptional Student Education Graduate Certificate
- Film & New Media Studies Graduate Certificate
- Florida Digital/Virtual Educator Graduate Certificate
- Food Sustainability and Security Graduate Certificate
- Foreign Language Education: Culture and Content Graduate Certificate
- Foreign Language Education: Professional Graduate Certificate
- Genocide and Human Rights Graduate Certificate
- Geographical Information Systems Graduate Certificate
- Geriatric Social Work/Clinical Gerontology Graduate Certificate
- Gerontology Graduate Certificate
- Global Health & Latin American and Caribbean Studies Graduate Certificate

- Global Health Practice Graduate Certificate
- Global Strategy and Decision-Making Graduate Certificate
- Global Sustainability Graduate Certificate
- Health and Wellness Coaching Graduate Certificate
- Health Informatics Graduate Certificate
- Health Information Graduate Certificate
- Health Management & Leadership Graduate Certificate
- Health Sciences Graduate Certificate
- Health, Safety and Environment Graduate Certificate
- Healthcare Analytics Graduate Certificate
- Homeland Security Graduate Certificate
- Hospice, Palliative Care, and End of Life Studies Graduate Certificate
- Human Resources Graduate Certificate
- Humanitarian Assistance Graduate Certificate
- Hydrogeology Graduate Certificate
- Infection Control Graduate Certificate
- Information Assurance Graduate Certificate•
- Instructional Technology: Web Design Graduate Certificate
- Intellectual Property Graduate Certificate
- Latin American & Caribbean Studies Graduate Certificate
- Leadership for Coastal Resiliency Planning Graduate Certificate
- Leadership in Child & Adolescent Behavioral Health Graduate Certificate
- Leadership in Developing Human Resources Graduate Certificate
- Library Information Technology Graduate Certificate
- Management of Non-Governmental and Non-Profit Organizations Graduate Certificate
- Marriage & Family Therapy Graduate Certificate
- Materials Science and Engineering Graduate Certificate
- Maternal & Child Health Graduate Certificate
- Mathematics Graduate Certificate

- Medical Anthropology Graduate Certificate
- Medicine & Gender Graduate Certificate
- Music Graduate Certificate
- Nanopharmaceutics Graduate Certificate
- Nursing Education (Post Master's) Graduate Certificate
- Pathology Graduate Certificate
- Pharmacoepidemiology Graduate Certificate
- Pharmacy Entrepreneurship, Leadership & Management Graduate Certificate
- Pharmacy Update & Practice Management Graduate Certificate
- Positive Behavior Support Graduate Certificate
- Post Master's Leadership in Higher Education Graduate Certificate
- Post Master's Library and Information Science Graduate Certificate
- Pre-Professional Pharmacy Graduate Certificate
- Professional and Technical Communication Graduate Certificate
- Project Management Graduate Certificate
- Public Health Generalist Graduate Certificate
- Public Health Policy & Programs Graduate Certificate
- Public Management Graduate Certificate
- Qualitative Research Graduate Certificate
- Reading Endorsement Graduate Certificate
- Robotics Graduate Certificate
- Scholarly Excellence, Leadership Experiences, & Collaborative Training (S.E.L.E.C.T) Graduate Certificate
- School Counseling (Post Master's) Graduate Certificate
- School Library Media Specialist Graduate Certificate
- Social Marketing & Social Change Graduate Certificate
- Statistical Data Analysis Graduate Certificate
- Strategic Intelligence Graduate Certificate
- Sustainable Tourism Graduate Certificate
- Sustainable Transportation Graduate Certificate

- Systems Engineering Graduate Certificate
- Teacher Leadership for Student Learning Graduate Certificate
- Teaching & Communicating Ocean Sciences Broader Impacts Graduate Certificate
- Teaching English as a Second Language (TESL) or Foreign Language Graduate Certificate
- Teaching in Pharmacy Graduate Certificate
- Technology Management Graduate Certificate
- Total Quality Management Graduate Certificate
- Toxicology Graduate Certificate
- Translational Research in Adolescent Behavioral Health Graduate Certificate
- Transportation System Analysis Graduate Certificate
- Water Sustainability Graduate Certificate
- Water, Health and Sustainability Graduate Certificate
- Wireless Engineering Graduate Certificate
- Women's and Gender Studies Graduate Certificate
- Women's Health Graduate Certificate

Colleges

- College of Arts and Sciences: School of Humanities
- College of Arts and Sciences: School of Natural Sciences and Mathematics
- College of Arts and Sciences: School of Social Sciences
- College of Behavioral and Community Sciences
- Muma College of Business
- College of Education
- College of Engineering
- Patel College of Global Sustainability
- College of Graduate Studies
- College of Marine Science
- Morsani College of Medicine
- College of Nursing
- Taneja College of Pharmacy
- College of Public Health
- College of The Arts

College of Arts and Sciences

Graduate Council approved the changes on the date noted.

Accelerated Majors

Advertising	B.S./M.S.	New Accelerated Major	2/4/19
Biology	B.S./M.S.	Terminate Accelerated Major	4/29/19
English	B.A./M.A.	Changed curriculum to align with changes to major	4/29/19
Microbiology	B.S./M.S.	Terminate Accelerated Major	4/29/19

Concurrent Majors

Religous Studies / English	M.A./B.A.	Terminate Concurrent Degree	1/14/19

New and Terminated Majors

Integrated Mathematical Oncology	Ph.D.	New Major under an existing CIP (26.0911)	9/10/18
Linguistics	M.A.	Terminate Major under existing CIP (16.0102)	4/29/19

Changes to Majors

Applied Physics	Ph.D.	Non-Substantive changes	2/4/19
Biology	M.S.	Change curriculum for compliance	4/29/19
Cancer Biology	Ph.D.	Change curriculum for compliance	4/29/19
Cancer Chemical Biology	Ph.D.	Change curriculum for compliance	4/29/19
Cancer Immunology and Immunotherapy	Ph.D.	Change curriculum for compliance	4/29/19
Cell and Molecular Biology	Ph.D.	Non-Subtantive change; removed sequence	4/15/19
Cell and Molecular Biology	Ph.D.	Additional non-sub changes for paper length	4/29/19
Communication	M.A.	Change curriculum for compliance	3/4/19

Communication	Ph.D.	Change curriculum for compliance	3/4/19
Economics	M.A.	Reformat for compliance	12/3/18
English	M.A.	Change curriculum, core for compliance	4/15/19
English	Ph.D.	Change curriculum, core for compliance	4/15/19
Environmental Science and Policy	M.S.	Change curriculum for compliance	4/29/19
Geography	M.A.	Change curriculum for compliance	4/29/19
Geography and Environmental Science and Policy	Ph.D.	Change curriculum for compliance	4/29/19
Government	Ph.D.	Change curriculum, change name to Politics and International Affairs	4/29/19
History	M.A.	Change curriculum for compliance	4/29/19
History	Ph.D.	Change curriculum for compliance	4/29/19
Integrated Mathematical Oncology	Ph.D.	Change curriculum for compliance	4/29/19
Integrative Biology	Ph.D.	Change curriculum, core for compliance	4/29/19
Latin American, Caribbean and Latino Studies	M.A.	Change curriculum for compliance	4/29/19
Library and Information Science	M.A.	Change curriculum, core for compliance	3/4/19
Linguistics and Applied Language Studies	Ph.D.	Change curriculm for compliance	2/4/19
Mathematics	M.A.	Change curriculum for compliance	4/29/19
Mathematics	Ph.D.	Change curriculum for compliance	4/29/19
Philosophy	M.A.	Change curriculum for compliance	4/29/19
Philosophy	Ph.D.	Change curriculum for compliance	4/29/19
Physics	M.S.	Change curriculum for compliance; terminate all concentrations	4/1/19
Psychology	M.A.	Non-substantive changes	3/4/19
Psychology	Ph.D.	Non-substantive changes	3/4/19
Public Administration	M.P.A.	Change curriculum for compliance, comp exam	3/4/19
Religious Studies	M.A.	Change curriculum, core for compliance	1/14/19

Sociology	M.A.	Change curriculum for compliance	3/4/19
Sociology	Ph.D.	Change curriculum for compliance	3/4/19
Urban and Regional Planning	M.U.R.P.	Non-substantive changes	2/4/19
Women's and Gender Studies	M.A.	Change curriculum for compliance	1/14/19

Graduate Certificates

Diasporas and Health Disparities (XDH)	Terminate Certificate	12/3/18
Globalization Studies (XGO)	Terminate Certificate	12/3/18

College of Arts and Sciences: School of Humanities

AS - Updates for 2019-20

AS - School of Humanities Programs

University of South Florida
College of Arts and Sciences
4202 E. Fowler Ave BEH107
Tampa, FL 33620

Web address: http://www.cas.usf.edu/
Email: see individual department listings
Phone: 813-974-6957
Fax: 813-974-4075

College Dean: Eric Eisenberg, Ph.D.
Sr. Associate Dean: Robert Potter, Ph.D.
Associate Dean: Allison Cleveland Roberts

College Structure

The College of Arts and Sciences is USF's largest college. The College is comprised of three schools including the School of Social Sciences, the School of Natural Sciences & Mathematics, and the School of Humanities, all with strong interdisciplinary connections among them and throughout the University.

Mission Statement

The College of Arts and Sciences is a community of scholars dedicated to the idea that educated people are the basis of a just and free society. The essences of education are a capacity for the appreciation of social change within a context of prior human achievement. The faculty of the Arts and Sciences strive to instill in their students a history of human ideas, a love of learning, and an understanding of the means that scholars have used in their search for beauty and order in the natural world. The education provided by the disciplines of the Arts and Sciences is the foundation upon which the lives and professions of our students are built, and the basis from which personal growth occurs.

The College of Arts and Sciences takes as its goal a melding of the natural, humanistic and social philosophies into a comprehensive whole that encourages the development of new ideas and new approaches to the understanding of our universe. It is the responsibility of scholars to share their discoveries for the betterment of society. Thus, the Arts and Sciences embrace the disciplines that strive to make immediate use of knowledge in the service of social goals as well as the disciplines whose discoveries contribute to the fund of basic information that is the stepping stone of applied knowledge.

College Requirements

Thesis Enrollment

Upon successful completion of all M.A./M.S. degree requirements except for thesis, Arts and Sciences graduate students must enroll in a minimum of two (2) credit hours of Thesis each semester (except Summers) until the completion of the master's degree.

Dissertation Enrollment

Doctoral students who have been admitted to candidacy are required to accumulate a minimum of six (6) credit hours of Dissertation during each previous 12-month period (previous three (3) terms, e.g., Fall, Spring, Summer) until the degree is granted.

Department of Communication

Communication, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 09.0101
Dept. Code: SPE
Major/College Codes: SPE AS
Approved: 1967

Contact Information

College: Arts and Sciences
Department: Communication

Contact Information: http://www.grad.usf.edu/majors

Graduate study at the University of South Florida Department of Communication emphasizes critical, qualitative, and quantitative research, a comprehensive focus that is unusual among graduate programs in the field of Communication. The department embraces innovative humanistic and social scientific approaches to inquiry and engagement in health, media, organizational and relational communication, with emphases on culture, performance, and social justice.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Two letters of recommendation;
- Writing sample,
- Statement of purpose.
- GRE with preferred scores of at least 153V (61st percentile)
- Transcripts
- CV or resume

Curriculum Requirements

Total minimum hours 36 credit hours

Core Requirements - 6 credit hours
Electives - 24 credit hours minimum
Thesis/Non-thesis - 6 credit hours

Core Requirements (6 Credit Hours)

- COM 6001 Theories and Histories of Communication **Credit Hours: 3**

This course must be taken the first time it is offered after the student is admitted to the graduate program.

- COM 7325 Seminar in Communication Research Methods **Credit Hours: 3**

Electives (24 Credit Hours)

Twenty-four (24) hours of elective graduate coursework, six (6) hours, of which, may consist of graduate courses from other departments and must have advisor approval.

Select: Thesis or Non-Thesis

Non-Thesis (6 credit hours)

Students in the non-thesis option take another 6 hours of graduate level electives, which may consist of graduate courses from other departments and must have advisor approval.

Thesis (6 Credit Hours)

- SPC 6971 Thesis: Master's **Credit Hours: 2-19**

In consultation with the major professor, Thesis Program students will select a thesis topic, constitute a thesis committee, and write orally defend a thesis proposal. The thesis is an extended research project within a specific area of communication research culminating in a written academic analysis. Upon completion of the thesis, the student must pass an oral defense.

Comprehensive Exam Requirements

All non-thesis students must pass both written and oral comprehensive examinations.
For thesis students, the thesis defense serves in lieu of the comprehensive exams.

Other Requirements

1. Establish a supervisory faculty committee consisting of a major professor and two additional members, at least one of whom is a member of the Department of Communication. The supervisory committee must be approved by the Director of Graduate Studies.
2. Prepare a Plan of Study approved by the student's supervisory committee. The Plan of Study expresses the ways in which the student will show evidence of the following:
    1. expertise in one or more of the central domains of communication study
    2. expertise in the research methodologies needed to carry out original research in the specialized area of concentration (Thesis Program students only)

Communication, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 51 post-masters
Level: Doctoral
CIP Code: 09.0101
Dept. Code: SPE
Major/College Codes: SPE AS
Approved: 1990

Contact Information

College: Arts and Sciences
Department: Communication

Contact Information: http://www.grad.usf.edu/majors

Graduate study at the University of South Florida Department of Communication emphasizes critical, qualitative, and quantitative research, a comprehensive focus that is unusual among graduate programs in the field of Communication. The department embraces innovative humanistic and social scientific approaches to inquiry and engagement in health, media, organizational and relational communication, with emphases on culture, performance, and social justice.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Three letters of recommendation;
- Writing sample,
- Statement of purpose
- GRE with preferred scores of at least 153V (61st precentile)
- Transcripts
- CV or resume

Curriculum Requirements

Total Minimum hours: 51 credit hours post-masters

Core - 6 credit hours

Course Requirements - 33 creditd hours

Research Tool Requirement - 6 credit hours minimum

Dissertation - 6 credit hours minimum

Core Requirements (6 Credit Hours)

- COM 6001 Theories and Histories of Communication **Credit Hours: 3**
- COM 7325 Seminar in Communication Research Methods **Credit Hours: 3**

Requirements (33 Credit Hours)

In addition to the six (6) hours of core requirements, students are required to take a minimum of 33 hours of coursework beyond the M.A. degree (not counting credits for dissertation research). Six (6) hours of graduate coursework must be in an area of study outside the department. Students must enroll in and successfully complete a minimum of 12 hours designated as Ph.D. Seminars (COM 7933) as part of their elective coursework.

Research Tool Requirement (6 Credit Hours)

In addition to COM 7325, complete an additional six (6) hours of coursework to fulfill the research tool requirement. If students elect to take both Qualitative and Critical Methods, they must take an additional methods course (3 hours) subject to the approval of their major professor.

Qualifying Exam Requirement

All students must pass a written and oral qualifying examination covering the student's area of specialization and methodological competence. This examination will be prepared and evaluated by the student's supervisory committee

Dissertation (6 Credit Hours Minimum)

In consultation with the major professor and supervisory committee, students will select a dissertation topic and write and orally defend a dissertation proposal. Upon completion of the dissertation, the student must pass an oral defense.

- SPC 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Other Requirements

1. Establish a supervisory faculty committee consisting of a major professor and at least two additional members from the Department of Communication and at least one member outside the Department of Communication. The supervisory committee must be approved by the Director of Graduate Studies.
2. Prepare a Plan of Study approved by the student's supervisory committee. The Plan of Study expresses the ways in which the student will show evidence of the following:
   - expertise in one of the central domains of communication study;
   - expertise in the research methodologies needed to carry out original research in the specialized area of concentration

Department of English

Creative Writing, M.F.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 45
Level: Masters
CIP Code: 23.1302
Dept. Code: ENG
Major/College: CWR AS
Approved: 2008

Concentrations:

Fiction (CFI)
Poetry (CPO)

Contact Information

College: Arts and Sciences
Department: English

Contact Information: http://www.grad.usf.edu/majors

The **Master of Fine Arts in Creative Writing** is a graduate-level major offering concentrations in fiction and poetry (with the opportunity to study other genres of writing such as screenwriting and creative nonfiction). The Major emphasizes the craft of writing and concentrates on the student's original work. The MFA requires 45 hours of coursework and typically will take three years for the student to complete. Our goal is to help MFA students to produce publishable theses and secure teaching or editing positions upon graduation.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below. Students accepted into the program will begin coursework in the fall. No applications will be considered for spring or summer admission.

- An undergraduate degree, preferably in English, from an accredited institution, with a 3.20 average, or its equivalent
- A competitive Verbal aptitude score on the GRE general test, with a target Analytical Writing score of 4.0 (while the Quantitative score is not a determining factor in our admission decisions, both Verbal and Quantitative scores are factors in some university scholarships and fellowships)
- Three (3) letters of recommendation, preferably from former English instructors, assessing the student's potential to do graduate level work
- A writing sample in one genre only: 12-20 pages of double-spaced fiction; 12-20 pages of double-spaced creative nonfiction, or 10-15 pages of single-spaced poetry
- A two-to-three page personal statement, describing the student's background, purpose for attending graduate studies, and career goals
- A completed application submitted online through the Graduate Admissions Office

All supplementary application materials (i.e., statement, writing sample, and letters of recommendation) may be submitted electronically through the online application or may be submitted directly to the Department at the following address:

Graduate Director
Department of English, University of South Florida
4204 E. Fowler Ave., CPR107
Tampa, FL 33620-5550

Materials including GRE scores and transcripts must be received by the application deadline in order for students to be considered for admission. Graduates of USF do not need to order official transcripts. Applications are reviewed by an admissions committee after the deadline. Students will be notified by mail of the admissions decision with four to six weeks after the deadline.

Curriculum Requirements

To complete the Master of Fine Arts in Creative Writing, students must satisfy the following requirements:

Total Minimum Hours: 45 hours

Earn 45 credit hours with an overall grade point average of 3.00 or better in the required courses. The distribution of the requirements will be

- 18 hours in writing workshops and craft seminars
- 3 hours in graduate studies
- 15 hours in pedagogy and literature courses, and
- 9 hours in thesis studies (taken in the final year of the program).

Complete a book-length manuscript in creative nonfiction, fiction, or poetry that will meet departmental and university requirements for the thesis. The thesis shall consist of 48-64 pages of poems (single- or double-spaced), at least 100 pages of fiction (double-spaced) or at least 100 pages of creative nonfiction (double-spaced). . All students must write a three- to ten-page introduction to their thesis that explains their goals for the work.

Core Requirements (18 Credit Hours Minimum)

Select Six (6) courses (18 hours) from the following:

**may be taken up to three times for a maximum of 9 credits.*

- CRW 6130 Fiction Writing **Credit Hours: 3** *
- CRW 6331 Poetry Writing **Credit Hours: 3** *
- CRW 6236 Nonfiction Writing **Credit Hours: 3** *
- CRW 6164 The Craft of Fiction **Credit Hours: 3** (Required for students admitted to the fiction concentration, optional for others.)
- CRW 6352 The Craft of Poetry **Credit Hours: 3** (Required for students admitted to the poetry concentration; optional for others.)
- CRW 6025 Special Topics in Creative Writing **Credit(s): 3** (The Craft of Nonfiction) (Required for students admitted to the nonfiction track, optional for others.)
- CRW 6025 Special Topics in Creative Writing **Credit Hours: 3** (This course concentrates on screenwriting, translation, editing, creative writing pedagogy (with a community service component), or study of a particular genre or technique.)

Course in Graduate Studies (3 Credit Hours Minimum)

Must be taken in the student's first or second semester of graduate studies.

- ENG 6009 Introduction to Graduate Study **Credit Hours: 3**

Other Course requirements (15 Credit Hours Minimum)

5 courses (15 credits) in any combination of the courses below:

- ENC 6745 Teaching Practicum **Credit Hours: 3** (Required of all first-year teaching assistants in composition)
- CRW 6025 Special Topics in Creative Writing **Credit Hours: 3** (Required of all teaching assistants in creative-writing courses. This course may be taken more than once, but will only count for a total of three credits toward degree requirements.)
- LIT 6934 Selected Topics in English Studies **Credit Hours: 1-6 (3 credits for this program)** (Literary Editing and Publishing) (Required of all students working on *Saw Palm*, USF's creative writing journal. This course may be taken more than once, but will only count for a total of three credits toward degree requirements.)

Any of the Following Graduate-Level (6000 and above) Literature Courses

Any of the following graduate-level (6000 and above) literature courses offered by the English Department. These courses are coded AML 6---, ENL 6---, and LIT 6---. Sample courses include:

- AML 6017 Studies in American Literature to 1860 **Credit Hours: 3**
- AML 6018 Studies in American Literature 1860 to 1920 **Credit Hours: 3**
- AML 6027 Studies in Modern American Literature **Credit Hours: 3**
- AML 6608 Studies in African American Literature **Credit Hours: 3**
- ENL 6206 Studies in Old English **Credit Hours: 3**
- ENL 6216 Studies in Middle English **Credit Hours: 3**
- ENL 6226 Studies in Sixteenth-Century British Literature **Credit Hours: 3**
- ENL 6228 Studies in Seventeenth-Century British Literature **Credit Hours: 3**
- ENL 6236 Studies in Restoration and Eighteenth-Century British Literature **Credit Hours: 3**
- ENL 6246 Studies of the English Romantic Period **Credit Hours: 3**
- ENL 6256 Studies in Victorian Literature **Credit Hours: 3**
- ENL 6276 Studies in Modern British Literature **Credit Hours: 3**
- LIT 6096 Studies in Contemporary Literature **Credit Hours: 3**
- LIT 6105 Studies in Continental Literature **Credit Hours: 3**
- LIT 6934 Selected Topics in English Studies **Credit Hours: 1-6 (3 credits for this program)**

Comprehensive Exam

Thesis (9 Credit Hours Minimum)

The student must be registered in at least 3 hours of ENG 6971 during the semester prior to graduation.

- ENG 6971 Thesis: Master's **Credit Hours: 2-19 (9 credits for the program)** taken in the student's final year of study

Graduate Certificates

For information on Graduate Certificates please visit http://www.outreach.usf.edu/gradcerts/

English Graduate Certificates Offered:

Creative Writing – Contact Professor Rita Ciresi at rciresi@usf.edu
Comparative and Interdisciplinary Literary Studies – Contact Dr. Susan Mooney at smooney@usf.edu

Teaching Composition – Contact Dr. Debra Jacobs at djacobs@usf.edu
Professional & Technical Communication – Contact Dr. Meredith Zoetewey at Zoetewey@usf.edu

English, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 23.0101
Dept. Code: ENG
Major/College Codes ENG AS
Approved: 1967

Concentrations

Literature (LIT)
Rhetoric and Composition (RAC)

Also offered as an Accelerated Program

Contact Information

College: Arts and Sciences
Department: English

Contact Information: http://www.grad.usf.edu/majors

The M.A. in English with a concentration in Literature is a continuation of the B.A. with greater depth in literary knowledge and an introduction and implementation of methods, standards, and conventions of scholarship on literature. It is a generalist degree with broad-based distribution requirements, but it has the flexibility to study cutting-edge theories and newly emerging fields of interests (including cultural and comparative studies, ethnic literatures, and genre studies such as film). The department also offers a M.A. in English with a concentration in Rhetoric and Composition. It is designed to produce teacher-scholars who have solid, foundational knowledge of critical theory, PTC theory and practice, and composition pedagogy, as well as a specialized knowledge in their field of concentration.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- B.A. in English
- A competitive Verbal aptitude score on the GRE general test, with a target Analytical Writing score of 4.0 (while the Quantitative score is not a determining factor in our admission decisions, both the Verbal and Quantitative score are factors in some university scholarships and fellowships)
- Undergraduate GPA 3.50
- Three (3) letters of recommendation
- Scholarly writing sample of approximately 2500 words (ten double-spaced pages) excluding bibliography or works cited; applicants may excerpt from a longer essay. Generally, the committee seeks to review academic writing from an English course.

- A two-to-three page personal statement describing the student's background, purpose for attending graduate studies, and career goals

All materials, including GRE scores and transcripts, must be received by the application deadline in order for students to be considered for admission. Graduates of USF do not need to order official transcripts. Applications are reviewed by an admissions committee. Students will be notified of the admissions decision within four to six weeks after the deadline.

Curriculum Requirements

Total Minimum Hours -33 Credit Hours

Core Requirements – 6 Credit Hours
Concentration – 21 Credit Hours (Literature) / 12 Credit Hours (Rhetoric)
Electives - 6 Credit Hours (Literature) / 9 Credit Hours (Rhetoric)
Non-thesis (Literature) - 3 Credit Hours / Thesis (Rhetoric) - 6 Credit Hours

Core Requirements (6 Credit Hours)

- ENG 6009 Introduction to Graduate Study **Credit Hours: 3**

(this should be taken in the first semester of coursework)

- ENC 6745 Teaching Practicum **Credit Hours: 3**

Concentration Requirements:

Students must select from the following concentrations:

Literature Concentration (21 Credit Hours)

Select one of the following:

- ENG 6018 Studies in Criticism and Theory I **Credit Hours: 3**
- ENG 6019 Studies in Criticism and Theory II **Credit Hours: 3**

Historical Distribution* (12 credits)
Select one course from each of the following areas:

One Medieval or Renaissance (including 17th Centurty)

- ENL 6206 Studies in Old English **Credit Hours: 3**
- ENL 6216 Studies in Middle English **Credit Hours: 3**
- ENL 6226 Studies in Sixteenth-Century British Literature **Credit Hours: 3**
- ENL 6228 Studies in Seventeenth-Century British Literature **Credit Hours: 3**

One 18th Century (Either British Tradition or Literature of the Americas)

- AML 6017 Studies in American Literature to 1860 **Credit Hours: 3**
- ENL 6236 Studies in Restoration and Eighteenth-Century British Literature **Credit Hours: 3**

One 19th Century (Either British Tradition or Literature of the Americas)

- AML 6018 Studies in American Literature 1860 to 1920 **Credit Hours: 3**
- ENL 6246 Studies of the English Romantic Period **Credit Hours: 3**
- ENL 6256 Studies in Victorian Literature **Credit Hours: 3**

One 20th Century (Either British Tradition or Literature of the Americas)

- AML 6027 Studies in Modern American Literature **Credit Hours: 3**
- ENL 6276 Studies in Modern British Literature **Credit Hours: 3**
- LIT 6096 Studies in Contemporary Literature **Credit Hours: 3**

Cultural & Critical Studies* - 6 credit hours
Select two (2) courses in ethnic literature (including African-American, Latino/a, post-colonial), world literature, women's literature or gender studies, critical theory, film, or genre)

- AML 6608 Studies in African American Literature **Credit Hours: 3**
- ENG 6067 History of the English Language **Credit Hours: 3**
- LIT 6934 Selected Topics in English Studies **Credit Hours: 1-6**

Or other graduate course approved by the Graduate Director.

** Of the six courses in Historical Distribution and Cultural & Critical Studies, two must be from British traditions and two from American traditions.*

Rhetoric and Composition Concentration (12 Credit Hours)

- ENC 6336 Studies in the History of Rhetoric **Credit Hours: 3**
- ENC 6421 Studies in Rhetoric and Technology **Credit Hours: 3**
- ENC 6700 Studies in Composition Theory **Credit Hours: 3**
- ENC 6720 Studies in Composition Research **Credit Hours: 3**

Electives (6 Credit Hours Minimum)

No CRW courses will be allowed in the Literature Concenteration. Only one practicum will be allowed to satisfy degree requirements (including ENC 6745). One Directed Study may be used to substitute for degree requirement with the approval of the Graduate Director.

Students in the Rhetoric and Composition Concentration select three courses within Literature or Rhetoric and Composition from the following (9 credit hours):

- ENC 6261 Professional and Technical Communication **Credit Hours: 3**
- ENC 6333 Contemporary Rhetorics **Credit Hours: 3**
- ENC 6422 New Media Production **Credit Hours: 3**
- ENC 6740 Theory and Development of Writing Programs **Credit Hours: 3**
- LAE 6375 Contemporary Composition Studies **Credit Hours: 3**
- LAE 5932 Selected Topics in the Teaching of English **Credit Hours: 3**

Advanced Technical Writing (3 Credit Hours)
Two additional electives in English or outside the Department, related to course of study (6 credt hours at the graduate level)

Non-Thesis Option (3 Credit Hours Minimum)

Students in the **Literature Concentration** complete a portfolio and portfolio defense. Three directed study hours to prepare portfolio. In their fourth and final semester (excluding summer terms), students will submit a portfolio for review to a two-member faculty committee six weeks prior to the Office of Graduate Studies deadline for thesis/dissertation submission. Upon submission, the student and chair of the committee will establish a defense date with the Graduate Program Specialist.

The portfolio will contain the following:

- An introductory first-person essay.
- Two revised seminar papers 5000-6000 words in length.

Papers should be developed under the direction of two different faculty members from the English Department, who then will form the committee for the defense. The portfolio will be reviewed and evaluated by this two-member faculty committee using the published assessment rubric. There will be a required Oral Defense.

- ENG 6916 Directed Research **Credit Hours: 1-19** (3 Credit Hours)

Thesis Option (6 Credit Hours Minimum)

Students in the **Rhetoric and Composition Concentration** complete a Thesis or Portfolio on a Rhetoric and Composition subject plus an oral defense.

The thesis – 40-50 pages– should be based on student's specialization in Rhetoric and Composition. This manuscript can be a revision and extension of a course paper or conference paper. It must contribute to the discipline by advancing scholarly discussions in Rhetoric and Composition studies and offering new knowledge.

- ENG 6971 Thesis: Master's **Credit Hours: 2-19** (6 Credit Hours)

Comprehensive Exam

Students in the Literature Concentration complete a capstone requirement/portfolio, including an oral defense, in lieu of a comprehensive exam. For students in the Rhetoric and Composition Concentration, the thesis defense serves in lieu of a comprehensive exam.

Accelerated Major

Also available as an Accelerated Majors

English, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 40 Post-Masters
Level: Doctoral
CIP Code: 23.0101
Dept. Code: ENG
Major/College Codes: ENG AS
Approved: 1971

Concentrations:

Literature (LIT)
Rhetoric and Composition (RAC)

Contact Information

College: Arts and Sciences
Department: English

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. in English with a concentration in Literature seeks to produce teacher-scholars who have a sound general knowledge of British and American literature and a specialized knowledge of their fields of concentration. Each student in the program must take courses in teaching college English. These courses in teaching are practicums that include actual teaching experience.

The Ph.D. in English with a concentration in Rhetoric and Composition seeks to equip teacher-scholars with both a robust familiarity with critical, literary, and rhetorical theory and with the pedagogical experiences requisite for quality instruction. Students will specialize their studies toward a particular field of concentration.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- M.A. from a regionally-accredited university
- A competitive Verbal aptitude score on the GRE general test, with a target Analytical Writing score of 4.0 (while the Quantitative score is not a determining factor in our admission decisions, both Verbal and Quantitative scores factor in some university scholarships and fellowships)
- GPA – minimum 3.70 graduate GPA
- Three (3) letters of recommendation, at least two of these letters should be from professors who have taught the applicant at the graduate level
- A two-to-three page personal statement describing the student's background, purpose for attending graduate studies, and career goals
- A scholarly writing sample of approximately 2500 words (ten double-spaced pages) excluding bibliography or works cited; applicants may excerpt from a longer essay. Generally, the committee seeks to review academic writing from an English course.

Curriculum Requirements

The Ph.D. in English involves a minimum of 30 hours of coursework beyond the M.A. degree, exclusive of credits devoted to the foreign language requirement and additional credit hours for the doctoral dissertation. After completing the necessary course work, students must complete a portfolio. Students passing the portfolio and fulfilling the foreign language requirement are then admitted to doctoral candidacy. Upon the completion and approval of the dissertation, students will defend the dissertation in an oral examination. After successful completion of the dissertation and defense, students are awarded the doctoral degree.

Total Minimum hours: 42 hours minimum Post-Master's

Core - 6 Credit Hours
Concentration - 9 Credit Hours (Literature) / 20 Credit Hours (Rhetoric)
Electives - 10 Credit Hours (Literature) / 12 Credit Hours (Rhetoric)
Dissertation - 10 Credit Hours Minimum

Core Requirements (6 Credit Hours)

- ENG 6005 Scholarly Research and Writing **Credit Hours: 3**
- ENC 6745 Teaching Practicum **Credit Hours: 3**

Concentration Requirements

Students select from the following concentrations:

Literature Concentration (9 Credit Hours)

Select one of the following:

- ENG 6018 Studies in Criticism and Theory I **Credit Hours: 3** (May have been taken at the MA level)
- ENG 6019 Studies in Criticism and Theory II **Credit Hours: 3** (May have been taken at the MA level)

One theory-rich course chosen from the following:

- ENC 6336 Studies in the History of Rhetoric **Credit Hours: 3**
- ENG 6018 Studies in Criticism and Theory I (3 Credit Hours)
- ENG 6019 Studies in Criticism and Theory II (3 Credit Hours)

Or other graduate courses designated theory-rich in the Department's Graduate Bulletin or otherwise approved by the Graduate Director.

And then also:

- ENG 7939 Doctoral Seminar **Credit Hours: 1** (3 Credit Hours)

Must be taken three times. The first seminar credit is taken with the Director of Graduate Studies the first semester. One credit is taken in conjunction with a course. The final seminar is taken with a member of the student's portfolio committee.

Rhetoric & Composition Concentration (32 Credit Hours)

- ENC 6336 Studies in the History of Rhetoric **Credit Hours: 3**
- ENC 6421 Studies in Rhetoric and Technology **Credit Hours: 3**
- ENC 6700 Studies in Composition Theory **Credit Hours: 3**
- ENC 6720 Studies in Composition Research **Credit Hours: 3**

And then also:

- ENG 7939 Doctoral Seminar **Credit Hours: 1**

Must be taken twice (two credits total) in conjunction with a three-credit course; the two courses plus the two seminar credits total 8 credits

Electives (10 Credit Hours Minimum)

Students in the Literature Concentration select courses from the English Dept., in consultation with the Graduate Director.

Students in the Rhetoric and Composition Concentration select four or five courses from the following (12-15 credit hours, dependent upon whether ENC 6745 was taken at the MA level):

- ENC 6261 Professional and Technical Communication **Credit Hours: 3**
- ENC 6333 Contemporary Rhetorics **Credit Hours: 3**
- ENC 6422 New Media Production **Credit Hours: 3**
- ENC 6740 Theory and Development of Writing Programs **Credit Hours: 3**
- LAE 6375 Contemporary Composition Studies **Credit Hours: 3**

Foreign Language Requirement

Demonstrated proficiency in one foreign language by one of the following means:

- Place beyond Level IV in a language placement test (administered by World Language Education)
- Earn a B or better in one of the graduate courses Reading for French, Spanish, or German
- Earn a B or better in two semester courses of an intermediate foreign language (e.g. Spanish III and Spanish IV)
- Earn a B or better in a fourth semester language course (e.g. Spanish IV)
- Earn a B or better in a second semester Latin course

Qualifying Exam

For students in the Literature Concentration, the portfolio and its oral defense serve in lieu of a qualifying exam and together form a required stage to advance to candidacy. Each doctoral literature student designs a portfolio in close consultation with professors in her/his field(s) during the first and second years of the program, culminating normally in the third year in a submission of diverse written items that show the student's knowledge, writing, and critical thinking in her/his selected general and more specific areas of specialization (by period, genre, topics, or other meaningful groupings). An oral defense of these items is scheduled soon after submission.

Students in the Rhetoric and Composition Concentration, after completing 30 hours of coursework, the language requirement, and all incomplete grades, may take the Ph.D. qualifying examination. The standardized exam will be offered twice each academic year for all eligible students and consists of:

- A 24-hour take-home exam divided into four written sections (1,000 words apiece), the content of which corresponds to the four core courses: Composition Theory, Research Methods, Rhetoric and Technology, and Historical Rhetorics. Questions will be available in Canvas office at 9:00 a.m. on the day of the exam. Questions will be digitally submitted to the exam chair by 9:00 a.m. on the following day for SafeAssign (or other software as approved by University and Department) submission in Canvas.

- A manuscript suitable for publication in a specified scholarly journal (7,000-8,500 words) to be turned in at the same time as the 24-hour exam. The topic of the manuscript should be based on the student's specialization in Rhetoric and Composition. This manuscript can be a revision of a course paper or conference paper or an extension of their project from the Scholarly Writing and Research class. It must contribute to the discipline by advancing scholarly discussions in Rhetoric and Composition studies and offering new knowledge.

Both parts of the exam carry equal weight. All exams will be assessed by a rotating committee of at least 3 Rhetoric and Composition faculty representing different areas of disciplinary expertise. Every exam question will be graded by each member of the committee, although emphasis will be placed upon readers' areas of specialization when determining the final score for each question.

Dissertation (10 Credit Hours Minimum)

- ENG 7980 Dissertation: Doctoral **Credit Hours: 2-19** (Minimum of 10 dissertation hours (no maximum), plus oral defense)

Comparative Literary Studies Graduate Certificate

This program is offered fully online.

Certificate Code: **XCL**

Description

This certificate offers a comprehensive graduate program of comparative study and research. Linked to the Department of English but not limited to it, the students take core courses in research, bibliography, approaches to critical theory, and develop a comparative study, part of which is often grounded in literature or rhetoric. The certificate culminates with an individualized comparative course (Directed Study) that allows students to engage in the practice of comparative research and results in a research paper, possibly publishable, on an aspect of the focus area(s) of inquiry.Through a thematic or conceptual cluster of five graduate-level courses in two disciplines, students can explore how different national literatures are interconnected, and/or how different literatures relate contextually and culturally to other disciplines, such as art, music, history, psychology, philosophy, politics, among others.This certificate, owing to the personalized design of each student's program, appeals to students of diverse backgrounds and interests and their desire to connect literary and aesthetic study to history, foreign languages, philosophy, religion, politics, and cultural studies.By completing this certificate, students will have an excellent formation in comparative or interdisciplinary studies. Graduates may decide to further their studies in comparative studies, literature, or their other discipline(s) of focus. This certificate enhances teaching and research credentials, as well as possibilities for employment in the arts, publishing, broadcasting, journalism, and government.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have:

B.S. in English or Humanities and a minimum GPA 3.3 and GPA 3.5 in major and 3 Letters of Recommendation; GRE Scores suggested min verbal score of 600.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Generally, students will have already had some undergraduate study of the discipline(s) they wish to include in their graduate certificate selection of courses. For example, those who wish to study Spanish literature will have knowledge of Spanish.

Requirements of this Certificate (15 Credit Hours)

15 Credit hours. Students will develop an individualized curriculum plan in conjuction with the Graduate Certificate Program Coordinator and the Graduate Dierctor. Normally, course selection will involve two or three courses in the English Department, but

- Any graduate-level English Lit., Rhetoric, or course in student's other declared discipline; for English MA and PhD,
- ENG 6009 Introduction to Graduate Study **Credit Hours: 3**

- ENG 6018 Studies in Criticism and Theory I **Credit Hours: 3**

or

- ENG 6019 Studies in Criticism and Theory II **Credit Hours: 3**

or

- a theory-rich course in English Literature.

- One graduate-level literature course in English, American or World Literature OR graduate-level course in student's other discipline.

Electives

Select two elective courses.

- One graduate-level course in a discipline other than English, usually in the Humanitites, Foregein Languages, philosophy, History, Religion,Theatre,Communications,etc. The course should contribute to the student's proposed area of comparative research.
- Directed Study-An individual reading and research course resulting in a graduate-level research paper of 15-25 pages with a comparative and/or interdisciplinary focus (related optimally to the courses in theory, literature, and elective discipline).

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Creative Writing Graduate Certificate

This program is offered fully online.

Curriculum Code: **XCW**

Description

The USF English department offers advanced degrees in Literature, Rhetoric and Composition, and Creative Writing. Faculty members include award-winning authors, which benefits the wide range of students interested in developing their own creative writing skills. The Creative Writing Certificate provides expert instruction, a supportive atmosphere, and a well-structured program. The Graduate Certificate fulfills the needs for both degree seeking (internal) and non-degree seeking (external) students. It provides students enrolled in traditional graduate programs with opportunity to develop their writing skills, widen the scope of their graduate education, and enhance their employment opportunities. Additionally, it provides an ideal learning environment for students who, although not pursuing a Master's degree in English, want to acquire the necessary skills for creative writing.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

B.S. in English or related discipline and minimum GPA 3.3 and minimum GPA 3.5 in their major and a writing sample.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

The program requires 15 hours coursework for certification. Six hours (two courses) of a core curriculum. Select two:

- CRW 6130 Fiction Writing **Credit Hours: 3**
- CRW 6164 The Craft of Fiction **Credit Hours: 3**
- CRW 6331 Poetry Writing **Credit Hours: 3**
- CRW 6236 Nonfiction Writing **Credit Hours: 3**

Electives

Three courses, or 9 credit hours of electives are selected from the elective course list below. Electives may also be selected from the list of core courses and must be approved by the certificate coordinator

- ENG 6018 Studies in Criticism and Theory I **Credit Hours: 3**
- LIT 6096 Studies in Contemporary Literature **Credit Hours: 3**
- LIT 6934 Selected Topics in English Studies **Credit Hours: 1-6** approved by the Creative Writing Coordinator or Graduate Director
- Any 6000-level literature course

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Digital Humanities Graduate Certificate

Certificate Code: XDHU
Approved 201808

Description

The Graduate Certificate in Digital Humanities program, designed in collaboration between the English department and the History department, offers students enrolled in the Graduate School an opportunity to complete a series of courses (12 hours) at the intersection of technology and humanities research. It offers training in technologies and platforms associated with digitization, electronic editions, cultural heritage, archives, text mining, data analysis and visualization, the use of mapping and GIS in humanities research, and the study of digital media and technology from a humanities perspective.

Course Location/Delivery

Offered at USF Tampa.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

- HUM 6939 Selected Topics in Humanities **Credit Hours: 1-3**

Introduction to Digital Humanities (3 Credit Hours) (Proposed DIG 6178)
Digital Humanities Capstone (3 Credit Hours) (Proposed DIG 6585)
Two additional appropriate graduate courses, as approved by the program (6 Credit hours)

Time Limit / Average Time to Completion

Five years.

Credit Toward Graduate Degree

Credit hours from this Certificate may be eligible to apply toward a graduate degree. Check with the department for information.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Professional and Technical Communication Graduate Certificate

This program is offered fully online.

Curriculum Code: **XPC**

Description

The Graduate Certificate in Professional and Technical Communication combines workplace writing theory and practice with an emphasis on contemporary multimedia communication technologies. The certificate helps working professionals to strengthen their workplace skills, gain experience working with communication technologies, and prepare for careers or advancement as professional who write. It also provides the opportunity for students from all graduate programs to broaden their research and teaching agendas as they prepare for a competitive job market in English Studies.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

- ENC 6261 Professional and Technical Communication **Credit Hours: 3**
- LIT 6934 Selected Topics in English Studies **Credit Hours: 1-6** (Practicum in Teaching Professional and Technical Communication) **(3 credits for this program)**

Electives

- ENC 6421 Studies in Rhetoric and Technology **Credit Hours: 3**
- ENC 6422 New Media Production **Credit Hours: 3**
- LIT 6934 Selected Topics in English Studies **Credit Hours: 1-6** (Rhetoric of Science, Technology and Medicine) **(3 credits for this program)**
- LIT 6934 Selected Topics in English Studies **Credit(s): 1-6** (Rhetoric, Science studies and the New Materialism)

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of History

History, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 54.0101
Dept. Code: HTY
Major/College Codes: HTY AS
Approved: 1969

Concentrations:

American History (AHY)
Ancient History (AHS)
European History (EHS)
Latin American History (LAH)
Medieval History (MHS)

Contact Information

College: Arts and Sciences
Department: History

Contact Information: http://www.grad.usf.edu/majors

The Department of History at the University of South Florida in Tampa offers MA applicants an enriching program of study, coursework, and directed research.

A master's degree in History can prepare students for a variety of careers in the public and private sectors where research, critical thinking, and writing skills are especially important.

Major Research Areas:
American History to 1877; American History post-1877; Ancient History; Digital Humanities; Early Modern Europe and the World; Latin American History; Medieval History; Modern Europe and the World; Russian History.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- **Letters of Recommendation:** Two letters of recommendation on behalf of the applicant are required. These letters should come from academic sources familiar with the quality of the applicant's academic work and indicate his/her graduate program potential.
- **Statement of Purpose:** A statement is required that delineates historical and intellectual areas of interest, proposed fields of study, educational and professional goals, the faculty with whom the applicant is potentially interested in working, and why the applicant sees him/herself as a good fit with the program.

- **Writing Sample:** A sample of written work which indicates the applicant's ability to write effectively, to conduct historical research and analysis must be submitted. Appropriate examples include a term paper, research paper, or thesis chapter.

Curriculum Requirements

Total Minimum Hours: 33

Core Requirements - 6 Credit Hours
Major Field Concentrations – 9 Credit Hours
Minor Field of Study Electives - 6 Credit Hours
Electives - 6 Credit Hours
Thesis/non-thesis – 6 hours

Core Course Requirement (6 Credit Hours)

- HIS 6112 Analysis of Historical Knowledge **Credit Hours: 3**
- HIS 6939 Seminar in History **Credit Hours: 3**

Historical Research and Publication (3 Credit Hours) (Proposed HIS 6905)

Major Field Concentrations (9 Credit Hours)

Students may select from the following Concentrations. Other courses may be included if approved by the Graduate Director.

American History (AHY)

Select from the following options:

- HIS 6939 Seminar in History **Credit Hours: 3**

Age of Jackson (3 Credit Hours)
Civil War (3 Credit Hours)
Immigration and Ethnicity (3 Credit Hours)
Slavery and Freedom in the United States Before the Civil War (3 Credit Hours)
The Sixties (3 Credit Hours)
The US and Russia in the 20th Century (3 Credit Hours)
U.S. Transnational History 1900-1945 (3 Credit Hours)
U.S. 1865-1920 (3 Credit Hours)
U.S. in the Cold War, 1945-2000 (3 Credit Hours)

- AMH 6199 Nineteenth-Century United States History **Credit Hours: 3**
- HIS 6925 Colloquium in History **Credit Hours: 3**

The Irish in America (3 Credit Hours)
Colloquium - Topics vary (3 Credit Hours)

Ancient History (AHS)

Select from the following options:

- HIS 6939 Seminar in History **Credit Hours: 3**

Ancient Navies (3 Credit Hours)
Death, Burial and the Afterlife in Antiquity (3 Credit Hours)
Religions of the Ancient Mediterranean (3 Credit Hours)
Thucydides (3 Credit Hours)
Digital Public Archeology (3 Credit Hours)

- AFH 6300 Roman North Africa **Credit Hours: 3**
- DIG 6774C Virtual Museums **Credit Hours: 3**
- DIG 6834C Digital Antiquity **Credit Hours: 3**

- HIS 6925 Colloquium in History **Credit Hours: 3**

Classical Greece (3 Credit Hours)
Digital Archeology (3 Credit Hours)
Age of Alexander (3 Credit Hours)
Roman Empire (3 Credit Hours)
Advanced Latin for Ancient Historians (3 Credit Hours)
Classical Greece (3 Credit Hours)

European History (EHS)

Select from the following options:

- HIS 6939 Seminar in History **Credit Hours: 3**

British Empires, 1500-Today (3 Credit Hours)
Popular Culture: Europe 1400-1700 (3 Credit Hours)
Early Modern Europe (3 Credit Hours)
Empire and Ethnicities (3 Credit Hours)
Approaches to Global and World History (3 Credit Hours)
Global History of Communism (3 Credit Hours)
The Inquisition: Spain and America (3 Credit Hours)
Immigration and Ethnicity (3 Credit Hours)
Twentieth Century Europe (3 Credit Hours)
The Soviet Union in WWII (3 Credit Hours)
Women and Gender in the Mediterranean World, 1400-1700 (3 Credit Hours)

- HIS 6925 Colloquium in History **Credit Hours: 3**

Latin American History (LAH)

Select from the following options:

- HIS 6939 Seminar in History **Credit Hours: 3**

Spanish Atlantic (3 Credit Hours)
The Inquisition: Spain and America (3 Credit Hours)
Sex, Crime, and Drugs in Latin America (3 Credit Hours)
Latin America in the 1960's (3 Credit Hours)

- HIS 6925 Colloquium in History **Credit Hours: 3**

(Topics vary)

Medieval History (MHS)

Select from the following options:

- HIS 6939 Seminar in History **Credit Hours: 3**

The Medieval World (3 Credit Hours)
History of the Crusades (3 Credit Hours)
Medieval Crime and Punishment (3 Credit Hours)
Medieval Mediterranean (3 Credit Hours)
Medieval Egypt and North Africa (3 Credit Hours)

- HIS 6925 Colloquium in History **Credit Hours: 3**

(Topics Vary)

Minor Field of Study Electives (6 Credit Hours)

Students select six (6) hours in a minor field of study that complements the concentration.

Electives (6 Credit Hours)

Students must complete additional hours in graduate courses in History or in another department at USF.

Other Requirements

Students may take a maximum of three hours in HIS 6914 Directed Research and/or HIS 6908 Independent Study and/or HIS 6925 Colloquia. Exceptions can be made with the approval of the major professor and Graduate Director.

M.A. students must select an advisor in their anticipated major field of study. Students will arrange their program of study and schedules of appropriate courses in consultation with their major professor.

Students need to demonstrate satisfactory progress or they will be removed from the program, consistent with department procedure.

Language Requirement

Students may need to demonstrate proficiency in a language other than English, consistent with the requirements of their field.

Thesis and Non-Thesis Options (6 Credit Hours)

Students may select either a thesis or non-thesis option.

Thesis

- HIS 6971 Thesis: Master's **Credit Hours: 2-19** (3 Credit hours)

In lieu of two other courses, students may write a Master's Thesis, enrolling in HIS 6971.

Non-Thesis

Any combination that totals six hours:

- HIS 6939 Seminar in History **Credit Hours: 3**
- HIS 6925 Colloquium in History **Credit Hours: 3**
- HIS 6914 Directed Research **Credit Hours: 1-19 (3 Credit Hours)**
- HIS 6908 Independent Study **Credit Hours: 1-19 (3 Credit Hours)**

Comprehensive Examinations:

Students will be assessed in their major and minor fields through a written comprehensive exam. An oral exam may be administered, if a field examiner (USF faculty member) is unsatisfied with the state of the student's comprehension of the field.

Department Handbook

http://history.usf.edu/data/ma-program-manual.pdf

History, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 75 (post-bachelor's), 42 (post-masters)
Level: Doctoral
CIP Code: 54.0101
Dept. Code: HTY
Major/College Codes: HTY AS
Approved: 2009

Contact Information

College: Arts and Sciences
Department: History

Contact Information: http://www.grad.usf.edu/majors

The Department of History at the University of South Florida in Tampa offers Ph.D. applicants an enriching program of study, coursework, and directed research.

A Ph.D. degree in History can prepare students for a variety of careers in the public and private sectors where research, critical thinking, and writing skills are especially important.

Major Research Areas:
American History to 1877; American History post-1877; Ancient History; Digital Humanities; Early Modern Europe and the World; Latin American History; Medieval History; Modern Europe and the World; Russian History.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- **Letters of Recommendation**: Three letters of recommendation on behalf of the applicant are required. These letters should come from academic sources familiar with the quality of the applicant's scholarly work and indicate his/her PhD program potential.
- **Statement of Purpose**: A statement is required that delineates historical and intellectual areas of interest, proposed fields of study, educational and professional goals, the faculty with whom the applicant is potentially interested in working, and why the applicant sees him/herself as a good fit with the program.
- **Sample of Writing**: A sample of written work that indicates the applicant's ability to write effectively and to conduct historical research and analysis must be submitted. Appropriate examples include a publication, seminar paper, or thesis chapter.
- **Language**: Applicants will provide evidence of proficiency in the foreign language(s) of their field(s) of study.

Curriculum Requirements

Total Minimum Hours: 75 -post-baccalaureate (42 hours post-masters)

Post-Master's requirements
Core Requirements – 6 Credit Hours
Major Field – 9 Credit Hours Minimum
Minor Field – 3 Credit Hours Minimum
Electives in other disciplines – 6 Credit Hours
Dissertation – 18 Credit Hours

Students entering for the post-baccalaureate option must complete the equivalent requirements for the M.A. in History at USF. Students entering the doctorate who have not satisfactorily completed HIS 6112 Analysis of Historical Knowledge or its equivalent must complete this course in addition to the post-master's requirements.

Core Requirements (6 Credit Hours)

- HIS 7937 Interdisciplinary Ph.D. Pro-Seminar **Credit Hours: 3**
- HIS 7938 Ph.D. Capstone Seminar **Credit Hours: 3**

Major Field Studies (9 Credit Hours Minimum)

- HIS 6939 Seminar in History **Credit Hours: 3**
- HIS 7939 Selected Topics for Doctoral Students **Credit Hours: 3**

Or other graduate courses approved by the Graduate Director.

Minor Field Studies (3 Credit Hours Minimum)

- HIS 6939 Seminar in History **Credit Hours: 3**
- HIS 7939 Selected Topics for Doctoral Students **Credit Hours: 3**

Or other graduate courses approved by the Graduate Director.

Electives (6 Credit Hours Minimum)

Students will enhance their major or minor areas of specialization with six credits of elective courses. They may include interdisciplinary courses within the department, courses outside the department, or a combination of these. These courses should be chosen in consultation with the student's advisor, and with the approval of the Graduate Director.

Other Requirements

Students may take a maximum of three hours each in HIS 6914 Directed Research and HIS 6908 Independent Study. Exceptions can be made with the approval of the major professor and Graduate Director.

Ph.D. students must select an advisor in their anticipated major field of study. Students will arrange their program of study and schedules of appropriate courses in consultation with their major professor.

Students need to demonstrate satisfactory progress or they will be removed from the program, consistent with department procedure.

Language Requirement for Ph.D. Students

Students may need to demonstrate proficiency in a language other than English, consistent with the requirements of their field(s).

- ANG 5486 Quantitative Methods in Anthropology **Credit Hours: 3**
- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- LIN 7639 Quantitative Methods in Applied Linguistics **Credit Hours: 3**
- POS 6736 Research Design **Credit Hours: 3**
- MAT 5932 Selected Topics **Credit Hours: 1-4 (3 credits for this program)**
- Or other graduate course approved by Graduate Director

Comprehensive Qualifying Exam

Students will be examined in their major and minor fields through a written exam. An oral exam may be administered, if a field examiner (USF faculty member) is unsatisfied with the state of the student's comprehension of the field.

Dissertation Defense

Students must complete an oral dissertation defense with the members of the dissertation committee. Faculty from fields other than History may serve on dissertation committees.

Dissertation (18 Credit Hours)

- HIS 7980 Ph.D. Dissertation **Credit Hours: 1-9 (18 credits for this program)**

Department of Humanities and Cultural Studies

Liberal Arts, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 24.0101
Dept. Code: HCS
Major/College Codes: MLA AS
Approved: 1984

Concentrations:

Africana Studies (AFT)
American Studies (AME)
Film Studies (FLM)
Humanities (HTS)
Social and Political Thought (SPT)

Also offered as an Accelerated Major

Contact Information

College: Arts and Sciences
Departments:
Humanities and Cultural Studies
School of Interdisciplinary Global Studies (SIGS)

Contact Information: http://www.grad.usf.edu/majors

The Master of Arts (M.A.) offers students an opportunity to study from an interdisciplinary perspective the ideas and works that have shaped world culture. Five program concentrations are available: Africana Studies (AFT), American Studies (TBA), Film Studies (FLM), Humanities (HTS), Social and Political Thought (SPT).

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE Recommended. Contact department for advising
- Writing Sample
- Personal Statement
- Letters of Recommendation are recommended
- Students must select a concentration at the time of application

Curriculum Requirements

Total Minimum Hours- 33

Core requirements – 6 hours
Concentration – 9 hours
Electives – 12 hours
Thesis / Non-Thesis Project – 6 hours

Core Requirements (6 Credit Hours)

- HUM 6814 Introduction to Graduate Study **Credit Hours: 3**
- HUM 6815 Research Seminar **Credit Hours: 3**

Concentration Requirements

Students select from the following concentrations:

Africana Studies Concentration (9 Credit Hours)

- AFA 6120 Social Theory and Social Thought **Credit Hours: 3**
- AFA 6108 Social Construction of Race and Racism **Credit Hours: 3**
- AFA 6932 Topics in Africana Studies **Credit Hours: 3**

American Studies Concentration (9 Credit Hours)

- AMS 6156 Theories and Methods of Cultural Studies **Credit Hours: 3**
- AMS 6254 Cultural Era **Credit Hours: 3**
- AMS 6805 Enduring Questions in American Culture **Credit Hours: 3**

Film Studies Concentration (9 Credit Hours)*

*Students entering the MA program from the USF BA in Humanities, Film Studies Concentration, who have already taken these courses at the undergraduate level may have these requirements waived and will instead complete graduate electives in place of HUM 6586, HUM 6583, and HUM 6584.

- HUM 6586 Film Theory **Credit Hours: 3**
- HUM 6583 Global Cinema and New Media to 1960 **Credit Hours: 3**
- HUM 6584 Global Cinema and New Media since 1960 **Credit Hours: 3**

Humanities Concentration (9 Credit Hours)

- HUM 6801 Theories and Methods of Cultural Studies **Credit Hours: 3**

Students select 6 hours from the following:

- HUM 6939 Selected Topics in Humanities **Credit Hours: 1-3 (3 credits for this program)**
- HUM 6588 Themes and Genres in Film and New Media **Credit Hours: 3**
- HUM 6475 Studies in Contemporary Arts and Letters **Credit Hours: 3**
- Or other courses approved by the Graduate Director

Social and Political Thought Concentration (9 Credit Hours)

- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- INR 6690 Research Seminar in Globalization **Credit Hours: 3**
- WST 6560 Advanced Feminist Theory **Credit Hours: 3**
- SPW 5135 Colonial Spanish American Literature **Credit Hours: 3**
- PHH 6266 - Continental Philosophy II: Political Theory and Continental Social Theory **Credit(s): 3**
- PHH 6267 - Continental Philosophy III: From Structuralism to Deconstructionism **Credit(s): 3**
- PHI 6425 Seminar in the Philosophy of Social Science **Credit Hours: 3**
- PHM 6105 Seminar in Social Philosophy **Credit Hours: 3**
- PHM 6305 Seminar in Political Philosophy **Credit Hours: 3**
- PHM 6406 - Seminar in the Philosophy of Law **Credit(s): 3**
- PHM 6506 Seminar in the Philosophy of History **Credit Hours: 3**
- PHP 6624 Adorno **Credit Hours: 4**
- PHP 6640 - Foucault **Credit(s): 4**
- POT 6007 Seminar in Political Theory **Credit Hours: 3**
- Or other courses approved by the Graduate Director

Electives (12 Credit Hours)

Graduate coursework in the Concentration area and/or related departments, selected in consultation with the Graduate Director. No more than six hours from any one related department may be credited toward the Major without written consent from the Graduate Director.

Note for Africana Studies

electives may include

- AFA 6387 Seminar on Genocide and Human Rights **Credit Hours: 3**
- AFA 6207 African American Historiography **Credit Hours: 3**
- AFA 6805 African Historiography **Credit Hours: 3**
- AFA 6355 African American Community Research: Ethnography **Credit Hours: 3**
- AFA 6945 Internship **Credit Hours: 1-3 (3 credits for this program)**
- Or other courses approved by the Graduate Director

Thesis/Non-Thesis (6 Credit Hours Minimum)

Thesis

Upon nearing the completion of coursework, each student will select a thesis topic and constitute a thesis committee. The thesis committee must approve proposals before students embark on their thesis. The student will then write and orally defend a thesis. During the proposal and thesis writing stage, students are required to enroll for at least 6 hours of Thesis credit.

- AFA 6971 Thesis **Credit Hours: 2-19 (6 credits for this program)** (Africana Studies Concentration)
- AMS 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)** (American Studies Concentration)
- HUM 6971 Thesis: Masters **Credit Hours: 2-19 (6 credits for this program)** (Film Studies and Humanities Concentrations)
- Or other thesis course approved by the Social and Political Thought Graduate Director

Non-Thesis

Students in the Africana Studies concentration may request a non-thesis option. Non-thesis students will be required to complete an additional six hours of graduate course work at the 6000 level, selected in consultation with the Graduate Director. The non-thesis student is required to demonstrate competency by successfully completing a substantial literature review of approximately 50 pages in the Concentration Area.

Comprehensive Exam

For students in the thesis option, successful submission and defense of the thesis proposal or final thesis serves in lieu of the Comprehensive Exam. For students in the non-thesis option, the extensive literature review determines competency and serves as the equivalent of a comprehensive examination.

Accelerated Major

Also available as an Accelerated Majors

American Culture & Society Graduate Certificate

This program is offered fully online.

Certificate Code: **XAC**

Description

The certificate offers an interdisciplinary approach to the study of American culture and society. Classes integrate interpretations of the literature, arts and music of the United States with an understanding of the social values and historical issues they engage. The field of American Studies offers students a unique opportunity to study a broad range of cultural phenomena of contemporary social relevance.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have:

Academic Writing Sample, GRE Scores

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- AMS 6254 Cultural Era **Credit Hours: 3**

Electives

Select 3:

- AMS 6002 American Lives **Credit Hours: 3**
- AMS 6156 Theories and Methods of Cultural Studies **Credit Hours: 3**
- AMS 6805 Enduring Questions in American Culture **Credit Hours: 3**
- AMS 6934 Selected Topics **Credit Hours: 1-3**
- HUM 6453 Studies in American Arts and Letters I **Credit Hours: 3**
- HUM 6453 Studies in American Arts and Letters I **Credit(s): 3**
- HUM 6585 Film and New Media Auteurs **Credit Hours: 3**

Time Limit

3 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Film & New Media Studies Graduate Certificate

This program is offered fully online.

Curriculum Code: **XFM**

Description

Moving-image media are transforming the way we work and play and how we relate to colleagues, friends, and family members. Film & New Media Studies is designed to teach students how to think actively, critically, and creatively, about the art of the moving image. To this end, it surveys significant examples of moving-image culture, including films from Hollywood and other global industries: experiments in documentary and art cinema; and works from television, digital video and the Internet. Foe some students, this certificate complements their aspirations to produce moving–image works. For others, it means better understanding their own mediated environments.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

Academic Writing Sample

Prefer GRE Verbal 153 & Analytic Writing 4.5

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- HUM 6584 Global Cinema and New Media since 1960 **Credit Hours: 3**

Electives

Choose three classes (9credit hours) from the list below.

- HUM 6583 Global Cinema and New Media to 1960 **Credit Hours: 3**
- HUM 6586 Film Theory **Credit Hours: 3**
- HUM 6587 National Cinemas **Credit Hours: 3**

- HUM 6588 Themes and Genres in Film and New Media **Credit Hours: 3**
- HUM 6585 Film and New Media Auteurs **Credit Hours: 3**

Time Limit

3 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Philosophy

Philosophy, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 38.0101
Dept. Code: PHI
Major/College Codes: PHI AS
Approved: 1971

Concentrations:
Philosophy and Religion (PHR)

Contact Information

College: Arts and Sciences
Department: Philosophy

Contact Information:
http://www.grad.usf.edu/majors
http://philosophy.usf.edu/

The Philosophy program at South Florida aims to produce teachers and scholars with a deep understanding of philosophy and a broad knowledge of its history. We welcome a diversity of approaches to the study of philosophy, including analytic, continental, historical, literary, and multicultural. Above all, we seek to prepare our students to make contributions in their areas of expertise and to become responsible members of the philosophical community.

Major Research Areas:
Aesthetics
Analytic Philosophy
Ancient Greek Philosophy
Continental Philosophy
Epistemology
Ethics & Contemporary Moral Philosophy
Feminist Philosophy
Medieval Philosophy
Modern Philosophy
Philosophy of Mind
Philosophy and Religion
Philosophy of Science
Social & Political Philosophy
19th and 20th Century Philosophy

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- three (3) letters of recommendation
- A ten (10) page philosophy writing sample
- Brief statement of the Applicant's Philosophical Interests
- GRE scores

Curriculum Requirements

Total Minimum hours: 30 Credit hours

Core – 6 Credit Hours
General Course Requirements or Concentration– 15 Credit Hours minimum
Additional Electives – 6 Credit Hours minimum
Thesis – 3 Credit Hours

Core Requirements (6 Credit Hours)

- PHH 6105 Seminar in Ancient and Medieval Philosophy **Credit Hours: 3** (3 Credit Hours)
- PHH 6310 Seminar in 17th and 18th Century Philosophy **Credit Hours: 3** (3 Credit Hours)

General Course Requirements or Concentration (15 Credit Hours)

Students must select either the General Course Requirements option or the Philosophy and Religion Concentration Option.

General Course Requirements Option

Students must complete one of the following:

- PHI 5135 Symbolic Logic **Credit Hours: 3**

Or approved substitute graduate course
Or pass an examination administered by the Department of Philosophy. Students who pass the exam in lieu of PHI 5135 will complete an additional elective for 3 hours.

Students must complete at least one course or graduate seminar in each of the following areas:

- 19th and 20th Century Philosophy
- Epistemology and Philosophy of Science
- Value Theory and Social & Political Philosophy
- Metaphysics, Mind, and Language

Courses are selected from the following list, or other graduate course as approved by the Graduate Director.

- PHH 6645 Contemporary Continental Philosophy **Credit Hours: 4** (3 Credit Hours)
- PHH 6677 Seminar in German Idealism **Credit Hours: 3** (3 Credit Hours)
- PHH 6938 Seminar in the History of Philosophy **Credit Hours: 3**

PHI 5135 Symbolic Logic (3 Credit Hours)

- PHI 5225 Philosophy of Language **Credit Hours: 3**

- PHI 5934 Selected Topics **Credit Hours: 1-3**
- PHI 6305 Seminar in Epistemology **Credit Hours: 3**
- PHI 6405 Seminar in the Philosophy of Natural Science **Credit Hours: 3**
- PHI 6425 Seminar in the Philosophy of Social Science **Credit Hours: 3** (3 Credit Hours)
- PHI 6506 Seminar in Metaphysics **Credit Hours: 3**
- PHI 6605 Seminar in Ethics **Credit Hours: 3**
- PHI 6665 Metaethics **Credit Hours: 3**
- PHI 6686 Climate Change and Societal Evolution **Credit Hours: 3**
- PHI 6808 Seminar in Aesthetics **Credit Hours: 3**
- PHM 6265 Continental Philosophy I: Phenomenology of Hermeneutics **Credit Hours: 3**
- PHM 6266 Continental Philosophy II: Political and Social Theory **Credit Hours: 3**
- PHM 6305 Seminar in Political Philosophy **Credit Hours: 3**
- PHP 6005 Plato **Credit Hours: 3**
- PHP 6015 Aristotle **Credit Hours: 3**
- PHP 6405 Seminar in Descartes' Philosophy **Credit Hours: 4** (3 Credit Hours)
- PHP 6415 Kant **Credit Hours: 3**
- PHP 6505 Seminar on Hegel's Philosophy **Credit Hours: 4** (3 Credit Hours)
- PHP 6525 Nietzsche and the Nietzscheans **Credit Hours: 4**
- PHP 6624 Adorno **Credit Hours: 4** (3 Credit Hours)
- PHP 6645 Foucault **Credit Hours: 4**

Philosophy and Religion Concentration (PHR)

- RLG 6035 Theory and Methods in Religious Studies **Credit Hours: 3**

And one course from each of the following areas:

- Religion in History
- Religion: Ethics, Politics, and Culture

Courses are selected from the following list or as approved by the Graduate Director.

- RLG 6126 Religion in America **Credit Hours: 3**
- RLG 6143 Religion, Culture, and Society **Credit Hours: 3**
- RLG 6189 Comparative Religious Ethics **Credit Hours: 3**
- RLG 6196 Religion and Modernization **Credit Hours: 3**
- RLG 6285 Studies in Biblical Archaeology **Credit Hours: 3**
- RLG 6327 Seminar: Ancient Religions and Literatures **Credit Hours: 3**
- RLG 6438 Modern Christian Thought **Credit Hours: 3**
- RLG 6906 Independent Study **Credit Hours: 1-3**
- RLG 6938 Special Topics in Religious Studies **Credit Hours: 2-4**

Students must complete one course or graduate seminar in Philosophy from the following area, as approved by the Graduate Director:

- Value Theory and Social and Political Philosophy

Students must complete one additional course or graduate seminar from either Philosophy or Religious Studies. When Possible, a course in Non-Western Philosophy or World Religions is recommended.

Language Competency

Students should develop reading knowledge of at least one language other than English relevant to their philosophical work. The level of competence required is to be determined by consultation with thesis advisor (if applicable) and the Graduate Director.

Comprehensive Examination

Students complete either a Thesis OR a comprehensive examination on a required list of readings constructed by the candidate and a committee of examiners.

Electives (6 Credit Hours)

May include Independent Study, Graduate Teaching Methods, language coursework, additional thesis work, or additional graduate coursework as approved by the Graduate Director.

Thesis (3 Credit Hours)

- PHI 6971 Thesis: Master's **Credit Hours: 2-19**

Philosophy, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90
Level: Doctoral
CIP Code: 38.0101
Dept. Code: PHI
Major/College Codes: PHI AS
Approved: 1990

Concentration:
Philosophy and Religion (PHR)

Contact Information

College: Arts and Sciences
Department: Philosophy

Contact Information: http://www.grad.usf.edu/majors

The Philosophy program at South Florida aims to produce teachers and scholars with a deep understanding of philosophy and a broad knowledge of its history. We welcome a diversity of approaches to the study of philosophy, including analytic, continental, historical, literary, and multicultural. Above all, we seek to prepare our students to make contributions in their areas of expertise and to become responsible members of the philosophical community.

Major Research Areas:

Aesthetics
Analytic Philosophy
Ancient Greek Philosophy
Buddhist Philosophy
Confucian Thought
Continental Philosophy
Epistemology
Ethics and Contemporary Moral Philosophy
Feminist Philosophy
Medieval Philosophy
Modern Philosophy
Philosophy of Mind
Philosophy and Religion
Philosophy of Science
Social & Political Philosophy
19th and 20th Century Philosophy

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- three (3) letters of recommendation
- a ten (10) page philosophy writing sample
- GRE Scores
- A brief statement of the applicant's philosophical interests

Curriculum Requirements

Total Minimum hours: 90 Credit Hours post-bachelors

Core Requirements– 6 Credit Hours
General Course or Concentration Option – 30 Credit Hours
Additional Electives – 42 Credit Hours
Dissertation Credit Hours – 12 hours

Core Requirements (6 Credit Hours)

- PHH 6105 Seminar in Ancient and Medieval Philosophy **Credit Hours: 3** (3 Credit Hours)
- PHH 6310 Seminar in 17th and 18th Century Philosophy **Credit Hours: 3** (3 Credit Hours)

General Course or Concentration Option (30 Credit Hours)

Student must select either the General Course Option or the Philosophy and Religion Concentration Option.

General Course Requirements Option

Students must complete a minimum of ten (10) additional courses or graduate seminars subject to the following requirements:

- PHI 5135 Symbolic Logic **Credit Hours: 3**

Or an approved substitute
At least one course or graduate seminar in each of the following areas:

- 19th and 20th Century Philosophy
- Epistemology and Philosophy of Science
- Value Theory and Social & Political Philosophy
- Metaphyics, Mind, and Language

Courses are selected from the following list, or other course as approved by the Graduate Director:

- PHH 6645 Contemporary Continental Philosophy **Credit Hours: 4** (3 Credit Hours)
- PHH 6677 Seminar in German Idealism **Credit Hours: 3** (3 Credit Hours)
- PHH 6938 Seminar in the History of Philosophy **Credit Hours: 3**
- PHI 5225 Philosophy of Language **Credit Hours: 3**
- PHI 5934 Selected Topics **Credit Hours: 1-3**

- PHI 6305 Seminar in Epistemology **Credit Hours: 3**
- PHI 6405 Seminar in the Philosophy of Natural Science **Credit Hours: 3**
- PHI 6425 Seminar in the Philosophy of Social Science **Credit Hours: 3**
- PHI 6506 Seminar in Metaphysics **Credit Hours: 3**
- PHI 6605 Seminar in Ethics **Credit Hours: 3**
- PHI 6665 Metaethics **Credit Hours: 3**
- PHI 6686 Climate Change and Societal Evolution **Credit Hours: 3**
- PHI 6808 Seminar in Aesthetics **Credit Hours: 3**
- PHI 6934 Selected Topics **Credit Hours: 1-3**
- PHM 6265 Continental Philosophy I: Phenomenology of Hermeneutics **Credit Hours: 3**
- PHM 6266 Continental Philosophy II: Political and Social Theory **Credit Hours: 3**
- PHM 6305 Seminar in Political Philosophy **Credit Hours: 3**
- PHP 6005 Plato **Credit Hours: 3**
- PHP 6015 Aristotle **Credit Hours: 3**
- PHP 6405 Seminar in Descartes' Philosophy **Credit Hours: 4**
- PHP 6415 Kant **Credit Hours: 3**
- PHP 6420 Seminar in Leibniz's Philosophy **Credit Hours: 4** (3 Credit Hours)
- PHP 6505 Seminar on Hegel's Philosophy **Credit Hours: 4** (3 Credit Hours)
- PHP 6525 Nietzsche and the Nietzscheans **Credit Hours: 4** (3 Credit Hours)
- PHP 6624 Adorno **Credit Hours: 4** (3 Credit Hours)
- PHP 6645 Foucault **Credit Hours: 4** (3 Credit Hours)

Philosophy and Religion Concentration (PHR)

Once admitted, students must successfully complete at least 90 credit hours including the following requirements:

Students must complete a minimum of 10 additional courses or graduate seminars subject to the following requirements:

- RLG 6035 Theory and Methods in Religious Studies **Credit Hours: 3**

Or an approved substitute

One Course or Graduate Seminar in Religious Studies from each of the following areas:

- Religion in History
- Religion: Ethics, Politics, and Culture

One course or graduate seminar in Philosophy from the following area:

- Value Theory and Social & Political Philosophy

When possible, a course in Non-Western Philosophy or World Religions is recommended.

Courses as selected from the list provided in the General Course Requirements, or from the following list, or as approved by the Graduate Director:

- RLG 6126 Religion in America **Credit Hours: 3**
- RLG 6143 Religion, Culture, and Society **Credit Hours: 3**
- RLG 6196 Religion and Modernization **Credit Hours: 3**
- RLG 6285 Studies in Biblical Archaeology **Credit Hours: 3**
- RLG 6327 Seminar: Ancient Religions and Literatures **Credit Hours: 3**
- RLG 6189 Comparative Religious Ethics **Credit Hours: 3**

- RLG 6438 Modern Christian Thought **Credit Hours: 3**
- RLG 6906 Independent Study **Credit Hours: 1-3** *(when appropriate to area)*
- RLG 6938 Special Topics in Religious Studies **Credit Hours: 2-4** *(when appropriate to area)*

Electives (42 Credit Hours Minimum)

May include Independent Study, Graduate Teaching Methods, language coursework, Directed Research, additional dissertation work, or additional coursework as approved by the Graduate Director

Language Competency

Students should develop reading knowledge of at least one language other than English relevant to their philosophical work. The language(s) and level of competence required is to be determined by consultation with their prospective major professor and the graduate director. Prior to the beginning of the third semester of matriculation, each student must submit a plan of study indicating the language or languages the student will be applying toward the language competency requirement, the level of competency expected, and a timetable for achieving that level of competency. This plan must be approved by the graduate director and the student's prospective major professor.

Comprehensive Exam

A comprehensive examination on a required list of readings constructed by the candidate and a committee of examiners.

Dissertation (12 Credit Hours Minimum)

- PHI 7980 Dissertation: Doctoral **Credit Hours: 2-19**

- A written prospectus for the dissertation and an oral defense of the prospectus.
- A written dissertation and an oral defense of this dissertation.

If the student has selected the Philosophy and Religion Concentration, the dissertation committee must be composed as follows:
1. Either a Major Professor appointed in both Philosophy and Religious Studies, or co-Major Professors, one of whom is appointed in Philosophy and the other of whom is appointed in Religious Studies.
2. At least one other member from Philosophy and one from Religious Studies.

Department of Religious Studies

Religious Studies, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Dept. Code: REL
Level: Masters
CIP Code: 38.0201
Minimum Total Hours: 30
Major/College Codes REL AS
Approved: 1980

Contact Information

College: Arts and Sciences
Department: Religious Studies

Contact Information: http://www.grad.usf.edu/majors

The M.A. degree in Religious Studies provides opportunities for students with backgrounds in the scholarly study of religion to expand their knowledge of the social, cultural, intellectual, and historical contexts of religion, to develop a greater in-depth knowledge of particular religious traditions, and to acquire proficiency with a variety of pertinent methodologies and theoretical perspectives. The degree serves the needs of students who pursue careers in health professions in education, journalism, law, business, politics, and social work. It will be of special value to those interested in pursuing a doctorate in religious studies.

Major Research Areas: Biblical Studies, Biblical Archaeology, Christianity, Judaism, Mysticism, Philosophy of Religion, Buddhism, Daoism, Confucianism, Hinduism, Chinese Medicine, Religion in Culture and Society, African Religion, African-American Religion, Afro-Caribbean Religion.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Three (3) letters of recommendation, and
- A writing sample
- A personal statement (1-3 pages, double-space)
- GRE required, but no minimum specified

Curriculum Requirements

Students select a major professor and develop a plan for completing a **minimum of 30 credit hours**. The thesis track requires six (6) of these credits be devoted to a thesis project. The non-thesis track requires that all 30 credits come from graduate seminars. The plan of study is subject to approval of the Graduate Committee. A majority of these courses will be in religious studies, although the plan may include approved courses in other departments.

There is no uniform language requirement; however, language skills may be required for particular areas of study. All students are required to satisfactorily complete a written, comprehensive examination wherein they demonstrate competence in:

1. pertinent theoretical issues and research methodologies;
2. the analysis and interpretation of related texts, artifacts, and activities; and
3. social and historical contexts of the religions studied.

The Department of Religious Studies "Graduate Student Handbook" should be consulted for additional information about basic requirements and specific procedures.

Total Minimum hours - 30 hours

Core – 6 Credit Hours
Additional Required Courses - 12 Credit Hours

Electives – 6 hours minimum
Thesis – 6 hours
Non-Thesis – 6 hours additional electives

Core Requirements (6 Credit Hours)

- RLG 6035 Theory and Methods in Religious Studies **Credit Hours: 3**
- RLG 6143 Religion, Culture, and Society **Credit Hours: 3**

Additional Required Courses (12 Credit Hours Minimum)

Six (6) hours of graduate courses in Abrahamic Religions (Christianity, Judaism, or Islam)
Six (6) hours of graduate courses in non-Abrahamic Religions (Hinduism, Buddhism, Daoism, or Confucianism)

Electives (6 Credit Hours)

No more than six (6) hours may come from independent study/directed reading.
No more than six (6) hours may come from departments other than Religious Studies.

Comprehensive Exam

Theory and Methods in Religious Studies

Thesis/Non-Thesis

Thesis (6 Credit Hours)

Students will pass a comprehensive exam prior to defending the master's thesis. They will research, write, and successfully defend the master's thesis before a committee of three professors.

- RLG 6971 Thesis: Master's **Credit Hours: 2-19**

Non-Thesis

Non-Thesis students must complete an additional six (6) hours of electives.

Department Handbook

http://religious-studies.usf.edu/grad/handbook/

Department of World Languages

French, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 16.0901
Dept. Code: WLE
Major/College Codes: FRE AS
Approved: 1967

Also offered as a Concurrent Degree

Contact Information

College: Arts and Sciences
Department: World Languages

Contact Information: http://www.grad.usf.edu/majors

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- 2-3 letters of recommendation,
- A writing sample in French, and
- An oral interview in French (can be done by phone).
- GRE is not required.

Curriculum Requirements

Total Minimum Hours: 33 hours

Core – 6 credit hours
Coursework – 21 credit hours minimum
Non-Thesis – 9 hours
Thesis – 6 hours minimum

Core Requirements (6 Credit Hours)

- FRW 5829 An Introduction to Modern French Literary Criticism **Credit Hours: 3**

- FRW 6405 Old French **Credit Hours: 3**

Required Coursework (24 Credit Hours Minimums)

Students select from FRW courses that are 5000-level and up, such as those listed below.
Students may take up to 9 credits of courses from a different section/department upon approval of the Graduate Director.

- FRW 5222 Classical Prose and Poetry **Credit Hours: 3**
- FRW 5226 20th Century Poetry and Theatre **Credit Hours: 3**
- FRW 5286 The 20th Century Novel **Credit Hours: 3**
- FRW 5314 Classical Drama **Credit Hours: 3**
- FRW 5415 Literature of the Middle Ages **Credit Hours: 3**
- FRW 5425 Literature of the Renaissance **Credit Hours: 3**
- FRW 5445 18th Century Literature **Credit Hours: 3**
- FRW 5535 Romanticism and Early Realism **Credit Hours: 3**
- FRW 5556 Naturalism and Realism **Credit Hours: 3**
- FRW 5745 French Literature of Quebec **Credit Hours: 3**
- FRW 5755 African and Caribbean Literature **Credit Hours: 3**
- FRW 5829 An Introduction to Modern French Literary Criticism **Credit Hours: 3**
- FRW 5934 Selected Topics **Credit Hours: 1-3** (varies)
- Or other courses approved by Graduate Director

Comprehensive Exam

Satisfactory performance on the written comprehensive examination is required.

Non-Thesis (9 Credit Hours Minimum)

Students in the non-thesis option take an additional 9 credit hours of graduate coursework from the French courses listed above, as approved by the Graduate Director.

Thesis (6 Credit Hours Minimum)

Students in the non-thesis option complete an additional 6 hours of graduate coursework.

- FRE 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**

Additional requirements

Proficiency in a second foreign language

Other Information

Special Programs Overseas

The Department of World Languages, in cooperation with the USF World, offers several study programs overseas. These include study in several locations in France and Canada. For complete details, contact the graduate advisors or USF World.

Concurrent Degree

Also available as a Concurrent Degrees

Linguistics and Applied Language Studies, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 55 Post-Master's
Level: Ph.D.
CIP Code: 16.0102
Dept. Code: WLE
Major/College Codes: LAL AS
Approved: Effective 2016

Contact Information

College: Arts and Sciences
Department: World Languages

Contact Information: http://www.grad.usf.edu/majors

This major in Linguistics and Applied Language Studies is designed to train advanced students in the field in using principled, empirical approaches to address language-related issues in the 21st century. Our faculty are equipped to meet the needs of students with diverse interests in the field. Possible careers for graduates from this program include university teaching, language program administration, and industry careers involving linguistic research and analysis. By the end of the major, our students will be able to:

- develop a strong knowledge base in the content areas of this field, including key topics, major lines of inquiry, current trends, and remaining questions;
- develop expertise in critical thinking as well as in oral and written communication for academic and non-academic audiences;
- contribute their expertise to advancing knowledge about the critical role of language(s) in a global society;
- demonstrate mastery of research methods and use these methods to design and conduct independent research on various topics in this field;
- contribute to the advancement of this field through scholarly publications and conference presentations;
- gain experience in teaching undergraduate courses;
- participate in professional activities in this field at national, regional, and local levels.

Major Research Areas:
Applied Language Studies, Applied Linguistics, Corpus linguistics, Discourse analysis, Individual differences, Intercultural communication, Language assessment, Second language acquisition, Second language learning and teaching, Second language phonology, Second language writing, and Text analysis.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- M.A. in Applied Linguistics, Linguistics, TESOL, Second Language Studies, Foreign Languages, or a related field
- Experience with an additional language(s)

- GRE scores (taken within the last five years): Verbal reasoning: 153 (500, approximately 60% percentile); Quantitative reasoning: 144 (500, approximately 20% percentile); Analytical Writing: 4.00.
- GPA of 3.50 or higher in the M.A. degree
- Statement of research interest
- Current curriculum vitae
- A writing sample that shows evidence of research skill. This can be published or unpublished, such as an article, an M.A. thesis, or an M.A. course paper.
- 3 academic references
- Interview with program faculty
- Official transcripts (must provide an official translation if transcripts are not available in English from the degree-granting university)

Curriculum Requirements

Total Minimum Hours: 55 hours Post-Masters

Core – 21 Credit Hours
Foundation courses – 6 Credit Hours
Electives – 9 Credit Hours
Directed research – 1 Credit Hour minimum
Dissertation – 18 Credit Hours minimum

Core Requirements (21 Credit Hours Minimum)

- LIN 6675 The Grammatical Structure of American English **Credit Hours: 3**
- LIN 6720 Second Language Acquisition **Credit Hours: 3**
- LIN 7637 Research and Writing in Applied Linguistics **Credit Hours: 3**
- LIN 7931 Advanced Seminar in Applied Linguistics **Credit Hours: 3**
- LIN 7635 Professional Development **Credit Hours: 3**
- LIN 7638 Qualitative Research Methods in Applied Linguistics **Credit Hours: 3**
- LIN 7639 Quantitative Methods in Applied Linguistics **Credit Hours: 3**

Foundation Courses (6 Credit Hours)

Based on student's prior educational background, recommendations will be made by the admissions committee and implemented by the academic advisor/ pedagogical coordinator. Each student is required to take a minimum of two of the following courses:

- LIN 5700 Applied Linguistics **Credit Hours: 3**
- LIN 6081 Introduction to Graduate Study in Linguistics **Credit Hours: 3**
- TSL 5371 Methods of Teaching English as a Second Language **Credit Hours: 3**
- TSL 5372 ESOL Curriculum and Instruction **Credit Hours: 3**
- TSL 5440 Language Testing **Credit Hours: 3**
- TSL 5525 Cross-Cultural Issues in ESL **Credit Hours: 3**

Electives (9 Credit Hours)

Each student is required to take a minimum of three general electives. These can be from established course numbers or via the LIN 6932 Selected Topics number and include the following:

- LIN 6601 Sociolinguistics **Credit Hours: 3**
- LIN 6722 Writing Processes in Second Languages Acquisition **Credit Hours: 3**
- LIN 6726 Individual Differences in Second Language Acquisition **Credit Hours: 3**
- LIN 6748 Contrastive Analysis **Credit Hours: 3**
- LIN 6932 Selected Topics **Credit Hours: 1-4**

Sample Topics include:

- Discourse Analysis
- English for Academic Purposes/English for Specific Purposes
- Task-Based Language Teaching
- Sound System of English
- Pragmatics for Language Teachers
- Bilingualism/Multilingualism
- Corpus Linguistics
- Language and Technology

Note: In special circumstances, additional courses from the "foundation course electives" group may be taken as electives.

Qualifying Examination (1 Credit Hour minimum)

- LIN 7911 Directed Research - Linguistics and Applied Language Studies **Credit Hours: 1-19** (1-3 Credit Hours)

Students will complete a qualifying examination. Students must enroll in LIN 7911 the semester of writing the qualifying exam paper.

Dissertation Hours (18 Credit Hours Minimum)

- LIN 7980 Dissertation - Linguistics and Applied Language Studies **Credit Hours: 2-19**

Students will complete 18 hours of dissertation research. The student will submit a proposal to the committee members and, once approved, will participate in an oral defense of that proposal. Finally, the student will submit a completed dissertation draft to the committee members and once approved will participate in an oral defense of the dissertation.

Linguistics: English as a Second Language, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 16.0102
Dept. Code: WLE
Major/College Codes: ESL AS
Approved: 1978

Also offered as a Concurrent Degree

Contact Information

College: Arts and Sciences
Department: World Languages

Contact Information: http://www.grad.usf.edu/majors

Linguistics is primarily an upper-level and graduate discipline with strong interdisciplinary concerns. The Department of World Languages currently offers a Master of Arts in Linguistics: English as a Second Language. At USF, our Linguistics and TESL majors are among the oldest in the Sunshine State. Linguistics dates back to the early 1960s, early in USF history, and the applied linguistics major has prepared ESL/ESOL/EFL educators since the 1970s. Our students are prepared for positions teaching second languages to non-native speakers, and our alumni have taught in public and private institutes, here in the Tampa Bay area and around the world. Other graduates have continued their graduate education and earned doctoral degrees, and many of our alumni hold positions of leadership. In short, our graduates have made a name for the linguistics major at USF.

Major Research Areas:
Individual differences, Corpus linguistics, Second language phonology, Second language writing, Second Language Acquisition, Discourse analysis, and second language learning and teaching.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE (taken within the last five years) required with minimum scores of 149 (approximately 40th percentile) V and 4 AW (approximately 50th percentile). Five-year limit may be waived for applicants with a master's degree who have previously taken the GRE.
- Three letters of recommendation,
- A two-page statement of purpose, written by the applicant.
- Curriculum Vitae (CV)

Applicants should note that proficiency in a second language is required by the time of graduation.

Curriculum Requirements

Total Minimum Hours: 36 hours

Core Requirements (24 Credit Hours)

- LIN 5700 Applied Linguistics **Credit Hours: 3**
- LIN 6081 Introduction to Graduate Study in Linguistics **Credit Hours: 3**
- LIN 6675 The Grammatical Structure of American English **Credit Hours: 3**
- LIN 6720 Second Language Acquisition **Credit Hours: 3**
- TSL 5371 Methods of Teaching English as a Second Language **Credit Hours: 3**
- TSL 5372 ESOL Curriculum and Instruction **Credit Hours: 3**
- TSL 5440 Language Testing **Credit Hours: 3**
- TSL 5525 Cross-Cultural Issues in ESL **Credit Hours: 3**

Electives (9 Credit Hours)

Nine hours of approved electives Students select electives in consultation with the graduate adviser.

Internship (3 Credit Hours)

- TSL 6945 Internship **Credit Hours: 1-6**

Non-Thesis

Applied Linguistics (TESL) is a non-thesis track.

Comprehensive Exam

Comprehensive Exam In lieu of a comprehensive exam, per the norm of the field, a three-part Exit Assessment consisting of a Pedagogical Theory (PT) paper, a Classroom Practice & Reflection (CPR) paper, and portfolio of major course assignments and other relevant items is required for the program. Students are required to demonstrate proficiency in a language other than their native language by the end of the major.

Concurrent Degree

Also available as a Concurrent Degrees

Spanish, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 16.0905
Dept. Code: WLE
Major/College Codes: SPA AS
Approved: 1967

Also offered as a Concurrent Degree

Contact Information

College: Arts and Sciences
Department: World Languages

Contact Information: http://www.grad.usf.edu/majors
Other Resources: http://languages.usf.edu/graduate/spanish/

The Spanish Section of the Department of World Languages supports a broad, intellectually-driven approach to teaching language, culture, and literature in higher education. Languages and cultures are complex, multifunctional phenomena that link an individual to other individuals, to communities and to national cultures. The graduate major in Spanish offers students academic and practical training in the languages, literatures and cultures of the Spanish-speaking communities of Spain, Latin America, and the United States. Students who receive a Masters of Arts in Spanish from the Department of World Language Education at USF become well-educated communicators with deep translingual and transcultural competence. Thus, they are exceptionally prepared to either continue studies leading to the Ph.D., or find careers in related fields such as the teaching profession, translation, government, civil service agencies, legal and paralegal services, or foreign and domestic business enterprises.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Three letters of recommendation
- A two-page statement of purpose in Spanish
- An oral interview in Spanish (can be done by phone, video, Skype, etc.)
- Approval from the Graduate Director in case of degree from another discipline

Curriculum Requirements

Total Minimum Hours 36

Core - 6 credit hours

Electives - 24 credit hours

Non-Thesis/Thesis Option - 6 credit hours

Core Requirements (6 Credit Hours)

- SPW 6806 Introduction to Hispanic Graduate Studies **Credit Hours: 3**
- SPW 5934 Selected Topics **Credit Hours: 3**

Modern Latin American Civilization (3 credit hours) (Proposed SPW 5525)

Electives (24 Credit Hours)

Students will take twenty-four (24) semester hours in SPN or SPW graduate courses. Students may substitute up to nine (9) semester hours with courses in a related area, as approved in advance by the Graduate Director.

- SPW 5135 Colonial Spanish American Literature **Credit Hours: 3**
- SPW 5339 Golden Age Drama **Credit Hours: 3**
- SPW 5375 Latin American Short Story **Credit Hours: 3**
- SPW 5387 Spanish American Prose **Credit Hours: 3**
- SPW 5405 Medieval Literature **Credit Hours: 3**
- SPW 5465 19th Century Literature **Credit Hours: 3**
- SPN 5525 Modern Spanish American Civilization **Credit Hours: 3**
- SPW 5597 Latin American Culture in Fantastic Literature and Film **Credit Hours: 3**
- SPW 5605 Cervantes **Credit Hours: 3**
- SPW 5725 Generation of 1898 **Credit Hours: 3**
- SPW 5934 Selected Topics **Credit Hours: 3**
- SPW 6427 Golden Age Novel **Credit Hours: 3**
- SPW 6485 Post Civil War Literature **Credit Hours: 3**
- SPN 6845 History of the Spanish Language **Credit Hours: 3**
- SPN 6846 Spanish Paleography and Textual Criticism **Credit Hours: 3**
- SPW 6775 Caribbean Literature **Credit Hours: 3**
- SPW 6910 Directed Research **Credit Hours: 1-19**

Non-Thesis (6 credit hours)

Students who choose the non-thesis option complete an additional six (6) credit hours of electives.

Thesis (6 Credit Hours)

- SPW 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**

Comprehensive Exam

Successful completion of a comprehensive exam (typically taken in the second semester of the second year). The comprehensive exam is administered in writing. Students will answer questions on literary works and cultural topics selected from a list of works or from questions prepared by the faculty.

Department Handbook

To obtain a copy of the Masters of Arts in Spanish handbook, please visit the Department of World Languages in CPR 419.

Concurrent Degree

Also available as a Concurrent Degrees

Applied Linguistics Graduate Certificate

This program is offered fully online.

Certificate Code: **XAL**

Description

This certificate is designed to provide students with an introduction to the field of applied linguistics. There are no other certificates of this kind in the state of Florida. Because of the program's flexibility regarding course requirements, it will allow students to specialize based on need and personal interest. And because of the applied nature of this discipline, this certificate will introduce students to advanced language analytic skills and expertise work in business, research and innovation, government, healthcare, technology, and the nonprofit sectors.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have:

1 academic Letter of Recommendation, resume, letter of intent

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (9 Credit Hours)

Students must take at least one of the following three-credit courses:

- TSL 5371 Methods of Teaching English as a Second Language **Credit Hours: 3**
- LIN 5700 Applied Linguistics **Credit Hours: 3**
- LIN 6720 Second Language Acquisition **Credit Hours: 3**
- TSL 5525 Cross-Cultural Issues in ESL **Credit Hours: 3**

Electives

Students may choose from the following electives for the remaining six credits. Courses from the core courses may also be used to fulfull remaining six credits.

- TSL 5471 - Langauge Testing

- LIN 6081 Introduction to Graduate Study in Linguistics **Credit Hours: 3**
- LIN 6675 The Grammatical Structure of American English **Credit Hours: 3**
- TSL 5372 ESOL Curriculum and Instruction **Credit Hours: 3**
- LIN 6601 Sociolinguistics **Credit Hours: 3**

Time Limit

3 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Teaching English as a Second Language (TESL) or Foreign Language Graduate Certificate

Certificate Code: XSL

This is a Professional Certificate in TESL. The program described below is designed only for persons who already hold, or are simultaneously pursuing, an advanced degree in another field such as English, Foreign Languages, Education, etc. (The TESL Certificate should not be confused with the Florida Public School Certification).

Location/Delivery

This certificate is offered at the USF Tampa campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. Applicant must hold (or be currently seeking) an earned Master's or Doctoral degree from a regionally accredited institution.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Student must complete Certificate within three years.

Pre-Requisites

None

Curriculum Requirements (21 Credit Hours)

- LIN 6720 Second Language Acquisition **Credit Hours: 3**
- TSL 5371 Methods of Teaching English as a Second Language **Credit Hours: 3**
- TSL 5372 ESOL Curriculum and Instruction **Credit Hours: 3**
- TSL 5440 Language Testing **Credit Hours: 3**
- TSL 5525 Cross-Cultural Issues in ESL **Credit Hours: 3**
- TSL 6945 Internship **Credit Hours: 1-6**

- LIN 5700 Applied Linguistics **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

College of Arts and Sciences: School of Natural Sciences and Mathematics

AS - Updates for 2019-20

CAS - School of Natural Sciences and Mathematics Programs

University of South Florida
College of Arts and Sciences
4202 E. Fowler Ave BEH107
Tampa, FL 33620

Web address: http://www.cas.usf.edu/
Email: see individual department listings
Phone: 813-974-6957
Fax: 813-974-4075

College Dean: Eric Eisenberg, Ph.D.
Sr. Associate Dean: Robert Potter, Ph.D.
Associate Dean: Allison Cleveland Roberts

College Structure

The College of Arts and Sciences is USF's largest college. The College is comprised of three schools including the School of Social Sciences, the School of Natural Sciences & Mathematics, and the School of Humanities, all with strong interdisciplinary connections among them and throughout the University.

Mission Statement

The College of Arts and Sciences is a community of scholars dedicated to the idea that educated people are the basis of a just and free society. The essences of education are a capacity for the appreciation of social change within a context of prior human achievement. The faculty of the Arts and Sciences strive to instill in their students a history of human ideas, a love of learning, and an understanding of the means that scholars have used in their search for beauty and order in the natural world. The education provided by the disciplines of the Arts and Sciences is the foundation upon which the lives and professions of our students are built, and the basis from which personal growth occurs.

The College of Arts and Sciences takes as its goal a melding of the natural, humanistic and social philosophies into a comprehensive whole that encourages the development of new ideas and new approaches to the understanding of our universe. It is the responsibility of scholars to share their discoveries for the betterment of society. Thus, the Arts and Sciences embrace the disciplines that strive to make immediate use of knowledge in the service of social goals as well as the disciplines whose discoveries contribute to the fund of basic information that is the stepping stone of applied knowledge.

College Requirements

Thesis Enrollment

Upon successful completion of all M.A./M.S. degree requirements except for thesis, Arts and Sciences graduate students must enroll in a minimum of two (2) credit hours of Thesis each semester (except Summers) until the completion of the master's degree.

Dissertation Enrollment

Doctoral students who have been admitted to candidacy are required to accumulate a minimum of six (6) credit hours of Dissertation during each previous 12-month period (previous three (3) terms, e.g., Fall, Spring, Summer) until the degree is granted.

Biology, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 26.0101
Dept. Code: BIO
Major/College Codes: BIO AS
Approved: 1965

Concentrations:

Cell Biology and Molecular Biology (MBG)
Ecology and Evolution (EEV)
Environmental and Ecological Microbiology (EVM)
Physiology and Morphology (PMY)

Contact Information

College: Arts and Sciences
Departments:
Cell Biology, Microbiology, and Molecular Biology (CMMB)
Integrative Biology (IB)

Contact Information: http://www.grad.usf.edu/majors

Because of the many undergraduate courses that require hands-on experimental laboratories, both CMMB and IB support many graduate students as Teaching Assistants. CMMB and IB values high quality teaching at all levels of instruction. Research Assistant positions also are available to support research with specific faculty members depending on an individual faculty members funding. Numerous scholarship opportunities are also offered on a competitive basis through the USF Office of Graduate Studies.

Application to the Biology Major is through one of the two departments, with students selecting a formal Concentration. Refer to the Concentration listing in the Catalog for specific information and requirements.

The Department of Integrative Biology is committed to train the next generation of graduate students to prepare them for professional success in the biological sciences. Our program of graduate study is designed to foster the development of technical and analytical skills used in existing and emerging fields of discovery. The Department of Integrative Biology emphasizes learning and teaching about the interactions, across all scales, among humans and other diverse organisms in a range of environments. These interactions mediate the resilience of natural biotic systems, and enhance the sustainability of products and processes that are beneficial to ecosystems and consequently to human well-being. Thus, our mission is to create new knowledge and promote learning about ecosystem health and sustainability.

The mission of the Department of Cell Biology, Microbiology and Molecular Biology (CMMB) is to prepare graduate students for professional careers in academia, government or industry in the areas of Cell Biology, Microbiology, and Molecular Biology. We pursue excellence in the following programmatic research areas: genome integrity and mechanisms of aging, bacterial pathogenesis and resistance, structural and computational biology.

Major Research Areas: Cell Biology, Molecular Biology, Signal Transduction and Gene Regulation, Cancer Biology, Developmental Biology, Microbiology, Ecology and Evolution, Environmental and Ecological Microbiology, Physiology and Morphology

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Prospective students must apply to the Biology M.S. major with a specific concentration via the online application process through the USF Office of Admissions.
- GRE: Preferred scores of 155V (69th percentile), 150Q (38th percentile), 4.5AW
- Acceptance by a faculty member in the IB or CMBB Department is MANDATORY. The Departments will make every effort to pair potential graduate students with appropriate faculty; however, it is recommended that applicants make direct contact with individual faculty via email to indicate an interest in the reserach being conducted in their laboratory.
- It is expected that candidates for the M.S. degrees will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.
- Interviews may be required.
- Three letters of recommendation from faculty in sealed envelopes (on their university letterhead) with the envelope seal signed by the recommender. Students shall complete a **Student Recommendation Form** that can be found on the CMMB and IB website and submit it to the recommenders.
- A brief essay stating your intended field of research and professional goals. Please indicate your specific research interests, in order that we may refer your application to appropriate CMMB or IB faculty members. In the essay, please list 2-3 CMMB or IB faculty members that you would like to have review your file.
- Applicant must complete the Application for Teaching Assistantship (TA) Form that can be found on the Department website if they wish to be considered for a TA position. Applicants who do not return this form will not be considered for a teaching position. Applicants should attach a resume to the Application for Teaching Assistantship (TA) Form that highlights any previous teaching experience.

Curriculum Requirements

The Master's Degree Requirements should be completed in two to three years. Students must choose a specific concentration in the M.S. degree that will be completed within either the CMMB or IB Department.

Total Minimum Hours - 30 post-bachelor's

Core - 6 credit hours

Concentration (required) - 15 credit hours minimum

Non-Thesis (electives) or Thesis (Seminar/Thesis) - 9 credit hours minimum

Core Requirements (6 Credit Hours)

- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**

Advances in Life Sciences (1 credit hour) (taken 3 times) (proposed)

- BSC 6930 Lectures in Contemporary Biology **Credit Hours: 1** (taken 3 times)

Concentration Requirements

Students must select one of the following Concentrations.

Cell Biology and Molecular Biology (MBG) (15 credit hours minimum)

- BMS 6300 Principles of Immunology and Infectious Diseases **Credit Hours: var.**
- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**

Advances in Cell and Molecular Biology (2 credit hours)

- BSC 6936 Scientific Grant Writing **Credit Hours: 3** *

**Thesis students are required to take this course*

Students select courses (10 hours minimum) from the following, or other graduate course approved by the supervisory committee:

- BSC 5931 Selected Topics in Biology **Credit Hours: 1-4**

Eukaryotic Genomics (3 credit hours)
Molecular Microbial Ecology (3 credit hours)
Prokaryotic Molecular Genetics (3 credit hours)

- BSC 5425 Genetic Engineering and Recombinant DNA Technology **Credit Hours: 3**
- MCB 5206 Public Health and Pathogenic Microbiology **Credit Hours: 3**
- MCB 5208 Cellular Microbiology **Credit Hours: 3**
- MCB 5655 Applied and Environmental Microbiology **Credit Hours: 3**
- MCB 5815 Medical Mycology **Credit Hours: 3**
- PCB 5256 Developmental Mechanisms **Credit Hours: 3**
- PCB 5616 Molecular Phylogenetics **Credit Hours: 3**
- PCB 6107 Advanced Cell Biology **Credit Hours: 4**
- PCB 6236 Advanced Immunology **Credit Hours: 4**
- PCB 6525 Molecular Genetics **Credit Hours: 3**

Ecology and Evolution (EEV) (15 credit hours minimum)

- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**

Graduate Skills (3 credit hours) (proposed)

Course work selected from the list below, or other graduate course approved by the Graduate Committee. The graduate student, major professor and Graduate committee will establish the specific courses for each graduate student. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student's Graduate Committee.

- BSC 5931 Selected Topics in Biology **Credit Hours: 1-4**

Comparative Approaches in Evolution (3 credit hours)
Marine Botany (4 credit hours)

- PCB 6447 Community Ecology **Credit Hours: 3**
- PCB 6426C Population Biology **Credit Hours: 3**
- ZOO 6455 Advances in Ichthyology **Credit Hours: 1**
- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**

Advances in Marine Ecology (1 credit hour)
Scientific Writing (2 credit hours)
Advances in Population Biology (1 credit hour)
Advances in Herpetology (1 credit hour)

- PCB 6456C Biometry **Credit Hours: 4**
- PCB 6939 Seminar in Ecology **Credit Hours: 1-3**
- PCB 6458 Biometry II **Credit Hours: 3**

- ZOO 5463C Herpetology **Credit Hours: 4**

Environmental and Ecological Microbiology (EVM) (15 credit hours minimum)

- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**

Graduate Skills (3 credit hours) (proposed)

Course work selected from the list below, or other graduate course approved by the Graduate Committee. The graduate student, major professor and Graduate committee will establish the specific courses for each graduate student. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student's Graduate Committee.

- BSC 5931 Selected Topics in Biology **Credit Hours: 1-4**

Genomics (4 credit hours)

- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**

Advances in Environmental Ecology (1 credit hour)

- MCB 5206 Public Health and Pathogenic Microbiology **Credit Hours: 3**
- MCB 5655 Applied and Environmental Microbiology **Credit Hours: 3**
- MCB 6930 Graduate Microbiology Seminar **Credit Hours: 1**

Applied and Ecological Microbiology (1 credit hour)

- PCB 6930 Current Topics in Cancer Biology **Credit Hours: 2**

Principles of Immunology (3 credit hours)

- PCB 6525 Molecular Genetics **Credit Hours: 3**
- PCB 6458 Biometry II **Credit Hours: 3**
- PCB 6455 Statistical Ecology **Credit Hours: 3**

Physiology and Morphology (PMY) (15 credit hours minimum)

- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**

Graduate Skills (3 credit hours) (proposed)

Course work selected from the list below, or other graduate course approved by the Graduate Committee. The graduate student, major professor and Graduate committee will establish the specific courses for each graduate student. Specific course training beyond this point will be determined in each individual case by the special needs of the student as decided by the student's Graduate Committee.

- BSC 5931 Selected Topics in Biology **Credit Hours: 1-4**

Comparative Approaches in Education (3 credit hours)
Ecological and Functional Morphology (3 credit hours)

- ZOO 6455 Advances in Ichthyology **Credit Hours: 1**
- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**

Advances in Physiology (1 credit hour)
Ecoimmunology (3 credit hours)
Ornithology (3 credit hours)
Physiology of Movement (3 credit hours)
Ichthyology (4 credit hours)

- PCB 6365C Physiological Ecology **Credit Hours: 4**
- BSC 6936 Scientific Grant Writing **Credit Hours: 3**
- PCB 5256 Developmental Mechanisms **Credit Hours: 3**
- ZOO 5463C Herpetology **Credit Hours: 4**

Comprehensive Oral Qualifying Examination

A comprehensive examination (thesis proposal, seminar/presentation and defense of thesis proposal) is required for all master's students. This examination is open to all departmental faculty. Students must take their comprehensive exam within two semesters of matriculation and the exam is normally taken after the completion of all formal course work. Thesis students must take the examination at least one semester before the thesis is presented.

Non-Thesis (9 credit hours)

For students enrolled in the non-thesis program a minimum of 9 hours of elective courses taken beyond the concentration and core requirements, and a review paper of a topic approved by the supervisory committee is required as well as successful completion of the comprehensive oral qualifying exam after all course work has been completed. For non-thesis master's students, this exam will occur at the end of the program of study.

Thesis (9 hours)

- BSC 6935 Graduate Seminar in Biology **Credit Hours: 1**

All thesis students must present a seminar to the Department and must be enrolled in BSC 6935, during the final semester. The seminar should be a concise summary of the research completed to satisfy the requirements for the M.S. Degree. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student's graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee.
Seminar requirement: One presentation, excluding the thesis seminar and defense. Students should present posters or oral presentations based on their thesis research at national/regional professional meetings. The student's graduate committee must approve the presentation.
Presentation of the thesis seminar (BSC 6935) and successful defense of the thesis.

- BSC 6971 Thesis: Master's **Credit Hours: 2-19** (8 credit hours minimum)

Submission of a thesis proposal and approval by the major professor, graduate committee and graduate director.
A minimum of eight (8) thesis research credit hours (BSC 6971). Thesis research should be publishable and students are encouraged to publish their findings.

Degree Progress

A student must be registered for an appropriate load (in no case fewer than two [2] graduate hours) in the College for the semester in which all degree requirements are satisfactorily completed. A student who receives three grades below "B" in structured courses required by the advisory committee will be dropped from the program. Registration in courses entitled Directed Research; thesis must be with the approval of the major professor and must be commensurate with each student's research plan. Students may not register in Thesis: Master's until a Supervisory Committee has been formed and completed the oral qualifying examination. A student who enrolls in courses entitled Thesis: Master's but does not submit a thesis will not be certified for graduation.

Department Handbooks

Department Handbooks
IB: http://biology.usf.edu/ib/forms-library/
CMMB: http://biology.usf.edu/cmmb/grad/forms/

Department of Cell Biology, Microbiology, and Molecular Biology

Cancer Biology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 96
Level: Doctoral
CIP Code: 26.0911
Dept. Code: BIO
Major/College Codes: CNB AS
Approved: 2001

This major shares core requirements with the Ph.D. in Cancer Chemical Biology; Ph.D. in Cancer Immunology and Immunotherapy; and Ph.D. in Integrated Mathematical Oncology.

Contact Information

College: Arts and Sciences
Department: Cell Biology, Microbiology, and Molecular Biology (CMMB)

Contact Information: www.grad.usf.edu

The Cancer Biology Major consists of interdisciplinary training in multiple fields emphasizing the facets which impact cancer. This will prepare students to enter the emerging new technological workforce required to implement biomedical advances that will have a key impact on global health and yield significant societal advantages.

The Major is a joint endeavor between the Moffitt Cancer Center and the University of South Florida. Tremendous advances in the detection and treatment of cancer has occurred through basic research and translational medicine, yet cancer continues to adversely affect millions of people worldwide in terms of quality of life, life span, and economic burden. The Moffitt Cancer Center located at the University of South Florida is a leading institution of basic research, clinical research, and patient treatment with a focused mission "to contribute to the prevention and cure of cancer." The Moffitt Cancer Center is officially designated as a Comprehensive Cancer Center by the National Cancer Institute of the National Institutes of Health.

The Cancer Biology Ph.D. Major's goal is to train the next generation of cancer researchers. Studies of cancer require specific knowledge in multiple fields that have traditionally been independent. Our Cancer Biology Ph.D. Major emulates the Moffitt Cancer Center and eliminates these boundaries. Students receive cancer oriented training in multiple areas include: molecular biology, immunology, functional genomics, bioinformatics, drug discovery & development, cancer genetics, cancer prevention & control, cancer therapeutics, cell biology, biochemistry, and proteomics.

Major Research Areas

genetics, epigenetics, RNA biology, proteomic interrogation of signal transduction pathways, cancer metabolism, tumor microenvironment, cancer imaging techniques, cancer dormancy and metastasis, immunotherapy, cell and molecular biology, signal transduction, functional genomics, proteomics, bioinformatics, and translational cancer therapies

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Extensive background in field of biology or chemistry
- GRE optional
- Advanced coursework and research experience preferred

Stipends

All Cancer Biology Ph.D. students in good standing will receive a highly competitive stipend. All students also receive student health insurance coverage and direct payment in full of all required tuition and required fees. Please visit the Program's website for current stipend levels.

Curriculum Requirements

All students are required to successfully complete the Cancer Biology Major Core Courses. Dissertation Committees may require students to take additional course work if needed to correct deficiencies. In special circumstances the Cancer Biology Education Committee can waive course requirements, if the student has recently completed identical coursework elsewhere. Students are required to achieve a minimum GPA of B in all Cancer Biology Core courses and an overall GPA of 3.00 (B) in order to remain in good standing.

Total Minimum Hours: 96 credit hours

Shared Core Requirements – 4 hours
Other Required Courses – 20 hours
Additional Requirements – 14 hours
Dissertation – 24 hours
Other Requirements – 34 hours

Shared Core Requirements (4 Credit Hours)

- PCB 6230 Cancer Biology I - Basics of Molecular Oncology **Credit Hours: 3**
- PCB 6932 Bioethics for Cancer Researchers **Credit Hours: 1**

Other Required Courses (20 Credit Hours)

- PCB 6930 Current Topics in Cancer Biology **Credit Hours: 2**

Current Topics in Oncology (8 credit hours)

- PCB 6231 Cancer Biology II - Immunology and Applied Biology **Credit Hours: 4**
- BSC 6457 Modern Basic Tools of Research **Credit Hours: 2**
- PCB 6205 Cancer Biology III - Cancer Genomics and Drug Discovery **Credit Hours: 3**
- PCB 6526 Cancer Biology IV - Concepts and Techniques in Cancer Genetics **Credit Hours: 3**

Additional Requirements (14 Credit Hours)

- PCB 6910 Cancer Biology Lab Rotations **Credit Hours: 1-3**
- BSC 7911 Directed Research in Cancer Biology **Credit Hours: 1-12 (4-8 credits for this program)**
- PCB 6931 Advances in Cancer Biology Research **Credit Hours: 2 (4-12 credits for this program)**

Qualifying Exam

The required qualifying exam consists of a written research proposal and an oral defense of the proposal by the student.

Dissertation (24 Credit Hours)

Prior to the dissertation defense, students must have an original first-author research report accepted for publication in a peer reviewed scientific journal.

- BSC 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Other Requirements (34 Credit Hours)

Remaining credit hours required to meet the 96 hour minimum for graduation will consist of additional Dissertation hours (BSC 7980), BSC 6939 Selected Topics in Cancer Biology, and/or Program approved electives.

During the first year, students will be required to complete two or three laboratory rotations according to their interest. Laboratory rotations may be for a full semester or 10 weeks for students that choose to do three rotations. Students doing rotations will need to enroll in the laboratory rotation course. If a student has not chosen a major professor after two semesters, they may enroll in an additional summer rotation. Rotations have several purposes. The foremost is to help the students choose a compatible major professor and an exciting research project. A second purpose is for students to develop necessary technical skills. Students will be evaluated by the host professor and the Graduate Advisor will assign a grade to each student at the end of the semester.

Cancer Chemical Biology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 96
Level: Doctoral
CIP Code: 26.0911
Dept. Code: BIO
Major/College Codes: CCB AS
Approved: 2018

This major shares core requirements with the Ph.D. in Cancer Biology; Ph.D. in Cancer Immunology and Immunotherapy; and Ph.D. in Integrated Mathematical Oncology.

Contact Information

College: Arts and Sciences
Department: Cell Biology, Microbiology, and Molecular Biology (CMMB)

Contact Information: http://www.grad.usf.edu/majors

The Cancer Chemical Biology Major consists of focused training in Cancer Medicinal Chemistry and Chemical Biology. Students will also receive interdisciplinary training in the broader field of chemistry & biology through coursework and immersion in the Moffitt Cancer Center's research endeavors. Cancer drug design and discovery will be the key component of the curriculum. The research focuses are (1) design and synthesis of chemical probes to modulate oncogenic targets and pathways, and development of selective chemical probes into novel anticancer drug candidates; and (2) to identify, validate, and characterize targets with therapeutic relevance in refractory and metastatic malignancies.

This Major will provide students a unique foundation of knowledge and practical experience in the rapidly advancing arena of cancer chemical biology. Students will also train alongside individuals studying other areas of cancer biology, providing a unique opportunity to study in a multidisciplinary and highly translational research environment. Graduates of this major will be positioned to enter the technological workforce ready to discover novel probes to unravel the mechanisms underlying oncogenesis and develop innovative anticancer drugs.

The Major is a joint endeavor between the Moffitt Cancer Center and the University of South Florida. Moffitt Cancer Center is located on the campus of the University of South Florida and is a leading institution of basic research, clinical research, and patient treatment with a focused mission "to contribute to the prevention and cure of cancer." The Moffitt Cancer Center is officially designated as a Comprehensive Cancer Center by the National Cancer Institute of the National Institutes of Health.

Major Research Areas
The main research areas include:
- Design and synthesize chemical probes to modulate oncogenic targets and pathways
- Develop potent chemical probes into novel anticancer drug candidates
- Identify, validate, and characterize new targets with therapeutic relevance in refractory and metastatic malignancies using selective chemical probes

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Extensive background in field of chemistry, medicinal chemistry, biochemistry, or pharmaceutical sciences
- GRE optional
- Advanced coursework and research experience preferred

Stipends

All Cancer Chemical Biology Ph.D. students in good standing will receive a highly competitive stipend. All students also receive student health insurance coverage and direct payment in full of all required tuition and required fees. Please visit the Program's website for current stipend levels.

Curriculum Requirements

All students are required to successfully complete the required Core Courses. Dissertation Committees may require students to take additional course work if needed to correct deficiencies. In special circumstances the Cancer Biology Education Committee can waive course requirements, if the student has recently completed identical coursework elsewhere. In such instances, the student will be required to take an equal number of other credits in lieu of the waived requirement. Students are required to achieve a minimum GPA of B in all Core courses and maintain an overall GPA of 3.00 (B) in order to remain in good standing.

Total Minimum Hours: 96 credit hours

Shared Core Requirements – 4 hours
Other Required Courses – 16 hours
Electives – 3 hours
Additional Requirements – 15 hours
Dissertation - 24 hours
Other Requirements – 34 hours

Shared Core Requirements (4 Credit Hours)

- PCB 6230 Cancer Biology I - Basics of Molecular Oncology **Credit Hours: 3**
- PCB 6932 Bioethics for Cancer Researchers **Credit Hours: 1**

Other Required Courses (16 Credit Hours)

- PCB 6930 Current Topics in Cancer Biology **Credit Hours: 2**

Current Topics in Oncology (8 credit hours required)

- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4 (3 credits for this program)** (Cancer Drug Discovery)
- BSC 6457 Modern Basic Tools of Research **Credit Hours: 2**
- CHM 6263 Advanced Organic Chemistry II: Physical-Organic **Credit Hours: 3**

Electives (3 Credit Hours)

- CHM 6250 Advanced Organic Chemistry I: Synthesis **Credit Hours: 3**
- BCH 6746 Structural Biology **Credit Hours: 3**

Additional Requirements: (15 Credit Hours)

- PCB 6910 Cancer Biology Lab Rotations **Credit Hours: 1-3**
- BSC 7911 Directed Research in Cancer Biology **Credit Hours: 1-12 (4-8 credits for this program)**
- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**

Advances in Cancer Chemical Biology (4-12 credit hours)

Qualifying Exam

The required qualifying exam consists of a written research proposal and an oral defense of the proposal by the student.

Dissertation (24 Credit Hours)

Prior to the dissertation defense, students must have an original first-author research report accepted for publication in a peer reviewed scientific journal.

- BSC 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Other Requirements (34 Credit Hours)

Remaining credit hours required to meet the 96 hour minimum for graduation will consist of additional Dissertation hours (BSC 7980 Dissertation: Doctoral), BSC 6939 Selected Topics in Cancer Biology, and/or Program approved electives.

During the first year, students will be required to complete laboratory rotations according to their interest. Laboratory rotations are 10 weeks each. Students doing rotations will need to enroll in the laboratory rotation course. If a student has not chosen a major professor after two semesters, they may enroll in an additional summer rotation. Rotations have several purposes. The foremost is to help the students choose a compatible major professor and an exciting research project. A second purpose is for students to develop necessary technical skills. Students will be evaluated by the host professor and the Graduate Advisor will assign a grade to each student at the end of the semester.

Cancer Immunology and Immunotherapy, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 96
Level: Doctoral
CIP Code: 26.0911
Dept. Code: BIO
Major/College Codes: CII AS
Approved: 2018

This major shares core requirements with the Ph.D. in Cancer Biology; Ph.D. in Cancer Chemical Biology; and Ph.D. in Integrated Mathematical Oncology.

Contact Information

College: Arts and Sciences
Department: Cell Biology, Microbiology, and Molecular Biology (CMMB)

Contact Information: http://www.grad.usf.edu/majors

The Cancer Immunology and Immunotherapy Major consists of focused training in tumor immunology and cancer immunotherapy. Students will also receive interdisciplinary training in the broader field of cancer biology through coursework and immersion in the Moffitt Cancer Center's research endeavors. The study of tumor immunology has led to major advances in the understanding of how tumors evade the immune system, resulting in multiple new immunotherapeutic modalities approved by the FDA for the treatment of cancer patients. Students will have the opportunity to conduct innovative research at the molecular and cellular level to reveal opportunities to alter the course of tumor progression.

This Major will provide students a unique foundation of knowledge and practical experience in the rapidly advancing arena of cancer immunotherapy. Students will also train alongside individuals studying other areas of cancer biology, providing a broad base of understanding of cancer and increasing the potential for interdisciplinary research. Graduates of this major will be positioned to enter the technological workforce ready to discover and implement immunological advances that will have a key impact on cancer patient therapy.

The Major is a joint endeavor between the Moffitt Cancer Center and the University of South Florida. Moffitt Cancer Center is located on the campus of the University of South Florida and is a leading institution of basic research, clinical research, and patient treatment with a focused mission "to contribute to the prevention and cure of cancer." The Moffitt Cancer Center is officially designated as a Comprehensive Cancer Center by the National Cancer Institute of the National Institutes of Health.

Major Research Areas

- Research drives discoveries in cancer immunology through basic and translational research in five areas:
- Tumor Immune Microenvironment (innate and adaptive regulatory mechanisms)
- Immune Regulation in Cancer (metabolism, T cell checkpoints)
- Vaccine-Based Therapies (Dendritic Cells, intralesional therapies)
- Adoptive T Cell Therapy (TIL, CAR)
- Hematological Diseases (MDS, graft-vs-host)

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- Extensive background in field of biology, immunology, or chemistry
- GRE optional
- Advanced coursework and research experience preferred

Stipends

All Cancer Immunology and Immunotherapy Ph.D. students in good standing will receive a highly competitive stipend. All students also receive student health insurance coverage and direct payment in full of all required tuition and required fees. Please visit the Program's website for current stipend levels.

Curriculum Requirements

All students are required to successfully complete the required Core Courses and the required Elective hours. Dissertation Committees may require students to take additional course work if needed to correct deficiencies. In special circumstances the Cancer Biology Education Committee can waive course requirements, if the student has recently completed identical coursework elsewhere. In such instances, the student will be required to take an equal number of other credits in lieu of the waived requirement. Students are required to achieve a minimum GPA of B in all Core courses and the required elective course, and maintain an overall GPA of 3.00 (B) in order to remain in good standing.

Total Minimum Hours: 96 credit hours

Shared Core Requirements – 4 credit hours
Other Required Courses – 18 credit hours
Electives – 3 credit hours
Additional Requirements – 14 credit hours
Dissertation – 24 credit hours
Other Requirements – 33 credit hours

Shared Core Requirements (4 Credit Hours)

- PCB 6230 Cancer Biology I - Basics of Molecular Oncology **Credit Hours: 3**
- PCB 6932 Bioethics for Cancer Researchers **Credit Hours: 1**

Other Required Courses (18 Credit Hours)

- PCB 6930 Current Topics in Cancer Biology **Credit Hours: 2**

Current Topics in Oncology (8 credit hours)

- PCB 6231 Cancer Biology II - Immunology and Applied Biology **Credit Hours: 4**
- PCB 6281 Cancer Immunotherapy **Credit Hours: 4**
- BSC 6428 Immunological Techniques for Cancer Research **Credit Hours: 2**

Electives (3 Credit Hours)

- PCB 6205 Cancer Biology III - Cancer Genomics and Drug Discovery **Credit Hours: 3**
- PCB 6526 Cancer Biology IV - Concepts and Techniques in Cancer Genetics **Credit Hours: 3**
- BSC 6875 Cancer Drug Discovery **Credit Hours: 3**

Additional Requirements (14 Credit Hours)

- PCB 6910 Cancer Biology Lab Rotations **Credit Hours: 1-3**
- BSC 7911 Directed Research in Cancer Biology **Credit Hours: 1-12 (4-8 credits for this program)**
- PCB 6936 Advances in Tumor Immunology and Cancer Research **Credit Hours: 2 (4-12 credits for this program)**

Qualifying Exam

The required qualifying exam consists of a written research proposal and an oral defense of the proposal by the student.

Dissertation (24 Credit Hours)

Prior to the dissertation defense, students must have an original first-author research report accepted for publication in a peer reviewed scientific journal.

- BSC 7980 Dissertation: Doctoral **Credit Hours: 2-19 (24 credits for this program)**

Other Requirements (33 Credit Hours)

Remaining credit hours required to meet the 96 hour minimum for graduation will consist of additional Dissertation hours (BSC 7980 Dissertation: Doctoral), BSC 6939 Selected Topics in Cancer Biology, and/or Program approved electives.

During the first year, students will be required to complete laboratory rotations according to their interest. Laboratory rotations are 10 weeks each. Students doing rotations will need to enroll in the laboratory rotation course. If a student has not chosen a major professor after two semesters, they may enroll in an additional summer rotation. Rotations have several purposes. The foremost is to help the students choose a compatible major professor and an exciting research project. A second purpose is for students to develop necessary technical skills. Students will be evaluated by the host professor and the Graduate Advisor will assign a grade to each student at the end of the semester.

Cell and Molecular Biology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90
Level: Doctoral
CIP Code: 26.0406
Dept Code: BCM
Major/College Codes: CBO AS
Implemented: 2014

Contact Information

College: Arts and Sciences
Department: Cell Biology, Molecular Biology and Microbiology (CMMB)

Contact Information: http://www.grad.usf.edu/majors

Major Research Areas: Cell Biology, Molecular Biology, Cancer Biology, Signal Transduction and Gene Regulation, Developmental Biology, Applied and General Microbiology

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE: 57th percentile Verbal, 35th percentile Quantitative, 73rd percentile AW
- It is expected that candidates for the Ph.D. degree will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.
- Interview
- Personal Statement of goals, experience
- Three letters of recommendation

Curriculum Requirements

Total Minimum Program Hours: 90

Core – 6 hours
Other courses – 5 hours
Electives – 3 hours
Dir Research – 43 hours
Dissertation – 32 hours
Seminar – 1 hour

Core Requirements (6 Credit Hours)

- PCB 6525 Molecular Genetics **Credit Hours: 3**
- PCB 6956 Scientific Grant Writing **Credit Hours: 3**

Other Required Courses (5 Credit Hours)

- PCB 6920 Advances in Cell and Molecular Biology **Credit Hours: 1**
- BSC 6930 Lectures in Contemporary Biology **Credit Hours: 1 (1 credit for this program, taken four times for a total of 4 credits)**

Electives* (3 Credit Hours Minimum)

**Classes not on this list may be used with the approval of the CMMB Graduate Director*

Selected from:

- PCB 5616 Molecular Phylogenetics **Credit Hours: 3**
- PCB 6107 Advanced Cell Biology **Credit Hours: 4**
- BSC 5425 Genetic Engineering and Recombinant DNA Technology **Credit Hours: 3**
- MCB 5206 Public Health and Pathogenic Microbiology **Credit Hours: 3**
- PCB 6236 Advanced Immunology **Credit Hours: 4**
- PCB 5256 Developmental Mechanisms **Credit Hours: 3**
- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**

Research Requirements (76 Credit Hours Minimum)

- BSC 7910 Directed Research **Credit Hours: 1-19 (43 credit hours minimum)**
- BSC 7980 Dissertation: Doctoral **Credit Hours: 2-19 (32 credit hours minimum)**
- BSC 7936 Doctoral Seminar **Credit Hours: 1**

Qualifying Exams

All students in the Cell and Molecular Biology Ph.D. program must complete a written and oral qualifying examination.

The written exam shall be in the format of a grant proposal and contain the following sections:

- Abstract {300 words}
- Specific Aims [1 page]
- Background and Significance of topics [2 pages]
- Proposed research program (conducted over 3-year period) [4 pages]
- Bibliography (no page limit)

The length of the proposal shall be no more than 7 pages (the abstract and bibliography does not count in the page limit). The topic of the exam shall meet the following guidelines:

- The written proposal *cannot be based in the same* **model organism** that the student will use to carry out their dissertation research
- The written proposal *cannot be based on the analysis of* **the same gene/protein** that the student will investigate during their dissertation research

- The written proposal *cannot be based on the analysis of* **the same pathway** that the student will investigate during their dissertation research

The oral exam is centered around a formal dissertation proposal presentation, followed by a period of questioning by the dissertation advisory committee.

Admission to Candidacy

The doctoral student is eligible for admission to candidacy after completing structured course requirements, passing the qualifying examinations and approval by the supervisory committee. Appropriate forms to document promotion to candidacy must be completed and to the Office of Graduate Studies. Following admission to candidacy, a student must enroll in BSC 7980 when engaged in research, data collection, or writing activities relevant to the doctoral dissertation. Advisors should assign the number of credits in this course in accordance with policy and appropriate to the demands made on faculty, staff, and University facilities, but in no event will the total number of earned dissertation credits be fewer than 32. Students not admitted to candidacy are not eligible to enroll in BSC 7980.

Dissertation Requirements (38 Credit Hours Minimum)

The dissertation of all graduate students admitted to a graduate degree program at the University of South Florida must conform to the guidelines of the Handbook for Graduate Thesis and Dissertations available from the USF Office of Graduate Studies (https://www.usf.edu/graduate-studies/students/electronic-thesis-dissertation/).

- BSC 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Doctoral Seminar and Defense

All doctoral students must present a public seminar to the CMMB Department and must be enrolled in BSC 7980, during the semester in which the seminar is given. The seminar should be a concise summary of the research completed to satisfy the requirements for the Ph.D. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student's advisory committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the advisory committee. Following the defense, students will make any editorial modifications to the dissertation as recommended by the advisory committee and submit the dissertation to the Office of Graduate Studies.

Other Requirements

- 1 Scientific Publication
- 2 presentations at Scientific Meetings

Integrated Mathematical Oncology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 96
Level: Doctoral
CIP Code: 26.0911
Dept. Code: BIO
Major/College Codes: IMO AS
Approved: 2019

This major shares core requirements with the Ph.D. in Cancer Biology; Ph.D. in Cancer Chemical Biology; and Ph.D. in Cancer Immunology and Immunotherapy.

Contact Information

College: Arts and Sciences
Department: Cell Biology, Microbiology, and Molecular Biology (CMMB)

Contact Information: http://www.grad.usf.edu/majors

The Integrated Mathematical Oncology Major consists of focused training in mathematical modeling. Students will also receive interdisciplinary training in the broader field of cancer biology through coursework and immersion in the Moffitt Cancer Center's research endeavors. Cancer patient and experimental data have been growing at an exponential rate during the last decade and now incorporates a range of biological scales (molecular, cellular, tissue, organ) and diverse techniques (gene expression, histological staining, imaging), however, these data are severely underutilized in current clinical decision processes. Appropriate quantitative models are essential to understand the complex dynamics of the evolving non-linear system that is cancer.

This Major will provide students a unique foundation of knowledge and practical experience in the rapidly advancing arena of mathematical oncology. Students will also train alongside individuals studying other areas of cancer biology, providing a broad base of understanding of cancer and increasing the potential for interdisciplinary research. Graduates of this major will be positioned to enter the technological workforce ready to discover and implement quantitative models and model analysis in experimental and clinical areas that will have a key impact on cancer patient therapy.

The Major is a joint endeavor between the Moffitt Cancer Center and the University of South Florida. Moffitt Cancer Center is located on the campus of the University of South Florida and is a leading institution of basic research, clinical research, and patient treatment with a focused mission "to contribute to the prevention and cure of cancer." The Moffitt Cancer Center is officially designated as a Comprehensive Cancer Center by the National Cancer Institute of the National Institutes of Health.

Major Research Areas

- Develop phenomenological mathematical models of tumor development, growth and invasion as well as treatment response
- Develop data-driven quantitative models to answer specific biological or clinical questions
- Research project work that include development, implementation, analysis and solution of topic-driven mathematical models

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Extensive background in field of mathematics, engineering, physics, or computer science
- GRE optional
- Advanced coursework and research experience preferred

Stipends

All Integrated Mathematical Oncology Ph.D. students in good standing will receive a highly competitive stipend. All students also receive student health insurance coverage and direct payment in full of all required tuition and required fees. Please visit the Program's website for current stipend levels.

Curriculum Requirements

All students are required to successfully complete the required Core Courses and the required Elective hours. Dissertation Committees may require students to take additional course work if needed to correct deficiencies. In special circumstances the Cancer Biology Education Committee can waive course requirements, if the student has recently completed identical coursework elsewhere. Students are required to achieve a minimum GPA of B in all Core courses and the required elective course, and maintain an overall GPA of 3.00 (B) in order to remain in good standing.

Total Minimum Hours: 96 credit hours

Shared Core Requirements – 4 Credit Hours
Other Required Courses – 17 Credit Hours
Electives – 3 Credit Hours
Additional Requirements – 14 Credit Hours
Dissertation - 24 Credit Hours
Other Requirements – 34 Credit Hours

Shared Core Requirements (4 Credit Hours)

- PCB 6230 Cancer Biology I - Basics of Molecular Oncology **Credit Hours: 3**
- PCB 6932 Bioethics for Cancer Researchers **Credit Hours: 1**

Other Required Courses (17 Credit Hours)

- PCB 6930 Current Topics in Cancer Biology **Credit Hours: 2**
- PCB 6205 Cancer Biology III - Cancer Genomics and Drug Discovery **Credit Hours: 3**
- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**
- BSC 6882 Integrated Mathematical Oncology I **Credit Hours: 3**
- BSC 6883 Integrated Mathematical Oncology II **Credit Hours: 4**

Electives (3 Credit Hours)

- PCB 6526 Cancer Biology IV - Concepts and Techniques in Cancer Genetics **Credit Hours: 3**
- PCB 6205 Cancer Biology III - Cancer Genomics and Drug Discovery **Credit Hours: 3**
- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**

Cancer Immunotherapy (4 Credit Hours) (Proposed BSC 6281)

- BSC 6875 Cancer Drug Discovery **Credit Hours: 3**

Additional Requirements (14 Credit Hours)

- PCB 6910 Cancer Biology Lab Rotations **Credit Hours: 1-3** (1-3 Credit Hours)
- BSC 7911 Directed Research in Cancer Biology **Credit Hours: 1-12** (4-8 Credit Hours)
- BSC 6939 Selected Topics in Cancer Biology **Credit Hours: 1-4**

Advances in Integrated Mathematical Oncology (4-12 Credit Hours) (Proposed BSC 6888)

Qualifying Exam

The required qualifying exam consists of a written research proposal and an oral defense of the proposal by the student.

Dissertation (24 Credit Hours)

- BSC 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Prior to the dissertation defense, students must have an original first-author research report accepted for publication in a peer reviewed scientific journal.

Other Requirements (34 Credit Hours)

Remaining credit hours required to meet the 96 hour minimum for graduation will consist of additional Dissertation hours (BSC 7980), Selected Topics in Cancer (BSC 6939), and/or Program approved electives.

During the first year, students will be required to complete laboratory rotations according to their interest. Laboratory rotations are 10 weeks each. Students doing rotations will need to enroll in the laboratory rotation course. If a student has not chosen a major professor after two semesters, they may enroll in an additional summer rotation. Rotations have several purposes. The foremost is to help the students choose a compatible major professor and an exciting research project. A second purpose is for students to develop necessary technical skills. Students will be evaluated by the host professor and the Graduate Advisor will assign a grade to each student at the end of the semester.

Microbiology, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 26.0503
Dept. Code: BIO
Major/College Codes: MIC AS
Approved: 1973

Contact Information

College: Arts and Sciences
Department: Cell Biology, Microbiology and Molecular Biology (CMMB)

Contact Information: http://www.grad.usf.edu/majors

The M.S. in Microbiology is administered by the Department of Cell Biology, Molecular Biology and Microbiology (CMMB). Most research in the CMMB Department is done by faculty housed in the Bio-Science Facility building (BSF). Due to the interdisciplinary aspect of most Research projects, faculty and graduate students often work together on broad ranging research projects that bring together many of the traditionally separate areas of biology. Many of the faculty within CMMB are involved in cooperative research with their colleagues in Chemistry, Integrative Biology, Public Health, Nursing, Medicine, Geology, Psychology, Geography, Marine Science, and Environmental Science. Often CMMB graduate students have faculty members from these other areas of USF as members of their graduate committees.

Because of the many undergraduate courses that require hands-on experimental laboratories, CMMB support many graduate students as Teaching Assistants. CMMB values high quality teaching at all levels of support. Research Assistant positions may also be available to support research with specific faculty members depending on an individual faculty members funding. Numerous scholarship opportunities are also offered on a competitive basis through the USF Office of Graduate Studies.

Applying to the Department of Cell Biology, Microbiology and Molecular Biology
Students interested in attending graduate studies within the CMMB Department should visit the CMMB website that can be accessed from the main USF site and review the current CMMB faculty. It is recommended that potential students consider at least 2-3 CMMB faculty that they would be interested in working with and communicate this information in their letter of application. It is also recommended that potential students contact the CMMB Graduate Director as well as the individual faculty members they are interested in working with via email. Such communication will facilitate the assignment of the laboratory rotations that CMMB students will participate in during their first semester of residency and also allow the applicant to determine whether the desired faculty member has positions available in the laboratory.

All students admitted to the Masters in Microbiology must establish a supervisory committee. The supervisory committee shall constitute the major professor and at least two additional credentialed faculty. At least one of the committee members must be a faculty member at USF. Supervisory committee must be formed within two semesters after matriculation. The CMMB Graduate Director and CMMB Chair must approve the Supervisory Committee. Once a major professor has been assigned and/or a student occupies or utilizes significant space or facilities for research or analogous scholarly activity directly pertinent to the generation of a thesis, the student shall enroll for a minimum of two (2) hours of research credit each semester (other than summer semester), until eligible to enroll in thesis credits.

Major Research Areas: Applied Microbiology, Pathogenic Microbiology, Cellular Microbiology, Molecular Microbiology, Ecological Microbiology

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Prospective students must apply to the Microbiology major via the online application process through the USF Office of Graduate Admissions.
- Preferred minimum scores of 153V (500V on the old test; 61st percentile), and 148Q (600Q on the old test; 30th percentile), 4.5 AW on GRE
- It is expected that candidates for the M.S. degrees will have completed courses equivalent to those required for the B.S. in Microbiology at U.S.F.

Materials necessary for a complete application are listed below:

The following items should be submitted in the envelope provided to:

CMMB Graduate Office
Attention: CMMB Graduate Director
University of South Florida
4202 E. Fowler Ave – ISA 2015Tampa, FL 33620-5150

1. Two official transcripts in a sealed envelope from each post-secondary institution. Transcripts of work completed at USF will be secured by the Office of Admissions. Thus, applicants only need to secure transcripts from other institutions for the application packet.
2. Three letters of recommendation from faculty in sealed envelopes (on their university letterhead) with the envelope seal signed by the recommender. Students shall complete a **Student Recommendation Form** that can be found on the CMMB website and submit it to the recommenders.
3. A brief essay stating your intended field of research and professional goals. Please indicate your specific research interests, in order that we may refer your application to appropriate CMMB faculty members. In the essay please list 2-3 CMMB faculty members that you would like to have review your file.
4. **Applicants must complete the Application for Teaching Assistantship (TA) Form** that can be found on the CMMB or IB website if they wish to be considered for a TA position. Applicants who do not return this form will not be consider for a teaching position. **Applicants should attach a resume to the Application for Teaching Assistantship (TA) Form** that highlights any previous teaching experience.
5. **OFFICIAL test scores must be sent to USF directly from the testing agency. The University of South Florida's 4-Digit Institution Code is: 5828** Official GRE scores. This exam must have been taken within the last five years.

Curriculum Requirements

Total Minimum Hours 30 hours

The thesis based M.S. degree requires successful completion of the following:

1. structured coursework
2. an oral qualifying exam
3. research thesis
4. comprehensive final examination

The Master's Degree Requirements should be completed in two to three years. The CMMB Department requires that all graduate work applied toward the completion of degree requirements be completed within a five year period after matriculation. Thesis research should be publishable and students are encouraged to publish their findings. The specific requirements for the Master of Science (M.S.) in Microbiology are provided below

1. Credit hour requirement: 30 semester hour credits beyond the Baccalaureate Degree are required. *(including: BSC 6910, BSC 6971, BSC 6935 and other structured and unstructured courses approved by CMMB or IB)*
2. Students admitted to the CMMB Department must complete three laboratory rotations during their first semester of residency.
3. Successful completion of the **comprehensive qualifying examination**. The exam should be taken at the end of the first year, or early in the second year of study. The examination is administered and evaluated by the student's graduate committee.
4. Submission of a **thesis proposal** and approval by the major professor, graduate committee and graduate director.

5. A minimum of eight (8) thesis research credit hours (BSC 6971).
6. Seminar requirement: one presentation, excluding the thesis seminar and defense. Students should present posters or oral presentations based on their thesis research at national/regional professional meetings. The student's graduate committee must approve the presentation.
7. Submission of an acceptable thesis.
8. Presentation of the thesis seminar (BSC 6935) and successful defense of the thesis.

M.S. in Microbiology Course Requirements

Required Coursework (9 Credit Hours)

- BSC 6930 Lectures in Contemporary Biology **Credit Hours: 1** *(Enrollment in this course is required during each semester of residency)*
- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**
- PCB 6956 Scientific Grant Writing **Credit Hours: 3**
- PCB 6930 Current Topics in Cancer Biology **Credit Hours: 2**

Microbiology Electives* (6 credit Hours Minimum)

**The supervisory committee may approve additional courses not listed here*

- MCB 5206 Public Health and Pathogenic Microbiology **Credit Hours: 3**
- MCB 5655 Applied and Environmental Microbiology **Credit Hours: 3**
- PCB 5335 - Principles of Immunology **Credit(s): 3**
- PCB 6236 Advanced Immunology **Credit Hours: 4**
- MCB 5815 Medical Mycology **Credit Hours: 3**
- BSC 5931 Selected Topics in Biology **Credit Hours: 1-4 (3 credits for this program)** (Molecular Microbial Ecology)
- BSC 5931 Selected Topics in Biology **Credit(s): 1-4 (3 credits for this program)** (Prokaryotic Molecular Genetics)
- MCB 5410 - Cellular Microbiology **Credit(s): 3**
- PCB 5616 Molecular Phylogenetics **Credit Hours: 3**
- PCB 6525 Molecular Genetics **Credit Hours: 3**
- BSC 5420 - Genetic Engineering and Recombinant DNA Technology **Credit(s): 3**

Comprehensive Oral Qualifying Examination.

A final comprehensive oral examination is required for all master's students. This examination is open to all departmental faculty. Students must take their comprehensive exam within two years of matriculation and the exam is normally taken after the completion of all formal course work. Thesis students must take the examination at least one semester before the thesis is presented. Any graduate work counted toward the requirement for the M.S. degree must be completed within five (5) years after matriculation.

All thesis-based Master's Degree students must present a seminar to the Department of CMBB and must be enrolled in BSC 6935, during the final semester. The seminar should be a concise summary of the research completed to satisfy the requirements for the M.S. Degree. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student's graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee.

M.S. in Microbiology Non-Thesis Option

Non-Thesis - For students enrolled in the non-thesis option, a 30-hour minimum is required at the 5000-6000 level; 26 hours must be in formally structured courses; 16 hours must be at the 6000 level; 15 structured hours must be offered by CMMB. A review paper of a topic approved by the supervisory committee is required as well as successful completion of the comprehensive qualifying exam after all course work has been completed. For non-thesis master's students, this exam will occur at the end of the program of study.

Comprehensive Exam

The comprehensive qualifying exam after all course work has been completed. For non-thesis master's students, this exam will occur at the end of the program of study.

Department of Chemistry

Chemistry, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 40.0501
Dept. Code: CHM
Major/College Codes: CHA AS
Approved: 1985

This major shares core requirements with the M.S. in Chemistry.

Contact Information

College: Arts and Sciences
Department: Chemistry

Contact Information: http://www.grad.usf.edu/majors
Other Resources: http://chemistry.usf.edu/graduate/

The Department of Chemistry offers Doctor of Philosophy, Master of Science, and Non-thesis Master of Arts degrees. The Chemistry graduate faculty is comprised of full-time senior faculty members, all holding the Ph.D. degree. The combination of a large and strong faculty with a wide variety of courses provides students with programs of study that can be tailored to fit individual needs, while maintaining a sound background in all general aspects of Chemistry. The excellent research facilities and low student-faculty ratio combine to afford unique opportunities for advanced study in Chemistry.

Major Research Areas:
Opportunities for graduate study are available in such interdisciplinary and specialized areas as Analytical Chemistry, Chemical Education, Computer Modeling and Computational Chemistry, Drug Discovery and Delivery, Bioorganic and Bioinorganic Chemistry, Biophysical Chemistry, Electrochemistry, Environmental Chemistry, Enzymology, Inorganic Chemistry, Marine Chemistry, Medicinal Chemistry, Metal-Organic Framework Chemistry, Nanomaterials, Natural Products, Nucleic Acid Chemistry, Nuclear Magnetic Resonance, Organic Chemistry, Organocatalysis, Photochemistry, Physical Chemistry, Polymers, Spectroscopy, and Synthetic Organic Chemistry.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A baccalaureate degree in Chemistry or a closely related discipline.
- A preferred minimum score of 149 V (430/800, 47th percentile) and 147 Q (570/800, 28th percentile) on the GRE (the Chemistry subject exam is not required).
- At least three letters of recommendation from professionals familiar with the student's academic background.

Curriculum Requirements

Total Minimum Hours – 30 Credit Hours (Post-Baccalaureate)

Twenty-six hours of formally structured (graded) courses, sixteen hours of which must be at the 6000 level, as approved by the student's Supervisory Committee.

Shared Core Requirements (6 Credit Hours)

- CHM 6935 Graduate Seminars in Chemistry **Credit Hours: 1 (3 credits for this program)**
- CHM 6978 Advanced Research in Chemistry **Credit Hours: 3**

Electives (24 Credit Hours)

Students may select from graduate level courses in the Chemistry Department and/or related departments, such as Public Health, Education, Chemical Engineering, Physics, Biology, and Mathematics, with advisement of the student's Supervisory Committee. Courses include, but are not limited to, the following:

- BCH 5045 Biochemistry Core Course **Credit Hours: 3**
- BCH 5105 Biochemistry Laboratory Rotations **Credit Hours: 1-3**
- CHM 5225 Intermediate Organic Chemistry I **Credit Hours: 3**
- CHM 5226 Intermediate Organic Chemistry II **Credit Hours: 3**
- CHM 5452 Polymer Chemistry **Credit Hours: 3**
- CHM 5621 Principles of Inorganic Chemistry **Credit Hours: 3**
- CHM 5931 Selected Topics in Chemistry **Credit Hours: 1-3**
- CHM 6036 Chemical Biology **Credit Hours: 3**
- CHM 6150 Advanced Analytical Chemistry **Credit Hours: 3**
- CHM 6235 Spectroscopic Analysis of Organic Compounds **Credit Hours: 3**
- CHM 6250 Advanced Organic Chemistry I: Synthesis **Credit Hours: 3**
- CHM 6263 Advanced Organic Chemistry II: Physical-Organic **Credit Hours: 3**
- CHM 6279 Introduction to Drug Discovery **Credit Hours: 3**
- CHM 6480 Advanced Quantum Mechanics I **Credit Hours: 3**
- CHM 6810 Methods of Instruction in Higher Ed Chemistry **Credit Hours: 3**
- CHM 6811 Classroom Assessment Practices in Chemistry **Credit Hours: 3**
- CHM 6907 Independent Study **Credit Hours: 1-19**
- CHM 6936 Chemistry Colloquium **Credit Hours: 1**
- CHM 6938 Selected Topics in Chemistry **Credit Hours: 1-3**
- CHM 6945 Investigating Chemical Education Research in the United States **Credit Hours: 3**
- CHM 6946 Graduate Instruction Methods **Credit Hours: 1-4**

Non-Thesis

This major does not require a thesis.

Comprehensive Exam

M.A. students are required to prepare a review article that requires integration of topics covered in multiple courses. The topic for the review must be approved by the student's advisor and Supervisory Committee. While there is no requirement to orally present the article to the Supervisory Committee, the student may opt for an oral presentation. The review paper will serve as the final comprehensive examination required by the *USF Office of Graduate Studies* .

Chemistry, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 40.0501
Dept. Code: CHM
Major/College Codes: CHM AS
Approved: 1965

This major shares core requirements with the M.A. in Chemistry.

Contact Information

College: Arts and Sciences
Department: Chemistry

Contact Information: http://www.grad.usf.edu/majors
Other Resources: http://chemistry.usf.edu/graduate/

The Department of Chemistry offers Doctor of Philosophy, Master of Science, and Non-thesis Master of Arts degrees. The Chemistry graduate faculty is comprised of full-time senior faculty members, all holding the Ph.D. degree. The combination of a large and strong faculty with a wide variety of courses provides students with programs of study that can be tailored to fit individual needs, while maintaining a sound background in all general aspects of Chemistry. The excellent research facilities and low student-faculty ratio combine to afford unique opportunities for advanced study in Chemistry.

Major Research Areas:
Research opportunities are available in such interdisciplinary and specialized areas as Analytical Chemistry, Chemical Education, Computer Modeling and Computational Chemistry, Drug Discovery and Delivery, Bioorganic and Bioinorganic Chemistry, Biophysical Chemistry, Electrochemistry, Environmental Chemistry, Enzymology, Inorganic Chemistry, Marine Chemistry, Medicinal Chemistry, Metal-Organic Framework Chemistry, Nanomaterials, Natural Products, Nucleic Acid Chemistry, Nuclear Magnetic Resonance, Organic Chemistry, Organocatalysis, Photochemistry, Physical Chemistry, Polymers, Spectroscopy, and Synthetic Organic Chemistry.

Admission Information

Must meet University requirements (see Graduate Admissions), as well as requirements for admission to the major, listed below.

- A baccalaureate degree in Chemistry or a closely related discipline.
- A preferred minimum score of 149 V (430/800, 47th percentile) and 147 Q (570/800, 28th percentile) on the GRE (the Chemistry subject exam is not required).
- At least three letters of recommendation from professionals familiar with the student's academic background.

Curriculum Requirements

Total Minimum Hours – 30 Credit Hours (Post-Baccalaureate)

Shared Core Requirements – 10 credit hours
Electives – 18 credit hours
Thesis – 2 credit hours

Twenty hours must be in formally structured (graded) courses of which sixteen hours must be at the 6000 level, as approved by the student's Supervisory Committee.

Shared Core Requirements (10 Credit Hours)

- CHM 6935 Graduate Seminars in Chemistry **Credit Hours: 1 (3 credits for this program)**
- CHM 6978 Advanced Research in Chemistry **Credit Hours: 3**
- CHM 6973 Directed Research **Credit Hours: 1-19 (4 credits for this program)**

Electives (18 Credit Hours)

Students may select from graduate level courses in the Chemistry Department and/or related departments, such as Public Health, Education, Chemical Engineering, Physics, Biology, and Mathematics, with advisement of the student's Supervisory Committee. Courses include, but are not limited to, the following:

- BCH 5045 Biochemistry Core Course **Credit Hours: 3**
- BCH 5105 Biochemistry Laboratory Rotations **Credit Hours: 1-3**
- CHM 5225 Intermediate Organic Chemistry I **Credit Hours: 3**
- CHM 5226 Intermediate Organic Chemistry II **Credit Hours: 3**
- CHM 5452 Polymer Chemistry **Credit Hours: 3**
- CHM 5621 Principles of Inorganic Chemistry **Credit Hours: 3**
- CHM 5931 Selected Topics in Chemistry **Credit Hours: 1-3**
- CHM 6036 Chemical Biology **Credit Hours: 3**
- CHM 6150 Advanced Analytical Chemistry **Credit Hours: 3**
- CHM 6235 Spectroscopic Analysis of Organic Compounds **Credit Hours: 3**
- CHM 6250 Advanced Organic Chemistry I: Synthesis **Credit Hours: 3**
- CHM 6263 Advanced Organic Chemistry II: Physical-Organic **Credit Hours: 3**
- CHM 6279 Introduction to Drug Discovery **Credit Hours: 3**
- CHM 6480 Advanced Quantum Mechanics I **Credit Hours: 3**
- CHM 6810 Methods of Instruction in Higher Ed Chemistry **Credit Hours: 3**
- CHM 6811 Classroom Assessment Practices in Chemistry **Credit Hours: 3**
- CHM 6907 Independent Study **Credit Hours: 1-19**
- CHM 6936 Chemistry Colloquium **Credit Hours: 1**
- CHM 6938 Selected Topics in Chemistry **Credit Hours: 1-3**
- CHM 6945 Investigating Chemical Education Research in the United States **Credit Hours: 3**
- CHM 6946 Graduate Instruction Methods **Credit Hours: 1-4**

Comprehensive Exam

The student must submit and orally defend before the Supervisory Committee a written thesis based on original research in an area approved by the student's Supervisory Committee. This will serve as the final comprehensive examination required by the *USF Office of Graduate Studies.*

Thesis (2 Credit Hours)

- CHM 6971 Thesis: Master's **Credit Hours: 2-19 (2 credits for this program)**

Chemistry, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours:
72 (Post-Baccalaureate)
42 (Post-Master's)
Level: Doctoral
CIP Code: 40.0501
Dept. Code: CHM
Major/College Codes: CHM AS
Approved: 1971

Contact Information

College: Arts and Sciences
Department: Chemistry

Contact Information: http://www.grad.usf.edu/majors
Other Resources: http://chemistry.usf.edu/graduate

The Department of Chemistry offers Doctor of Philosophy, Master of Science, and Non-thesis Master of Arts degrees. The Chemistry graduate faculty is comprised of full-time senior faculty members, all holding the Ph.D. degree. The combination of a large and strong faculty with a wide variety of courses provides students with programs of study that can be tailored to fit individual needs, while maintaining a sound background in all general aspects of Chemistry. The excellent research facilities and very low student-faculty ratio combine to afford unique opportunities for advanced study in Chemistry.

Major Research Areas:
Research opportunities are available in such interdisciplinary and specialized areas as Analytical Chemistry, Chemical Education, Computer Modeling and Computational Chemistry, Drug Discovery and Delivery, Bioorganic and Bioinorganic Chemistry, Biophysical Chemistry, Electrochemistry, Environmental Chemistry, Enzymology, Inorganic Chemistry, Marine Chemistry, Medicinal Chemistry, Metal-Organic Framework Chemistry, Nanomaterials, Natural Products, Nucleic Acid Chemistry, Nuclear Magnetic Resonance, Organic Chemistry, Organocatalysis, Photochemistry, Physical Chemistry, Polymers, Spectroscopy, and Synthetic Organic Chemistry.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A Bachelor of Arts or Bachelor of Science degree in Chemistry. Applicants with other degrees are considered on a case-by-case basis.
- A preferred minimum score of 149 V (430/800, 47th percentile) and 147 Q (470/800, 28th percentile) on the GRE (the Chemistry subject exam is not required).
- At least three letters of recommendation from people familiar with the student's academic background.

Curriculum Requirements

Total Minimum Hours – 72 credit hours (Post-Baccalaureate) 42 credit hours (Post-Master's)

Core requirements – 9 hours minimum
Additional Coursework – 61 (post-Baccalaureate) or 31 (post-masters) hours minimum
Dissertation – 2 hours minimum

Core Requirements (9 Credit Hours)

- CHM 6935 Graduate Seminars in Chemistry **Credit Hours: 1 (6 credits for the program)**
- CHM 6978 Advanced Research in Chemistry **Credit Hours: 3**

Electives

61 (Post-Baccalaureate) or 31 (post-masters)

Students may select from graduate level courses in the Chemistry Department and/or related departments, such as Public Health, Education, Chemical Engineering, Physics, Biology, and Mathematics, with advisement of the student's Supervisory Committee. Courses include, but are not limited to, the following:

- BCH 5045 Biochemistry Core Course **Credit Hours: 3**
- BCH 5105 Biochemistry Laboratory Rotations **Credit Hours: 1-3**
- CHM 5225 Intermediate Organic Chemistry I **Credit Hours: 3**
- CHM 5226 Intermediate Organic Chemistry II **Credit Hours: 3**
- CHM 5452 Polymer Chemistry **Credit Hours: 3**
- CHM 5621 Principles of Inorganic Chemistry **Credit Hours: 3**
- CHM 5931 Selected Topics in Chemistry **Credit Hours: 1-3**
- CHM 6036 Chemical Biology **Credit Hours: 3**
- CHM 6150 Advanced Analytical Chemistry **Credit Hours: 3**
- CHM 6235 Spectroscopic Analysis of Organic Compounds **Credit Hours: 3**
- CHM 6250 Advanced Organic Chemistry I: Synthesis **Credit Hours: 3**
- CHM 6263 Advanced Organic Chemistry II: Physical-Organic **Credit Hours: 3**
- CHM 6279 Introduction to Drug Discovery **Credit Hours: 3**
- CHM 6480 Advanced Quantum Mechanics I **Credit Hours: 3**
- CHM 6810 Methods of Instruction in Higher Ed Chemistry **Credit Hours: 3**
- CHM 6811 Classroom Assessment Practices in Chemistry **Credit Hours: 3**
- CHM 6907 Independent Study **Credit Hours: 1-19**
- CHM 6936 Chemistry Colloquium **Credit Hours: 1**
- CHM 6938 Selected Topics in Chemistry **Credit Hours: 1-3**
- CHM 6945 Investigating Chemical Education Research in the United States **Credit Hours: 3**
- CHM 6946 Graduate Instruction Methods **Credit Hours: 1-4**
- CHM 7820 Directed Research **Credit Hours: 1-19 (varies)**

Qualifying Exam

Students must successfully pass at least three of the five ACS undergraduate Chemistry proficiency exams in the subject areas of Analytical Chemistry, Biochemistry, Inorganic Chemistry, Organic Chemistry, and Physical Chemistry. A student may attempt each area exam three times and must score above the 50th percentile of national norms.

Promotion to Candidacy

Before the end of the third semester (excluding summers), the student should present to the Supervisory Committee a written document outlining the student's research progress and future plans. This research summary is also to be presented orally to the committee. A successful defense results in the student being promoted to candidacy for the Ph.D. degree.

Original Research Proposal (ORP) Examination

An original research proposal must be written and defended before the end of the fifth semester (excluding summers), and after the student has already obtained Ph.D. candidacy.

Research Data Presentation

The student must give a research data presentation to his or her Dissertation Committee, preferably by the end of the fourth year (eight semesters, excluding summers), and at least one semester prior to the final oral thesis defense.

Publication and Presentation Requirements

The student must publish at least one peer-reviewed manuscript on his or her doctoral research topic, and make at least two presentations at a scientific meeting.

Oral Defense of the Ph.D. Dissertation

Upon completing all the research and other program requirements, the student will schedule a final oral defense of the written dissertation. This presentation is open to the public and will serve as the final comprehensive examination required by the *USF Office of Graduate Studies.*

Dissertation (2 Credit Hours Minimum)

Students who take more dissertation hours may apply these toward the additional course requirements.

- CHM 7980 Dissertation: Doctoral **Credit Hours: 2-19 (2 credits for this program)**

Department of Integrated Biology

Integrative Biology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90
Level: Doctoral
CIP Code: 26.1399
Dept Code: BIO
Major/College Codes: IBO AS
Approved: 2014

Concentrations:

Ecology and Evolution (EEV)
Environmental and Ecological Microbiology (EVM)
Physiology and Morphology (PMY)

Contact Information

College: Arts and Sciences
Department: Integrative Biology (IB)

Contact Information: http://www.grad.usf.edu/majors

The Department of Integrative Biology is committed to train the next generation of graduate students to prepare them for professional success in the biological sciences. Our program of graduate study is designed to foster the development of technical and analytical skills used in existing and emerging fields of discovery. The Department of Integrative Biology emphasizes learning and teaching about the interactions, across all scales, among humans and other diverse organisms in a range of environments. These interactions mediate the resilience of natural biotic systems, and enhance the sustainability of products and processes that are beneficial to ecosystems and consequently to human well-being. Thus, our mission is to create new knowledge and promote learning about ecosystem health and sustainability.

Major Research Areas: Ecology and Evolution, Environmental and Ecological Microbiology, and Physiology and Morphology.

Admission Information

Must meet University requirements (see Graduate Admissions), as well as requirements for admission to the major, listed below.

- Bachelor of Science required.
- It is expected that candidates for the Ph.D. degree will have completed courses equivalent to those required for the B.S. in Biology at U.S.F.
- GRE: 155+ (70%)V, 150+ (70%)Q, 4.5 (70%) AW.

- Acceptance by a faculty member in the Department of Integrative Biology is mandatory. Students are expected to contact faculty via email to indicate an interest in the research being conducted in their laboratory. The Department will make every effort to pair potential graduate students with appropriate faculty.
- Three letters of recommendation.
- On Campus Interview.
- Personal Statement

Curriculum Requirements

Total Minimum Hours 90 hours post-bacc

Core – 8 Credit Hours
Other required courses – 12 Credit Hours Minimum
Additional coursework – 6 Credit Hours
Concentrations – 6 Credit Hhours Minimum
Doctoral Seminar – 1 Credit Hour
Dissertation – 24 Credit Hhours
Remaining hours required – Directed Research/Dissertation – 33 Credit Hours

The graduate student, major professor and Graduate Committee will establish the specific course requirement for each graduate student. Every graduate student must satisfy minimum course requirements. The Graduate Committee consists of four individuals; three must be members of the Integrative Biology Department.

Core Requirements (8 Credit Hours)

- BSC 6930 Lectures in Contemporary Biology **Credit Hours: 1** *(Taken 4 Times)*
- PCB 6456C Biometry **Credit Hours: 4**

Other Required Courses (12 Credit Hours Minimum)

- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**

Selected from the following:
Graduate Skills (3 Credit Hours) (Proposed)
Evolution (Graduate Level) (3 Credit Hours)
Other Topics (6-9 Credit Hours)

Additional Structured Coursework (6 Credit Hours)

An additional six hours of structured coursework is required. The structured courses are listed below for each of the three concentrations. The Major Professor and Graduate Committee may approve courses from outside the Department to satisfy this requirement. Doctoral students typically will take 20-25 semester hours of coursework selected from the lists of courses presented below. The remainder of the required 90 hours is obtained through research credits.

Concentrations

Students select from one of the following Concentrations:

Ecology and Evolution (EEV) (6 Credit Hours Minimum)

A minimum of two courses selected from the list below for a minimum of 6 credit hours.

- BSC 5931 Selected Topics in Biology **Credit Hours: 1-4**

Comparative Approaches in Evolution (3 Credit Hours)
Conservation Biology (3 Credit Hours)

- PCB 6447 Community Ecology **Credit Hours: 3**
- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**

Advances in Environmental Ecology (1 Credit Hour)
Marine Botany (4 Credit Hours)
Ichthyology (4 Credit Hours)

- PCB 6426C Population Biology **Credit Hours: 3**
- PCB 6455 Statistical Ecology **Credit Hours: 3**
- PCB 6939 Seminar in Ecology **Credit Hours: 1-3**
- ZOO 5463C Herpetology **Credit Hours: 4**

Any graduate course approved by the Graduate Committee.

Environmental and Ecological Microbiology (EVM) (6 Credit Hours Minimum)

A minimum of two courses selected from the list below for a minimum of 6 credit hours.

- BSC 5931 Selected Topics in Biology **Credit Hours: 1-4**

Genomics (3 Credit Hours)

- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**

Advances in Environmental Ecology (1 Credit Hour)

- MCB 5206 Public Health and Pathogenic Microbiology **Credit Hours: 3**
- MCB 5655 Applied and Environmental Microbiology **Credit Hours: 3**
- MCB 6930 Graduate Microbiology Seminar **Credit Hours: 1**

Applied and Ecological Microbiology (1 Credit Hour)

- PCB 6458 Biometry II **Credit Hours: 3**
- PCB 6525 Molecular Genetics **Credit Hours: 3**
- BMS 6300 Principles of Immunology and Infectious Diseases **Credit Hours: var.**

Any graduate course approved by the Graduate Committee.

Physiology and Morphology (PMY) (6 Credit Hours Minimum)

A minimum of two courses selected from the list below for a minimum of 6 credit hours.

- BSC 5931 Selected Topics in Biology **Credit Hours: 1-4**

Comparative Approaches in Evolution (3 Credit Hours)
Ecological and Functional Morphology (3 Credit Hours)

- ZOO 6455 Advances in Ichthyology **Credit Hours: 1**
- PCB 6365C Physiological Ecology **Credit Hours: 4**
- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**

Advances in Physiology (1 Credit Hour)
Ecoimmunology (3 Credit Hours)
Physiology of Movement (3 Credit Hours)

Ornithology (3 Credit Hours)
Ichthyology (4 Credit Hours)

- BSC 6936 Scientific Grant Writing **Credit Hours: 3**
- PCB 5256 Developmental Mechanisms **Credit Hours: 3**
- ZOO 5463C Herpetology **Credit Hours: 4**

Any graduate coruse approved by the Graduate Committee.

Qualifying Exam

All students in the IB Ph.D. degree must complete a qualifying examination. Successful completion of the preliminary doctoral examination by the end of the 4th semester. The exam consists of 3 parts:

1. Dissertation proposal
2. Seminar/presentation of proposal
3. Defense of dissertation proposal

Admission to Candidacy

The doctoral student is eligible for admission to candidacy after completing structured course requirements, passing the qualifying examination and approval by the supervisory committee. Appropriate forms to document promotion to candidacy must be completed and to the Office of Graduate Studies. Following admission to candidacy, a student must enroll in BSC 7980 when engaged in research, data collection, or writing activities relevant to the doctoral dissertation. Advisors should assign the number of credits in this course in accordance with policy and appropriate to the demands made on faculty, staff, and University facilities, but in no event will the total number of earned dissertation credits be fewer than 24. Students not admitted to candidacy are not eligible to enroll in BSC 7980.

Doctoral Seminar (1 Credit Hour)

- BSC 7936 Doctoral Seminar **Credit Hours: 1**

All doctoral students must present a public seminar to the IB Department and must be enrolled in BSC 7980, during the semester in which the seminar is given. The seminar should be a concise summary of the research completed to satisfy the requirements for the Ph.D. The seminar is open to the general public and must be announced two weeks prior to the presentation. Upon completion of the seminar, the general public will be invited to ask questions. At the discretion of the student's graduate committee, members of the committee may continue to question the graduate student after the general public has departed the seminar room. Each student is expected to defend his/her research to the unanimous satisfaction of the graduate committee. Following the defense, students will make any editorial modifications to the dissertation as recommended by the supervisory committee and submit the dissertation to the Office of Graduate Studies.

Dissertation (24 Credit Hours)

- BSC 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Submission of a doctoral research proposal must be approved by the Major Professor, Graduate Committee, and Graduate Director. Successful completion of the dissertation proposal, presentation of a dissertation seminar and passing the doctoral examination enables the student to become a doctoral candidate. Submission of an acceptable dissertation, presentation of the doctoral seminar (BSC 7936) and successful defense of the dissertation enable the student to obtain the Ph.D. Degree.

Other Requirements

Presentation Requirement:

Two presentations, excluding the doctoral seminar and defense are required. Students are expected to present posters or oral presentations based on their dissertation research at two national/regional professional meetings. The Graduate Committee must approve the presentation.

Publication Requirement:

One research paper must be submitted for publication to a refereed scientific journal by the date of the Doctoral Seminar and Defense. The paper may be sole or coauthored, but it must be based on the dissertation research. The student's supervisory committee must approve the paper prior to submission. The Graduate Committee must approve the journal to which the paper is submitted.

Department Handbook

http://biology.usf.edu/ib/forms-library/

Department of Mathematics and Statistics

Mathematics, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 27.0101
Dept. Code: MTH
Major/College Codes: MTH AS
Approved: 1965

Concentration:
Pure and Applied (PAA)
Also offered as an Accelerated Major

Contact Information

College: Arts and Sciences
Department: Mathematics and Statistics

Contact Information: http://www.grad.usf.edu/majors

The major provides the experience and knowledge to understand and appreciate prior accomplishments in the discipline and develop the skills necessary for a meaningful contribution to the intellectual advancement and applications of the discipline. It prepares its graduates to pursue long-term careers in their field by providing solid and cutting-edge knowledge, as well as a technical education enabling them to take on leading positions in a modern economy.

Major Research Areas

Algebra & Number Theory, Applied Statistics, Approximation Theory, Bio-Mathematics, Complex & Harmonic Analysis, Cyber-Security & Cryptography, Data Science, Differential Equations, Graph Theory & Combinatorics, Low-Dimensional Topology, Mathematics Education, Mathematical Physics, Operator Theory, Probability, Statistical Learning, Stochastic Processes & Modelling

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A Bachelor's degree or equivalent in mathematical sciences or related area.
- GRE - At least a 55th percentile Quantitative score; Verbal and Analytical Writing scores are also considered.
- At least a 3.00 GPA in undergraduate math courses, and specifically in the following courses or their equivalents: Elementary Abstract Algebra, Bridge to Abstract Mathematics, and Intermediate Analysis.
- Three letters of recommendation (two of which should be from college level mathematics/statistics professors).
- A completed math department application form, including a statement of goals
- A completed departmental graduate teaching assistantship application form (if such a position is desired).

The Graduate Admissions Committee may provisionally admit applicants from other majors to the Master's Program if they meet the GPA requirement.

Curriculum Requirements

Total Minimum Hours: 30 hours

Core Requirements – 9 Credit Hours
Fundamental Sequence Courses – 6 Credit Hours minimum
Elective Sequence Courses or Conceptration Option – 6 Credit Hours (Electives), 12 Credit Hours (Concentration)
Electives - 3 Credit Hours Minimum
Thesis/Non-Thesis– 6 Credit Hours minimum

Core Requirements (9 Credit Hours)

- MAA 5306 Introduction to Real Analysis **Credit Hours: 3**
- MAS 5145 Advanced Linear Algebra **Credit Hours: 3**
- MAE 5177 Teaching College Mathematics **Credit Hours: 3**

Sequences of Courses

The program offers coherent pairs/triples of courses, referred to as sequences, to ensure a certain balance of breadth and depth of disciplinary knowledge. The student must complete a total of two sequences: one Fundamental Sequence and one from among the Fundamental and Elective Sequences with at least a 3.00 average in each sequence. Each course may count towards only one Sequence.

Fundamental Sequences (6 Credit Hours)

Algebra:

- MAS 5311 Algebra I **Credit Hours: 3**
- MAS 6312 Algebra II **Credit Hours: 3**

Analysis:

- MAA 5307 Real Analysis I **Credit Hours: 3**
- MAA 6616 Real Analysis II **Credit Hours: 3**

Topology:

- MTG 5316 Topology I **Credit Hours: 3**
- MTG 6317 Topology II **Credit Hours: 3**

Elective Sequences (6 Credit Hours)

Applied Mathematics:

one of

- MAP 5407 Methods of Applied Mathematics **Credit Hours: 3**
- MAP 5345 Applied Partial Differential Equations **Credit Hours: 3**

one of

- MAA 5405 Applied Complex Analysis **Credit Hours: 3**
- MAT 5932 Selected Topics **Credit Hours: 1-4** (Numerical Analysis)

one of

- MAP 6205 Control Theory and Optimization **Credit Hours: 3**
- MAP 6319 Dynamical Systems II **Credit Hours: 3**

Combinatorics:

- MAD 6206 Combinatorics I **Credit Hours: 3**
- MAD 6207 Combinatorics II **Credit Hours: 3**

Complex Analysis:

- MAA 6406 Complex Analysis I **Credit Hours: 3**
- MAA 6407 Complex Analysis II **Credit Hours: 3**

Differential Geometry

- MTG 6256 Differential Geometry **Credit Hours: 3**
- MTG 6257 Differential Geometry II **Credit Hours: 3**

Dynamical Systems:

- MAP 6312 Dynamical Systems I **Credit Hours: 3**
- MAP 6319 Dynamical Systems II **Credit Hours: 3**

Functional Analysis:

- MAA 6506 Functional Analysis I **Credit Hours: 3**
- MAA 6507 Functional Analysis II **Credit Hours: 3**

Harmonic Analysis

- MAP 6418 Harmonic Analysis **Credit Hours: 3**
- MAP 6356 Partial Differential Equations **Credit Hours: 3**

Nonlinear Analysis:

- MAP 5316 Ordinary Differential Equations I **Credit Hours: 3**
- MAP 5317 Ordinary Differential Equations II **Credit Hours: 3**

Partial Differential Equations:

- MAP 5345 Applied Partial Differential Equations **Credit Hours: 3**
- MAP 6356 Partial Differential Equations **Credit Hours: 3**

Theory of Computing:

- MAD 6616 Algebraic Automata Theory **Credit Hours: 3**
- MAD 6510 Analysis of Algorithms **Credit Hours: 4**

Statistical Methods

- STA 5166 Statistical Methods I **Credit Hours: 3**
- STA 6167 Statistical Methods II **Credit Hours: 3**
- STA 6208 Linear Statistical Models **Credit Hours: 3**

Mathematical Statistics

- STA 5326 Mathematical Statistics I **Credit Hours: 3**
- MAT 6932 Selected Topics **Credit Hours: 1-4**

Mathematical Statistics II (3 Credit Hours) (Proposed STA 6326)

Linear Models and Multivariate Analysis

- STA 6208 Linear Statistical Models **Credit Hours: 3**
- STA 6746 Multivariate Analysis **Credit Hours: 3**

Probability

- STA 5446 Probability Theory I **Credit Hours: 3**
- STA 6447 Probability Theory II **Credit Hours: 3**

Stochastic Processes And Time Series Analysis

- STA 6876 Time Series Analysis **Credit Hours: 3**
- STA 6206 Stochastic Processes **Credit Hours: 4**

Concentration Option

The concentration in Pure and Applied Mathematics has the following requirements in lieu of the elective sequence courses.

Pure and Applied Math Concentration ( ) (12 Credit Hours)

Students must complete three of the following courses.

- MAT 5932 Selected Topics **Credit Hours: 1-4**

Applied Complex Variables (3 Credit Hours) (Proposed MAA 5406)
Other topics (3 Credit Hours)

- MAP 5345 Applied Partial Differential Equations **Credit Hours: 3**
- MAP 5407 Methods of Applied Mathematics **Credit Hours: 3**
- MAP 6356 Partial Differential Equations **Credit Hours: 3**
- MAT 6932 Selected Topics **Credit Hours: 1-4**

Topics Vary (3 Credit Hours)

Students must also complete one of the following courses.

- STA 5326 Mathematical Statistics I **Credit Hours: 3**
- STA 6206 Stochastic Processes **Credit Hours: 4**
- STA 6876 Time Series Analysis **Credit Hours: 3**

MAT 6932 Selected Topics: *Mathematical Statistics II (3 Credit Hours) (Proposed as STA 6327)*

Electives (3 Credit Hours Minimum)

Students select graduate course electives in consultation with their advisor.

Comprehensive Exam

The student must either successfully defend a thesis (the Thesis Option) or pass one of the written Fundamental Qualifying Examinations (the Exam Option). For the student who elects the Thesis Option, the Comprehensive Examination takes the form of an oral thesis defense, in which the candidate must demonstrate knowledge of the general subject area of the thesis. For the student who elects the Exam Option, the Comprehensive Examination is passed by passing one of the Fundamental Qualifying Examinations at M.A. level or better.

Thesis/Non-Thesis (6 Credit Hours)

Non-Thesis

Students in the non-thesis option complete an additional 6 hours of electives.

Thesis

- MAT 6971 Thesis: Master's **Credit Hours: 2-19** (6 Credit Hours)

A student who elects the Thesis Option must register for a minimum of six (6) credit hours in MAT 6971 , only six (6) hours of which may be applied toward the 30-hour degree requirement.

Department Handbook

The student is responsible for familiarizing themselves with the additional program requirements and expectations listed in the program handbook, particularly those concerning timely progress.

Accelerated Major

Also available as an Accelerated Majors

Mathematics, Ph.D.

Degree Information

Priority Program Admission Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90 post-baccalaureate, 60 post-masters
Level: Doctoral
CIP Code: 27.0101
Dept. Code: MTH
(Major/College Codes: MTH AS
Approved: 1971

Concentrations:
Pure and Applied (PAA)
Statistics (STT)

Contact Information

College: Arts and Sciences
Department: Mathematics and Statistics

Contact Information: http://www.grad.usf.edu/majors

The major provides the experience and knowledge to understand and appreciate prior accomplishments in the discipline and develops the skills necessary for a meaningful contribution to the intellectual advancement and applications of the discipline. It prepares its graduates to pursue long-term careers in their field by providing solid and cutting-edge knowledge. Graduates receive training that enables them to conduct independent research and write research papers publishable in peer-reviewed journals of their discipline, as well as a technical education enabling them to take on leading positions in a modern economy.

Major Research Areas
Algebra & Number Theory, Applied Statistics, Approximation Theory, Bio-Mathematics, Complex & Harmonic Analysis, Cyber-Security & Cryptography, Data Science, Differential Equations, Graph Theory & Combinatorics, Low-Dimensional Topology, Mathematics Education, Mathematical Physics, Operator Theory, Probability, Statistical Learning, Stochastic Processes & Modelling

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A degree from a regionally accredited institution relevant to the prospective concentration. Either
  - a Master's degree or equivalent in mathematical sciences/statistics or a related area; or
  - a Bachelor's degree or equivalent in mathematical sciences/statistics or related area with a strong record of undergraduate/graduate courses related to prospective concentration.
- GRE - At least a 55th percentile Quantitative; Verbal and Analytical Writing scores are also considered.
- At least a 3.50 GPA in graduate and/or upper undergraduate mathematics/statistics courses.
- Three letters of recommendation (two of which should be from college level mathematics/statistics professors)

- A completed departmental application form, including a statement of goals.
- A completed departmental graduate teaching assistantship application form (if such a position is desired).

Applicants to the Ph.D. program may be offered admission to the M.A. program and move to the Ph.D. program after establishing a record of success in graduate courses. Graduate Teaching and Research Assistantships are available on a competitive basis. Contact the Department for recommended prerequisites for each concentration.

Curriculum Requirements

Total Minimum Hours: 90 hours post-baccalaureate, 60 hours post-masters

Students entering for the post-bachelor's option must complete the requirements specified for the MA in Math at USF.

Core Requirements – 9 Credit Hours
Concentration – 33 Credit Hours minimum
Electives – 2 Credit Hours minimum
Dissertation – 16 Credit Hours minimum

Core Requirements (9 Credit Hours Minimum)

- MAA 5307 Real Analysis I **Credit Hours: 3**
- MAS 5145 Advanced Linear Algebra **Credit Hours: 3**
- MAE 5177 Teaching College Mathematics **Credit Hours: 3**

Concentrations

Students must select from one of the concentrations below. Each concentration offers coherent pairs/triples of courses, referred to as sequences, to ensure a certain depth of disciplinary knowledge. In addition to the primary concentration courses, the student must complete a total of four sequences: two Fundamental sequences for their concentration and a two more sequences from among the Fundamental and Elective Sequences for their concentration with at least a 3.00 average in each sequence. Each course may count towards only one sequence. Substitutions may be allowed with prior approval of both the Concentration Director and Concentration Graduate Committee.

Pure and Applied Concentration (PAA) (33 Credit Hours)

The student must complete at least one course from each of the following groups:

Group 1 – Algebra:

- MAS 5311 Algebra I **Credit Hours: 3**
- MAS 6312 Algebra II **Credit Hours: 3**

Group 2 – Complex Analysis:

- MAA 6406 Complex Analysis I **Credit Hours: 3**
- MAA 6407 Complex Analysis II **Credit Hours: 3**

Group 3 – Topology:

- MTG 5316 Topology I **Credit Hours: 3**
- MTG 6317 Topology II **Credit Hours: 3**

Fundamental Sequences

Students must complete two sequences.

Algebra:

- MAS 5311 Algebra I **Credit Hours: 3**
- MAS 6312 Algebra II **Credit Hours: 3**

Real Analysis:

- MAA 5306 Introduction to Real Analysis **Credit Hours: 3**
- MAA 5307 Real Analysis I **Credit Hours: 3** (taken as a core requirement)
- MAA 6616 Real Analysis II **Credit Hours: 3**

Topology:

- MTG 5316 Topology I **Credit Hours: 3**
- MTG 6317 Topology II **Credit Hours: 3**

Elective Sequences

Students must complete two sequences.

Applied Mathematics

one of

- MAP 5407 Methods of Applied Mathematics **Credit Hours: 3**
- MAP 5345 Applied Partial Differential Equations **Credit Hours: 3**

one of

- MAA 5405 Applied Complex Analysis **Credit Hours: 3**
- MAT 5932 Selected Topics **Credit Hours: 1-4** (Numerical Analysis)

one of

- MAP 6205 Control Theory and Optimization **Credit Hours: 3**
- MAP 6319 Dynamical Systems II **Credit Hours: 3**

Combinatorics

- MAD 6206 Combinatorics I **Credit Hours: 3**
- MAD 6207 Combinatorics II **Credit Hours: 3**

Complex Analysis

- MAA 6406 Complex Analysis I **Credit Hours: 3**
- MAA 6407 Complex Analysis II **Credit Hours: 3**

Differential Geometry

- MTG 6256 Differential Geometry **Credit Hours: 3**
- MTG 6257 Differential Geometry II **Credit Hours: 3**

Dynamical Systems

- MAP 6312 Dynamical Systems I **Credit Hours: 3**
- MAP 6319 Dynamical Systems II **Credit Hours: 3**

Functional Analysis

- MAA 6506 Functional Analysis I **Credit Hours: 3**
- MAA 6507 Functional Analysis II **Credit Hours: 3**

Harmonic Analysis

- MAP 6418 Harmonic Analysis **Credit Hours: 3**
- MAP 6356 Partial Differential Equations **Credit Hours: 3**

Nonlinear Analysis

- MAP 5316 Ordinary Differential Equations I **Credit Hours: 3**
- MAP 5317 Ordinary Differential Equations II **Credit Hours: 3**

Partial Differential Equations

- MAP 5345 Applied Partial Differential Equations **Credit Hours: 3**
- MAP 6356 Partial Differential Equations **Credit Hours: 3**

Theory of Computing

- MAD 6616 Algebraic Automata Theory **Credit Hours: 3**
- MAD 6510 Analysis of Algorithms **Credit Hours: 4**

Statistics Concentration (STT) (48 Credit Hours)

The student must complete the following courses:

- STA 5446 Probability Theory I **Credit Hours: 3**
- STA 6447 Probability Theory II **Credit Hours: 3**
- STA 5526 Non-Parametric Statistics **Credit Hours: 3**
- STA 6746 Multivariate Analysis **Credit Hours: 3**
- STA 6876 Time Series Analysis **Credit Hours: 3**
- HSC 6055 Survival Analysis **Credit Hours: 3**

Choose three of the following seven courses:

- STA 6206 Stochastic Processes **Credit Hours: 4**
- MAT 5932 Selected Topics **Credit Hours: 1-4**

Time Series Analysis II (3 Credit Hours)
Nonlinear Time Series Analysis (3 Credit Hours)
Multivariate Iterative Processes with Applications (3 Credit Hours)
Other Topics, with preapproval (3 Credit Hours)

- MAT 6908 Independent Study **Credit Hours: 1-19** *(Preapproval required)*
- MAT 6932 Selected Topics **Credit Hours: 1-4**

Stochastic Dynamic Modeling (3 Credit Hours)

Fundamental Sequences

Students must complete two sequences.

Statistical Methods:

- STA 5166 Statistical Methods I **Credit Hours: 3**
- STA 6167 Statistical Methods II **Credit Hours: 3**
- STA 6208 Linear Statistical Models **Credit Hours: 3**

Mathematical Statistics:

- STA 5326 Mathematical Statistics I **Credit Hours: 3**
- MAT 6932 Selected Topics **Credit Hours: 1-4**

Mathematical Statistics II (3 Credit Hours) (Proposed STA 6326)

Elective Sequences

Students must complete two sequences.

Linear Models and Multivariate Analysis:

- STA 6208 Linear Statistical Models **Credit Hours: 3**
- STA 6746 Multivariate Analysis **Credit Hours: 3**

Probability:

- STA 5446 Probability Theory I **Credit Hours: 3**
- STA 6447 Probability Theory II **Credit Hours: 3**

Stochastic Processes and Time Series Analysis:

- STA 6876 Time Series Analysis **Credit Hours: 3**
- STA 6206 Stochastic Processes **Credit Hours: 4**

Electives (2 Credit Hours Minimum)

All students select graduate course electives in consultation with their advisor.

Qualifying Examinations

An examination based on a Fundamental Sequence is called a Fundamental Qualifying Examination. The student is required to pass two Fundamental Qualifying Examinations at the Ph.D. Level. After passing two Fundamental Qualifying Examinations, the student will select a Dissertation Advisor, who will convene a Specialty Examination Committee to author a Specialty Examination. Passing two Fundamental Qualifying Examinations and the Specialty Examination at the Ph.D. level is considered passing the Doctoral Qualifying Examination.

Dissertation (16 Credit Hours Minimum)

- MAT 7980 Dissertation: Doctoral **Credit Hours: 2-19 (16 credit hours)**

Students admitted to doctoral candidacy are required to take at least 16 hours in MAT 7980 Dissertation: Doctoral, with a minimum of 6 credits of dissertation hours accumulated during each previous 12-month period (previous 3 terms, e.g. Fall, Spring, Summer) until the degree is granted.
The candidate will conduct original and significant research which is worthy of publication. The research will be described in the doctoral dissertation. Research towards the dissertation typically forms the major part of the work required for the Ph.D. in Mathematics. The Doctoral Dissertation Defense shall consist of an oral presentation of the research in the dissertation to the supervisory committee.

Handbook

The student is responsible for familiarizing themselves with the additional program requirements and expectations listed in the program handbook, particularly those concerning timely progress.

Statistics, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 27.0501
Dept. Code: MTH
Major/College Codes: STC AS
Approved: 2006

Contact Information

College: Arts and Sciences
Department: Mathematics and Statistics

Contact Information: http://www.grad.usf.edu/majors

The Department of Mathematics and Statistics offers a Ph.D. in Mathematics with concentrations in Pure and Applied mathematics and in Statistics. The major provides the experience and knowledge to understand and appreciate prior accomplishments in the discipline and develops the skills necessary for a meaningful contribution to the intellectual advancement and applications of the discipline. It prepares its graduates to pursue long-term careers in their field by providing solid and cutting-edge knowledge. Graduates receive training that enables them to conduct independent research and write research papers publishable in peer-reviewed journals of their discipline, as well as a technical education enabling them to take on leading positions in a modern economy.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Students should have at least 3.50 GPA average in courses taken during the last two years of their undergraduate or graduate studies.
- Students must have a BA or BS in one of the following areas: Statistics, Mathematics, Physical Sciences, Engineering, or Business.
- Students who expect to specialize in graduate work in statistics are advised to study as much mathematics as possible during their undergraduate years. Some interdisciplinary experience in natural sciences, engineering, economics, or psychology is also highly desirable. Students who do not have at least three semesters of successful course work in calculus will be required to complete additional courses in mathematics before being admitted. Prior course work in intermediate analysis, advanced calculus, and in statistics is strongly recommended, but not mandatory.
- At least a 55th percentile Quantitative score on the GRE; Verbal and Analytic Writing scores on the GRE are also considered. The University of South Florida and the Department of Mathematics and Statistics encourage applications from qualified individuals with disabilities and qualified individuals from all cultural, racial, religious, ethnic, and gender groups, and sexual orientations in accordance with all university regulations.

Other Information

The most recent supplementary documents for Statistics graduate students, "THE HANDBOOKS FOR BOTH M.A. AND Ph.D. GRADUATE STUDENTS IN STATISTICS/PROBABILITY PROGRAMS," at the Department of Mathematics and Statistics, University of South Florida, Tampa, Florida, USA, dated October 2007 (revised October 2016) are available at the following websites:

http://math.usf.edu/grad/stats/ma/
http://math.usf.edu.grad.stats.Ph.D./

Prospective graduate students in Statistics are welcome to read the information in the Handbooks. In addition, a HARD COPY OF THESE HANDBOOKS will be provided to graduate students at the time of their FIRST time academic advisement process.

Curriculum Requirements

Total Minimum Hours 30 hours

Core – 15 hours
Electives – 15 hours

Core Requirements

Sequences:

The student must earn a 3.00 average in Statistics Methods I and II and the student must earn a 3.00 average in Mathematical Statistics I, Mathematical Statistics II, and Linear Statistical Models.

- STA 5166 Statistical Methods I **Credit Hours: 3**
- STA 6167 Statistical Methods II **Credit Hours: 3**
- STA 5326 Mathematical Statistics I **Credit Hours: 3**
- STA 6327 – Mathematical Statistics II **Credit(s): 3** (proposed course)
- STA 6208 Linear Statistical Models **Credit Hours: 3**

Electives:

- STA 5446 Probability Theory I **Credit Hours: 3**
- STA 6447 Probability Theory II **Credit Hours: 3**
- STA 5526 - Nonparametric Statistics **Credit(s): 3**
- STA 6746 Multivariate Analysis **Credit Hours: 3**
- STA 6876 Time Series Analysis **Credit Hours: 3**
- MAT 6932 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Survival Analysis)
- STA 6206 Stochastic Processes **Credit Hours: 4**
- STA 6823 - Stochastic Dynamic Modeling **Credit(s): 3** (proposed course)
- MAT 6932 Selected Topics **Credit(s): 1-4 (3 credits for this program)** (Time Series Analysis II)
- MAT 6932 Selected Topics **Credit(s): 1-4 (3 credits for this program)** (Nonlinear Time Series Analysis)
- MAT 6908 Independent Study **Credit Hours: 1-19** (as indicated by professor)
- MAT 6932 Selected Topics **Credit(s): 1-4 (3 credits for this program)**

Non-Thesis/Thesis

Students opt for either a non-thesis research project or thesis.

Non-Thesis Research Project (3 Credit Hours Minimum)

Completing at least 3 hours of Research Project work which is counted towards the 30 credit-hours requirement.

- Taking the course MAT 6908 Independent Study (Non-Thesis Option) and presenting a paper exemplifying the creative component of the major. This may be, but is not restricted to, a literature review, a report of independent research, design and (or) analysis of a sample survey or experiment, a report on consulting with research workers outside the department, or a report on the construction of a computer program requiring statistical numerical analysis.
- Passing one Qualifying Exam on Statistical Methods or Math Statistics at master's level.

Thesis Option (6 Credit Hours Minimum)

Students may opt to complete a thesis in lieu of 6 hours of electives.

A master's thesis is a scholarly composition that demonstrates the ability of the author to do independent and creative work. It explores in some depth a problem or issue related to the major field of study. Although considerable variations in format and style are acceptable, precise expression, logical construction, and meticulous attention to detail are essential. A thesis in statistics should deal with some aspect of statistical methodology or theory, or the development of statistical models for a class of problems related to a scientific question. While most theses will include a case study or example that involves scientific data, the analysis of a particular data set does not, alone, constitute the level of scholarly accomplishment required for a thesis.

- MAT 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**

Student's Graduate Committee

Students working toward a thesis will have the benefit of a committee of members of the graduate faculty, appointed by the graduate director/departmental chairperson and approved by the Dean of the College. The Committee will approve the course of study for the student and plan for research, supervise the research and any comprehensive qualifying exams, and read and approve the thesis for content and format.

- Successful Oral Defense of the Thesis
- Final Submission of Approved Thesis.

Other Requirements

A candidate must complete at least 30 credit hours for a MA. At least twenty hours must be in formal regularly scheduled course work, ten of which must be at the 6000-level. The student must maintain a 3.00 average to remain a candidate for a degree. Failure to do this will result in being placed on probation. A letter from the major professor is required to remove a student from probation after he/she regains a 3.00 average. Department may waive some of the course requirements for those students who have taken equivalent course work at another institution. In such instances, students will be required to complete other coursework to meet the minimum hours required for the degree.

Comprehensive Examination

Graduation from the Master's major also requires the completion of either a thesis or both written and oral examinations.

Written Comprehensive Examination - The written exam is designed to cover material presented during the first year of graduate work. The purpose of the exam is to make sure the students have reviewed their first year's work before starting the second year and to point out weaknesses which should be overcome during their second year in order to graduate. Students are expected to pass this exam in at most two attempts. More specifically, the material for the above

examination will be taken primarily from the following sequences of courses Semester 1: STA 5166 Statistical Methods I and STA 5326 Mathematical Statistics I; Semester 2: STA 6167 Statistical Methods II and MAT 6326 Mathematical Statistics II, and STA 6208 Linear Statistical Models.

Mathematics Graduate Certificate

Certificate Code: XMI
Approved 200601

Regional community colleges expect their faculty to have a strong background and credentials in mathematics at the graduate level. This program provides prospective and current college instructors with the experience and knowledge to understand and value prior accomplishments in the mathematical sciences, while supplying the training to develop the skills necessary for a meaningful contribution in college-level education.

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. Applicants must hold an earned bachelor's degree from a regionally accredited institution in mathematics or a related field.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

The certificate program should be completed within three years.

Pre-Requisites

None

Curriculum Requirements (18 Credit Hours)

A student may petition to substitute additional mathematics courses for those listed as certificate courses. Course substitutions must be approved by the certificate director and the Office of Graduate Studies.

- MAA 5306 Introduction to Real Analysis **Credit Hours: 3**
- MAA 5307 Real Analysis I **Credit Hours: 3**
- MAA 5405 Applied Complex Analysis **Credit Hours: 3**
- MAD 5305 Graph Theory **Credit Hours: 3**

- MAD 6206 Combinatorics I **Credit Hours: 3**
- MAD 6207 Combinatorics II **Credit Hours: 3**
- MAS 5145 Advanced Linear Algebra **Credit Hours: 3**
- MAS 5215 Number Theory **Credit Hours: 3**
- MAS 5311 Algebra I **Credit Hours: 3**
- MAS 6312 Algebra II **Credit Hours: 3**
- MAT 5932 Selected Topics **Credit Hours: 1-4**

Symbolic Computations in Mathematics (3 Credit Hours)

- MHF 5402 The Early History of Mathematics **Credit Hours: 3**
- MHF 5405 History of Modern Mathematics **Credit Hours: 3**
- MAP 5345 Applied Partial Differential Equations **Credit Hours: 3**
- MTG 5316 Topology I **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Statistical Data Analysis Graduate Certificate

Certificate Code: XSA
Approved 200408

There is a significant need to certify professional statistical analysts in various fields, such as the social, medical, physical, and biological sciences, engineering, business, and other industries. Individuals who have their baccalaureate or graduate degrees from these fields, and who find it necessary to design experiments, collect and analyze data, and interpret and make decisions based on ordinary and complex statistical techniques and methods would benefit from this certificate. This interdisciplinary program fulfills the basic educational training required to address these professional activities.

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

The applicant must have an earned bachelor's degree from a regionally accredited academic institution with a minimum 3.0 GPA and:

- A minimum score of 1000 on the GRE
- A minimum score of 650 on the quantitative portion of the GRE

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

The Certificate should be completed within five (5) semesters.

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

- STA 5166 Statistical Methods I **Credit Hours: 3**
- STA 5326 Mathematical Statistics I **Credit Hours: 3**
- STA 5526 Non-Parametric Statistics **Credit Hours: 3**
- STA 6167 Statistical Methods II **Credit Hours: 3**

- MAT 6908 Independent Study **Credit Hours: 1-19**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Physics

Physics (Applied Physics), Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 72 post-bachelor's; 45 post-master's
Level: Doctoral
CIP Code: 40.0801
Dept. Code: PHY
Major/College Codes: APD AS
Approved: 1999

Concentration (optional):
Medical Physics (MDP)

Contact Information

College: Arts and Sciences
Department: Physics

Contact Information: http://www.grad.usf.edu/majors

The Department of Physics at the University of South Florida expresses an inclusive vision of applied physics. Some of us collaborate with engineers, others with mathematicians. In between, we always keep in mind the applications both of physics and of the results of our research. Applied Physics seeks both fundamental knowledge and new ideas that benefit society. Our research strengths include (but are not limited to) materials science, solid-state and condensed-matter physics, computational physics, biophysics, spectroscopy, and optics. Our graduates find employment in academia, national laboratories, hospitals, finance, and industry.

Accreditation
The Ph.D. degree program in "Applied Physics with an emphasis in medical-physics" has been accredited since 2015 by the Commission on the Accreditation of Medical Physics Education Programs, CAMPEP.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- three letters of recommendation
- a statement of purpose
- GRE General Test scores required, GRE Physics Subject Test scores recommended.

Applicants for admission to the Ph.D. program must indicate whether they are requesting the medical-physics concentration option.

Students Entering with Prior Master's Degrees from Other Institutions
Students entering with a prior master's degree from an institution other than USF must complete a minimum of 45 credit hours. The Director of Graduate

Studies will evaluate coursework and may waive specific requirements with the substitution of other approved graduate coursework. However, at least six structured courses (18 credit hours) approved by the Director of Graduate Studies must be completed at USF in a discipline related to the Ph.D. Degree.

Curriculum Requirements

Total Minimum Hours: 72 credit hours post-bachelor's

Core Requirements - 15 Credit Hours
General Option or Concentration Option - 18 Credit Hours
Other Courses - 15 Credit Hours
Dissertation - 24 Credit Hours

For students entering with a prior non-USF master's degree:
Total Minimum hours: 45 Credit Hours post-master's

Core Requirements - 15 Credit Hours
Additional Structured courses - 3 Credit Hours
Industrial Practicum or Medical Option - 3 Credit Hours
Dissertation Research - 24 Credit Hours

Note: the student entering with a prior master's degree may need more than 45 credit hours to satisfy all competencies.

Core Courses (15 Credit Hours)

- PHZ 5115 Methods of Theoretical Physics I **Credit Hours: 3**
- PHY 6346 Electromagnetic Theory I **Credit Hours: 3**
- PHY 6645 Quantum Mechanics I **Credit Hours: 3**
- PHY 6646 Applied Quantum Mechanics **Credit Hours: 3**
- PHY 6536 Statistical Mechanics **Credit Hours: 3**

Students entering with a prior master's degree from an institution other than USF must complete a minimum of 45 credit hours. The Director of Graduate Studies will evaluate coursework and may waive specific requirements with the substitution of other approved graduate coursework. However, at least six structured courses (18 credit hours) approved by the Director of Graduate Studies must be completed at USF in a discipline related to the Ph.D. Degree.

General Option or Concentration

Students complete either the General Option or the Concentration.

General Option (18 Credit Hours)

Laboratory and Computer Experience (3 Credit Hours Minimum)

Candidates for the Ph.D. must demonstrate both laboratory and computational experience. In many cases, one or the other requirement will be satisfied through dissertation research.

Laboratory Experience: 0–1 Classes

This may be met, for example, by submitting an experimental thesis or dissertation, by an approved graduate-level elective; or through sufficiently rigorous relevant experience (e.g., prior courses, industrial employment, etc.). Contact the department for a current list of approved courses.

Computational Experience: 0–1 Classes

This may be met, for example, by an approved graduate-level elective, submitting a computational thesis or dissertation, or through sufficiently rigorous relevant experience (e.g., prior graduate or undergraduate courses, industrial employment, etc.). Contact the department for a current list of approved courses.

Electives (12 Credit Hours)

At least an additional four (4) graduate-level classes, of which at least two (2) are in Physics graduate-level classes (excluding research and seminars) not used to fulfill other requirements. Contact the department for a current list of approved courses.

Industrial Practicum (3 Credit Hours)

- PHZ 7940 Industrial Practicum **Credit Hours: 3**

Medical-Physics Concentration Option (MDP) (18 Credit Hours)

The Concentration is administered jointly by the Department of Physics of the University of South Florida and the Medical Physics Faculty Group of the Moffitt Cancer Center.

Students in the medical-physics concentration must perform medical physics research leading to a dissertation and a minimum of two papers submitted to peer- reviewed journals before graduation. In addition, the following courses are required:

- PHY 6938 Selected Topics in Physics **Credit Hours: 1-10**

Radiation Physics and Dosimetry (3 Credit Hours) (proposed PHZ 6736)
Radiobiology for Physicists (3 Credit Hours) (proposed PHZ 6730)
Radiation Therapy Physics (3 Credit Hours) (Proposed RAD 6628)

- EEL 6935 Selected Electrical Topics **Credit Hours: 1-3**

Biomedical Image Processing (3 Credit Hours)

- PHC 7935 Special Topics in Public Health **Credit Hours: 1-3 (3 credits for this program)**
- GMS 6605 Basic Medical Anatomy **Credit Hours: 3**

Other Courses - 15 Credit Hours

A student must complete other coursework, which may include additional electives or seminars as well as Directed Research (PHY 7910), to meet the minimum of 72 credit hours (post-bachelor's degree).

Doctoral Qualifying Examination:

The Doctoral Qualifying Examination consists of two parts: The Credentials Certification and the Dissertation Proposal. Following successful completion of these two parts, the student may submit the paperwork for doctoral candidacy. The student's presentation of the Dissertation Proposal may occur at any time after successful completion of the Credentials Certification.

- *Credentials Certification*

The Student, in consultation with his/her research advisor, will assemble a supervisory committee consistent with the rules of the Office of Graduate Studies. It

is the responsibility of the supervisory committee to evaluate the student's academic and research accomplishments and potential according to departmental standards, and if these are met, to certify that the student may proceed to the next step. Contact the Department for details.

- *Dissertation Proposal –*

To become a Ph.D. Candidate, the student must present a written dissertation proposal and successfully defend that proposal to the supervisory committee. Contact the Department for details.

Dissertation (24 Credit Hours)

- PHY 7980 Dissertation: Doctoral **Credit Hours: 2-12 (2-9 credits for this program)**

The candidate will conduct original and significant research, describe that research and the results in a doctoral dissertation and defend that dissertation in an oral presentation to the supervisory committee. The defense is open to the public and must be scheduled according to the regulations of the Office of Graduate Studies.

Physics, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 40.0801
Dept. Code: PHY
Major/College Codes: PHY AS
Approved: 1965

Contact Information

College: Arts and Sciences
Department: Physics

Contact Information: http://www.grad.usf.edu/majors

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- three letters of recommendation
- a statement of purpose
- GRE General Test scores required, GRE Physics Subject Test scores recommended.

Curriculum Requirements

Students admitted to the graduate major in Physics, will consult with the Physics Director of Graduate Studies, who will be the student's course advisor and monitor the student's progress. After a decision has been made concerning the student's academic goals, the duties of graduate advising will be assumed by the major professor and the supervisory committee appointed by the department chairperson. In keeping with the student's academic goals, the supervisory committee will determine the appropriate course of study and examinations required for graduation for both the thesis and non-thesis options.

Total Minimum Hours: 30 credit hours

Core – 9 Credit Hours
Electives 12 Credit Hours minimum
Thesis / Non-thesis – 9 Credit Hours minimum

Core Requirements (9 Credit Hours)

- PHZ 5115 Methods of Theoretical Physics I **Credit Hours: 3**
- PHY 6346 Electromagnetic Theory I **Credit Hours: 3**
- PHY 6645 Quantum Mechanics I **Credit Hours: 3**

Electives (12 Credit Hours)

Students complete at least twelve hours, of which at least two courses (6 hours) must be within physics.
Contact the department for a current list of approved electives.

Thesis/Non-Thesis (9 Credit Hours)

Students select either the thesis or non-thesis option:

Non-Thesis Option

Students in the non-thesis option take an additional 9 hours of graduate electives. The remaining nine credit hours may be earned through a combination of approved graduate-level electives, approved graduate seminars, or directed research.

Thesis Option

- PHY 6971 Thesis: Master's **Credit Hours: 2-12**

PHY 7910 Directed Research hours may satisfy up to 50% of the thesis-hour requirement.

Laboratory or Computing Experience

The student, as part of their elective work or thesis, or through previous course work, should demonstrate either laboratory or computational experience.

Comprehensive Exam

The Thesis defense is used in lieu of the comprehensive exam. Non-thesis students complete a written exam.

Department of Psychology

Psychology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 50 (Post-Masters); 80 (Post Bachelors)
Level: Doctoral
CIP Code: 42.0101
Dept. Code: PSY
Major/College Codes: PSY AS
Approved: 1971

Concentrations:

Clinical Psychology (PSC)
Cognition, Neuroscience, & Social Psychology (PCN)
Industrial-Organizational Psychology (PSI)

Contact Information

College: Arts and Sciences
Department: Psychology

Contact Information: http://www.grad.usf.edu/majors

The Psychology Department graduate major is divided into three broad concentrations: Clinical, Cognition, Neuroscience, & Social Psychology, and Industrial-Organizational. Each of these areas offers Ph.D. level training in the following areas of special expertise:

Clinical
Psychopathology, Psychological Assessment and Interventions, Health Psychology, Addictive Behaviors, Clinical Child Psychology, Clinical Neuropsychology.

Cognition, Neuroscience, & Social Psychology
Behavioral Neuroscience, Cognition, Judgment and Decision Making, Development, Memory, Perception, Social. In addition, with faculty in Communication Sciences and Disorders, the CNS faculty offers a specialization in Speech/Language/Hearing Sciences.

Industrial-Organizational
Selection, Training and Evaluation of Organization Members, Job Analysis, Motivation and Satisfaction, Occupational Health Psychology, Leadership, Career Development, Work-Family.

Methodological offerings across areas include Research Design and Statistics, Regression, Analysis of Variance, Psychometrics, Factor Analysis, Meta-analysis, Structural Equation Modeling.

Accreditation:
Clinical Program is accredited by American Psychological Association, Psychological Clinical Sciences Accreditation System, and member of the Academy of Psychological Clinical Science.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below. See Department website for full instructions at http://psychology.usf.edu/grad/admission/adminreq/

- a statement of purpose
- a Research Interests and Faculty Matches Form (http://psychology.usf.edu/forms/ResearchInterest.aspx)
- three letters of recommendation
- a GRE Score Report with a strong preference for GRE V and Q scores each at the 50th percentile or better
- a GPA Worksheet (http://www.grad.usf.edu/inc/linked-files/gpa.pdf) with an upper-level undergraduate GPA of 3.40 or better.

Curriculum Requirements

Post-Bachelor's - Total Minimum Hours: 80 hours

Students must successfully complete all requirements noted in the Catalog section for the M.A. in Psychology, or its equivalent, with a minimum GPA of 3.00. In addition, students must successfully complete the following post-Masters requirements. The 30 hours from the Master's degree is then added to the post-Masters minimum of 50 hours for the 80 hour total.

Post-Master's – Total Minimum Hours: 50 hours

Individual concentrations may require more hours for accreditation. A minimum GPA of 3.00 is required for all courses within the Ph.D. Degree

Core – Completed as part of the Masters requirements
Doctoral Concentration – 30 hours minimum
Additional Courses – 8 hours
Dissertation – 12 hours minimum

Concentration Requirements

Students apply to and enroll in one of the following concentrations:

Clinical Psychology (18 Credit Hours)

- SOP 6068 Personality and Social Psychology **Credit Hours: 3** *(Social Psychology)*
- EXP 6608 Cognitive Psychology **Credit Hours: 3**

Select one of the following:

- EXP 7099 Graduate Seminar in Experimental Psychology **Credit Hours: 1-3**

The Nature of Emotion (3 Credit Hours)

- CLP 7379 Graduate Seminar in Clinical-Community Psychology **Credit Hours: 1-3** *Emotion and Its Disorders (3 Credit Hours)*

Select one of the following:

- PSB 6056 Physiological Psychology **Credit Hours: 3**
- CLP 6937 Topics in Clinical Psychology **Credit Hours: 1-3**

Human Neuropsychology/Cognitive Neuroscience (3 Credit Hours)

- PSY 6946 Practicum and Internship in Clinical Psychology **Credit Hours: 1-15**

Cognition, Neuroscience, and Social Psychology (6 Credit Hours)

A minimum of two of the following, or alternative graduate advanced courses or seminars, (in addition to the Masters requirements), selected in consultation with major professor:

- EXP 6608 Cognitive Psychology **Credit Hours: 3**
- PSB 6056 Physiological Psychology **Credit Hours: 3**
- SOP 6068 Personality and Social Psychology **Credit Hours: 3**
- PPE 6058 Personality **Credit Hours: 3**
- EXP 7099 Graduate Seminar in Experimental Psychology **Credit Hours: 1-3** *The Nature of Emotion (3 Credit Hours)*

Judgment & Decision Making (3 Credit Hours)
The Self (3 Credit Hours)

Industrial-Organizational Psychology Concentration (21 Credit Hours)

A minimum of seven of the following, or alternative graduate courses, selected in consultation with major professor:

- INP 7937 Graduate Seminar in Industrial-Organizational Psychology **Credit Hours: 1-3** *Psychology and Technology (3 Credit Hours)*

Work and Family (3 Credit Hours)
Performance Measurement/Criterion Development (3 Credit Hours)
Occupational Health Psychology (3 Credit Hours)
Job Attitudes (3 Credit Hours)
Assessment Centers (3 Credit Hours)
Teams (3 Credit Hours)

Tools of Research:

Students complete tools of research in the area of the concentration:

Clinical (6 Credit Hours)

One of the following:

- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4 (3 credits for this program)**
- GEY 6403 Multivariate Statistical Analysis for Aging Research **Credit Hours: 3**

One of the following:

- PSY 6217 Research Methods and Measurement **Credit Hours: 2-4** *Psychometrics (4 Credit Hours)*
- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**

Cognition, Neuroscience, and Social Psychology Research/Elective Courses (9 Credit Hours)

A minimum of three of the following, or alternative graduate methods courses, selected in consultation with major professor:

- PSY 6217 Research Methods and Measurement **Credit Hours: 2-4** *Psychometrics (4 Credit Hours)*

Meta-Analysis (3 Credit Hours)

Bayesian Statistics I (3 Credit Hours)
Bayesian Statistics II (3 Credit Hours)

- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**
- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4 (3 credits)**
- GEY 6403 Multivariate Statistical Analysis for Aging Research **Credit Hours: 3**

Industrial-Organizational Psychology (6 Credit Hours)

A minimum of two of the following, or alternative graduate methods courses, (in addition to the graduate methods courses from the Masters requirements), selected in consultation with major professor:

- PSY 6217 Research Methods and Measurement **Credit Hours: 2-4 (3 credits for this program)** (Meta-Analysis)
- PSY 6217 Research Methods and Measurement **Credit(s): 2-4 (3 credits for this program)** (Bayesian Statistics I)
- PSY 6217 Research Methods and Measurement **Credit(s): 2-4 (3 credits for this program)** (Bayesian Statistics II)
- PSY 6217 Research Methods and Measurement **Credit(s): 2-4 (3 credits for this program)** (Experimental Design & ANOVAI)
- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**
- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4 (3 credits for this program)**
- GEY 6403 Multivariate Statistical Analysis for Aging Research **Credit Hours: 3**

Electives: (3 to 12 Credit Hours)

Clinical Elective Courses (12 Credit Hours)

- Choice of at least three other graduate courses, chosen in consultation with major professor **Credit(s): 12**

Cognition, Neuroscience, and Social Psychology (9 Credit Hours)

A minimum of nine hours from the following, or acceptable alternatives, selected in consultation with major professor:

- PSY 6907 Independent Study **Credit Hours: 1-19 (0-9 credits for this program)**
- PSY 7908 Directed Readings in Psychology **Credit Hours: 1-15 (0-9 credits for this program)**
- PSY 7918 Directed Research **Credit Hours: 1-19 (0-9 credits for this program)**

Industrial-Organizational Psychology (3 Credit Hours)

Research/Elective Courses - A minimum of three hours from the following, or acceptable alternatives, selected in consultation with major professor:

- PSY 6907 Independent Study **Credit Hours: 1-19 (0-3 credits for this program)**
- PSY 7908 Directed Readings in Psychology **Credit Hours: 1-15 (0-3 credits for this program)**
- PSY 7918 Directed Research **Credit Hours: 1-19 (0-3 credits for this program)**

Internship and Specialization Requirements:

External Internship

Students in the Clinical Psychology Concentration are required to complete a one-year, full-time, APA-approved (or CPA approved) internship in a training facility approved by the Department.

Specialization (6 Credit Hours)

Students in the **Cognition, Neuroscience, and Social Psychology Concentration** are required to complete a specialization. A minimum of two three-credit graduate courses (often from outside of the concentration or department), selected in consultation with major professor.

Qualifying Examination:

Successful completion of the Ph.D. Comprehensive Qualifying Exam (CL, CNS, IO) or major area paper (CL, CNS) for Admission to Candidacy

Dissertation: (12 Credit Hours Minimum)

- PSY 7980 Dissertation: Doctoral **Credit Hours: 2-19 (12 credits minimum for this program)**

Department Handbook

Additional information is available in the Graduate Student Handbook: http://psychology.usf.edu/policies/students.aspx

Psychology, M.A.

Degree Information

Priority Admission Application Deadlines: www.grad.usf.edu/majors

Students are not admitted to a terminal M.A. degree in Psychology. See deadlines for Ph.D.

Minimum Total Hours: 30
Level: Masters
CIP Code: 42.0101
Dept. Code: PSY
Major/College: PSY AS
Approved: 1966

Concentrations:

Clinical Psychology (PSC)
Cognition, Neuroscience, and Social Psychology (PCN)
Industrial-Organizational Psychology (PSI)

Contact Information

College: Arts and Sciences
Department: Psychology

Contact Information: www.grad.usf.edu/majors

The graduate faculty of the Psychology Department is divided into three broad concentrations: Clinical, Cognition, Neuroscience, & Social Psychology, and Industrial-Organizational. Each of these areas offers Ph.D. level training in the following areas of special expertise.

Clinical – Psychopathology, Psychological Assessment and Interventions, Health Psychology, Addictive Behaviors, Clinical Child Psychology, Clinical Neuropsychology.

Cognition, Neuroscience, & Social Psychology – Behavioral Neuroscience, Cognition, Judgment and Decision Making, Development, Memory, Perception, Social. In addition, with faculty in Communication Sciences and Disorders, the Cognitive and Neural Sciences faculty offer a specialization in Speech/Language/Hearing Sciences.

Industrial-Organizational – Selection, Training and Evaluation of Organization Members, Job Analysis, Motivation and Satisfaction, Occupational Health Psychology, Leadership, Career Development, Work-Family.

Methodological offerings across areas include Research Design and Statistics, Regression, Analysis of Variance, Psychometrics, Factor Analysis, Meta-analysis, Structural Equation Modeling.

Accreditation:
Clinical Program accredited by the American Psychological Association, Psychological Clinical Sciences Accreditation System, and member of the Academy of Psychological Clinical Science.

Admission Information

Not a terminal MA. - Admission only through Ph.D.; see Ph.D. Requirements.

Curriculum Requirements

The Department of Psychology does not admit students seeking a terminal M.A. degree in Psychology. Additional information is available in the Graduate Student Handbook: http://psychology.usf.edu/policies/students.aspx

Total Minimum Hours: 30

Individual concentrations may require more than 30 hours for accreditation. Students are required to earn B- or better for each required course

Core – 7 Credit Hours
Concentrations – 17 Credit Hours minimum
Thesis – 6 Credit Hours

Core Requirements (7 Credit Hours)

- PSY 6217 Research Methods and Measurement **Credit Hours: 2-4** *Regression and ANOVA (4 Credit Hours)*
- PSY 6065 Introduction to Advanced Psychology **Credit Hours: 1-4 (3 credit hours)**

Concentration Requirements

Students select from the following Concentrations:

Clinical Psychology Concentration (19 Credit Hours Minimum)

Required Courses:

- CLP 6166 Psychopathology **Credit Hours: 3**
- CLP 6438 Psychological Assessment: Theory and Research **Credit Hours: 1-4 (3 credits for this program)**
- CLP 7379 Graduate Seminar in Clinical-Community Psychology **Credit Hours: 1-3 (3 credits for this program)** (Evidence-Based Assessment)
- CLP 7188 Clinical Psychology Interventions **Credit Hours: 1-4 (3 credits for this program)** (Theory and Research)
- PSY 6946 Practicum and Internship in Clinical Psychology **Credit Hours: 1-15 (2 credits for this program)** (Clinical Skills for Psychological Intervention)
- PSY 7931 Seminar in Ethics and Professional Problems **Credit Hours: 2**

In addition:

Students select at least one of the following, chosen in consultation with the major professor

- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4 (3 credits for this program)**
- GEY 6403 Multivariate Statistical Analysis for Aging Research **Credit Hours: 3**
- PSY 6217 Research Methods and Measurement **Credit Hours: 2-4 (4 credits for this program)** (Psychometrics)

- PSY 6217 Research Methods and Measurement **Credit(s): 2-4 (3 credits for this program)** (Experimental Design & ANOVA)
- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**
- SOP 6058 - Personality and Social Psychology **Credit(s): 3** (Social Psychology)
- SOP 6068 Personality and Social Psychology **Credit Hours: 3**
- EXP 6608 Cognitive Psychology **Credit Hours: 3**
- EXP 7099 Graduate Seminar in Experimental Psychology **Credit Hours: 1-3 (3 credits for this program)** (The Nature of Emotion)
- CLP 7379 Graduate Seminar in Clinical-Community Psychology **Credit Hours: 1-3 (3 credits for this program)** (Emotion and its Disorders)
- PSB 6056 Physiological Psychology **Credit Hours: 3**
- CLP 6937 Topics in Clinical Psychology **Credit Hours: 1-3 (3 credits for this program)** (Human Neuropsychology/Cognitive Neuroscience)
- One other elective Method/Statistics course, chosen in consultation with major professor **Credit(s): 3**

Cognition, Neurosciences, & Social Psychology (CNS) Concentration (17 Credit Hours Minimum)

Required Courses

- PSY 6217 Research Methods and Measurement **Credit Hours: 2-4 (4 credits for this program)** (Experimental Design & ANOVA)

A minimum of two of the following:

- EXP 6608 Cognitive Psychology **Credit Hours: 3**
- PSB 6056 Physiological Psychology **Credit Hours: 3**
- SOP 6068 Personality and Social Psychology **Credit Hours: 3**

A minimum of two three-credit CNS seminars:

Students in the CNS concentration may be allowed to substitute advanced three-hour courses in cognition, neuroscience, or social psychology for one or more of the content requirements with the written permission of the CNS Area Director.

- EXP 7099 Graduate Seminar in Experimental Psychology **Credit Hours: 1-3 (3 credits for this program, taken twice for a total of 6 credits)**

A minimum of at least one of the following:

- PSY 6917 Directed Research **Credit Hours: 1-19** (1 credits for this program)
- PSY 6907 Independent Study **Credit Hours: 1-19** (1 credits for this program)

Industrial-Organizational Psychology Concentration (18 Credit Hour Minimum)

- PPE 6058 Personality **Credit Hours: 3**
- INP 6935 Topics in Industrial-Organizational Psychology **Credit Hours: 3**

(Personnel Psychology)

- INP 6935 Topics in Industrial-Organizational Psychology **Credit(s): 3** (Organizational Psychology)
- PSY 7931 Seminar in Ethics and Professional Problems **Credit Hours: 2 (3 credits for this program)**
- PSY 6217 Research Methods and Measurement **Credit Hours: 2-4 (4 credits for this program)**
- INP 6935 Topics in Industrial-Organizational Psychology **Credit(s): 3** (Organizational Research Methods)

Comprehensive Exam

Department Handbook

Procedures and guidelines for the different concentrations are described in detail in the Psychology Graduate Student Handbook: http://psychology.usf.edu/policies/students.aspx.

School of Geosciences

Environmental Science and Policy, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 3.0104
Dept. Code: SGS
Major/College Codes: ESP AS
Approved: 1999

Contact Information

College: Arts and Sciences
Department: Geography, Environment and Planning

Contact Information: http://www.grad.usf.edu/majors

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE
- Statement of interests, documenting capabilities, achievements, goals and intended area of academic and research concentration in the Department if admitted.
- At least three (3) letters of recommendation from persons familiar with the applicant's achievements, capabilities, and potential, including two persons qualified to judge the applicant's academic performance.
- Program may have additional requirements; check before applying. It is strongly recommended that the applicant contact the Department's Graduate Director for guidance in applying to the M.S.

Curriculum Requirements

Total Minimum Hours: 36

Core – 6 Credit Hours
Additional required courses - 9 Credit Hours Minimum
Electives – 12 Credit Hours
Non-Thesis/Thesis – 9 Credit Hours

Core Requirements (6 Credit Hours)

- GEO 6116 Perspectives on Environmental Thought **Credit Hours: 3**
- EVR 6922 ESP Capstone Seminar **Credit Hours: 3**

(taken after a minimum of 24 major hours have been completed)

Additional Required Courses (9 Credit Hours Minimum)

Applications/Tools: Students select one course whose primary objective is mastery of research tools or methods with applications to research in the environmental field, subject to the approval of the Graduate Director and the student's Supervisory Committee. Courses that meet these criteria include:

- GIS 5049 GIS for Non-Majors **Credit Hours: 3**
- GIS 6100 Advanced Geographic Information Systems **Credit Hours: 3**
- STA 5166 Statistical Methods I **Credit Hours: 3** (or other statistics course approved by the Graduate Director such as PCB 6456 or GEO 6166)
- PCB 6456 – Biometry I **Credit(s): 4**
- GEO 6166 Multivariate Statistical Analysis **Credit Hours: 3**

Students must also take two courses from the following list. At least one class must be an EVR Course.

- EVR 6934 Graduate Environmental Science, Policy, and Management Selected Topics **Credit Hours: 3**

(Varying Special Topics)

- EVR 6937 Seminar in Environmental Policy **Credit Hours: 3**

(Varying Special Topics)

- EVR 6216 Advances in Water Quality Policy and Management **Credit Hours: 3**
- EVR 6101 Geomorphology for Environmental Scientists **Credit Hours: 3**
- EVR 6408 Wildlife Ecology **Credit Hours: 3**
- GEO 6347 Natural Hazards **Credit Hours: 3**
- GEO 6288 Hydrological Systems **Credit Hours: 3**
- GEO 6286 Advances in Water Resources **Credit Hours: 3**
- GEO 6263 Soils Seminar **Credit Hours: 3**
- GEO 6217 Karst Geomorphology **Credit Hours: 3**
- GEO 6215 Geomorphology Seminar **Credit Hours: 3**
- GEO 6209C Physical Geography Seminar **Credit Hours: 3**
- GEO 6345 Technological Hazards and Environmental Justice **Credit Hours: 3**
- PHC 6303 Community Air Pollution **Credit Hours: 3**

Elective Requirements (12 Credit Hours)

Students complete 12 hours selected in the area of interest, in consultation with the major professor and supervisory committee. Students completing a Graduate Certificate may apply these hours toward the elective requirement, with approval. Students may complete their electives from the following areas, or other area approved by the department: Ecology, Environmental Policy and Management, Geology, Hydrogeology, Hazards Assessment and Migration, Urban Environment, Water Quality and Policy.

Research Requirements (9 Credit Hours)

The M.S. in ES&P is a research-oriented degree. Thesis track students complete a Thesis that constitutes an original scholarly contribution and is conducted under the direction of a Major Professor and a 3- member Faculty Supervisory Committee (of which the Major Professor serves as chair). Students should form their Supervisory Committee before completion of 18 credits of coursework, typically near the end of their first full year in the Major. Students complete a Thesis Proposal subject to approval of the Supervisory Committee typically early in the second year of studies. Students defend their Thesis in an oral presentation, and submit a written document for the approval of the Supervisory Committee, which is then submitted to the University as a requirement for earning the degree.

The research requirements include the following coursework, for a minimum total of 9 credit hours:

1. Directed Research (Thesis Preparation, EVR (6920): Students complete at least 6 credit hours of thesis research under the direct supervision of their major professor, typically during the second year of studies. After completion of all Core and Elective requirements, students remain enrolled in at least 2 credit hours per semester of EVR 6920 until the completion and submittal of the Thesis which completes the requirements for the degree. Throughout this period students must work in close cooperation with their major professor and Supervisory Committee, and provide the Committee a summary of progress at least once per semester.
2. Research Methods/Design Preparation: All students selecting the Thesis option will complete a research methods/design course (GEO 6970 Geographic Research Design – Research Methods in Geography). Other courses may be substituted for this requirement with the permission of the student's advisor and the Graduate Director.
3. EVR 6930 Research Colloquium in Environmental Science and Policy **Credit(s): 1**

Non-Thesis (9 Credit Hours)

In lieu of a thesis, students complete an additional 9 hours of electives.

Thesis Option (9 Credit Hours)

The thesis option is designed for students who wish to complete original research as part of their graduate studies. The thesis option is a viable option for all students. Those intending to continue graduate work to the Ph.D. level are strongly encouraged to complete a thesis.

Thesis track students complete a Thesis that constitutes an original scholarly contribution and is conducted under the direction of a Major Professor and a three-member Faculty Supervisory Committee (of which the Major Professor serves as chair). Students should form their Supervisory Committee before completion of 18 credits of coursework, typically near the end of their first full year in the Major. Students complete a Thesis Proposal subject to approval of the Supervisory Committee typically early in the second year of studies. Students defend their Thesis in an oral presentation, and submit a written document for the approval of the Supervisory Committee, which is then submitted to the University as a requirement for earning the degree.

Directed Research - 3 Credit Hours

- EVR 6934 Graduate Environmental Science, Policy, and Management Selected Topics **Credit Hours: 3**

Thesis Preparation (3 Credit Hours)

Students complete at least 6 credit hours of thesis research under the direct supervision of their major professor, typically during the second year of studies. After completion of all Core and Elective requirements, students remain enrolled in at least two (2) credit hours per semester of EVR 6934 Thesis Prep until the completion and submittal of the Thesis, which completes the requirements for the degree. Throughout this period students must work in close cooperation with their major professor and Supervisory Committee, and provide the Committee a summary of progress at least once per semester.

Research Methods/Design Preparation- 3 credit hours

- GEO 6970 Geographic Research Design **Credit Hours: 3**

All students selecting the Thesis option will complete a research methods/design course. Other courses may be substituted for this requirement with the permission of the student's advisor and the Graduate Director.

Research Colloquium - 1 Credit Hour

- EVR 6930 Research Colloquium in Environmental Science and Policy **Credit Hours: 1**

Thesis - 2 Credit Hours Minimum

- EVR 6971 Thesis: Master's **Credit Hours: 2-19**

Comprehensive Examination

The Exam can be completed only during the spring and fall Semesters. Students are encouraged to complete the Exam during the last semester of their coursework.

Thesis students are required to present his/her thesis research at a public thesis defense. As part of the thesis defense, an oral comprehensive exam is also administered. The defense and oral exam is scheduled and organized by the student's major professor, in consultation with the student's Supervisory Committee and the Graduate Director. As part of this process, a Presentations Form (available in the department office) needs to be completed one week prior to the defense date. A copy of the thesis must be made available in the department office one week prior to the defense for public review.

Non-thesis students are required to complete a six-hour long, written, open book, comprehensive exam, which typically consists of series of questions that are prepared by the examination committee. Except in circumstances where other arrangements have been made, the Graduate Director at the time of the exam serves as chair (or major professor). The exam must be completed no later than one semester after the student completes the coursework for the degree.

All non-thesis examinations will be scheduled for the same day each semester (i.e. all students will sit for the exam at the same time), the date being set by the Graduate Director. Students must coordinate with their major professors when they will take the exam. The answers to the questions are evaluated by the by the Examination Committee within two weeks of the exam. If the answer to any question is determined to be incorrect or incomplete, the student may be required to retake that portion of the exam in the form of an oral exam that is only open to the committee. Students are encouraged to complete the oral exam in the same semester they completed the first written exam.

If the student fails all portions of the exam, they will have one opportunity to retake the entire exam. This second exam must be completed no later than the semester after the student receives notification that a second exam is necessary. If it is determined that the student did not successfully complete his/her comprehensive exam after their second attempt, he/she will be dismissed from the Major.

Thesis Option:

1. The student is required to present his/her thesis research at a public thesis defense.
2. As part of the thesis defense, an oral comprehensive exam is also administered. The defense and oral exam is scheduled and organized by the student's major professor, in consultation with the student's Supervisory Committee and the Graduate Director. As part of this process, a Presentations Form (available in the department office) needs to be completed one week prior to the defense date.
3. The exam can be completed only during the spring and fall Semesters.
4. A copy of the thesis must be made available in the department office one week prior to the defense for public review.

Non-Thesis Option:

1. The examining committee will be comprised of the student's Supervisory Committee.
2. Non-thesis students are required to complete a six-hour long, written, closed book, comprehensive exam, which typically consists of series of questions that are prepared by the examination committee. Students are not allowed any outside materials during the exam, which is to be hand-written on paper supplied by the examination committee.
3. The exam can be completed during the spring or fall semesters, but not during the summer.
4. Students are encouraged to complete the exam during the last semester of their coursework. The exam must be completed no later than one semester after the student completes the coursework for the degree. You must be registered for two credits in that semester in the semester that the exam is completed.

5. All non-thesis examinations will be scheduled for the same day each semester (i.e. all students will sit for the exam at the same time), the date being set by the Graduate Director. Students must coordinate with their major professors when they will take the exam.
6. Questions are solicited and organized by the student's major professor in consultation with the student's examination committee.
7. The answers to the questions are evaluated by the student's Supervisory Committee within two weeks of the exam.
8. If the answer to any question is determined to be incorrect or incomplete, the student may be required to retake that portion of the exam in the form of an oral exam that is only open to the committee. Students are encouraged to complete the oral exam in the same semester they completed the first written exam.
9. If the student fails all portions of the exam, they will have one opportunity to retake the entire exam. This second exam must be completed no later than the semester after the student receives notification that a second exam is necessary.
10. If it is determined that the student did not successfully complete his/her comprehensive exam after their second attempt, he/she will be dismissed from the Major.

Geography and Environmental Science and Policy, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 60 (post-Master's); 90 (post-Bachelor's)
Level: Doctoral
CIP Code: 45.0799
Dept. Code: SGS
Major/College Codes: GEP AS
Approved: 2005

Contact Information

College: Arts and Sciences
Departments: School of Geosciences

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. degree in Geography and Environmental Science and Policy (GEP) is an interdisciplinary program, and its curriculum is designed around critical areas of geography and the environment. The GEP Program is designed to integrate fully the strengths of the Geography and the Environmental Science and Policy (ESP) Programs in the School of Geosciences (SGS) at the USF. Emphasis is placed on providing theoretical rigor and methodological skills, thereby enabling students to make significant and original research and policy contributions in an integrated interdisciplinary environment. In addition, the degree has a very strong applied component emphasizing working on solutions to real-world geographical and environmental problems. Through a commitment to quality interdisciplinary teaching, combined with research and hands-on learning opportunities, the GEP Doctoral Program in the SGS is dedicated to ensuring that students are well prepared for careers in academics, and private and public sectors.

Major Research Areas:
Geography, Environmental Science and Policy

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A Master's degree, or its equivalent, from an approved regionally accredited university with preparation in geography, environmental science and policy, or a related discipline. Highly qualified applicants can enter directly into the doctoral program from a Bachelor's degree but must complete a minimum of 90 hours prior to obtaining the Ph.D., including the required coursework in either the Geography or Environmental Science and Policy Master's majors.
- Graduate Record Exam (GRE)
- GPA at least 3.20 in upper division undergraduate and graduate credits

- A letter of intent. The letter should outline the applicant's specific academic interests and goals and identify faculty members whose interests align with that of the applicant.
- Three letters of recommendation. Arrange to have letters of recommendation sent to the Office of Graduate Admissions online prior to the application deadline. Prospective students should solicit the letters of recommendation from sources who are familiar with the applicant's academic/work history and performance. Signatures and letterheads are required for letters of recommendation.

Students Upgrading into the Doctoral Degree from the Master's Degree

After completing a minimum of one semester of course work, an admitted master's student may apply for the doctoral degree with the consent of his/her major professor (must be the major professor and not simply the initial advisor). When the student applies to the Ph.D. degree, the application is then reviewed by the Graduate Committee via the established application process, and recommendations are made regarding admission to the major and funding.

Curriculum Requirements

Total Minimum Hours: 60 hours post-Master's; 90 hours post- Bachelor's

Post-Master's (60 minimum hours)
Core Requirements - 6 Credit Hours

Additional Required Courses - 6 Credit Hours
Electives - 36 Credit Hours (Post-Master's) / 66 Credit Hours (Post-Bachelor's)
Dissertation – 12 hours

Core Requirements (6 Credit Hours)

- GEO 7021 Doctoral Dissertation Preparation **Credit Hours: 3**
- GEO 7606 Seminar in Urban Environments **Credit Hours: 3**

Additional Required Courses (6 Credit Hours)

Choose one of the following courses:

- GEO 6116 Perspectives on Environmental Thought **Credit Hours: 3**
- GEO 6058 Geographic Literature and History **Credit Hours: 3**

And select one of these methods courses:

- GIS 6100 Advanced Geographic Information Systems **Credit Hours: 3**
- GIS 6038C Remote Sensing **Credit Hours: 3**
- GEO 6119 Geographical Techniques and Methodology **Credit Hours: 3**
- GEO 6166 Multivariate Statistical Analysis **Credit Hours: 3**

Electives (36 Credit Hours)

36 credits (post-Master's); 66 credits (post-Bachelor's)

Students complete 36 (post-master's) or 66 (post-bachelor's) credit hours in the form of elective coursework related to their area of interest. A Minimum of nine (9) structured credit hours is required for students with a master's degree. Students entering the Ph.D. who have not completed a Master's Degree in either Geography or Environmental Science and Policy should expect to complete coursework equivalent to the requirements of one of those Masters, in addition to these nine (9) minimum structured credit hours. The student's Major Professor and Faculty Supervisory Committee will advise students on the selection of the proper mix of coursework and other study to support the agreed upon dissertation research. Students can include coursework from a variety of departments to

support the elective requirements, and students may choose to complete a Graduate Certificate in a particular field, from SGS or another department, as part of their studies.

Doctoral Qualifying Exam

As soon as the substantial majority of the course work is completed, the student must pass a written qualifying examination covering the subject matter in the major and related fields. This examination may be supplemented by an oral examination.

Dissertation and Directed Research (12 Credit Hours)

Directed Research hours shall not exceed 50% of the doctoral dissertation hour requirement. Directed research hours cannot retroactively be converted to dissertation hours.

- EVR 7980 Doctoral Dissertation Research **Credit Hours: 2-15**
- GEO 7980 Doctoral Dissertation Research **Credit Hours: 2-15**
- GEO 6918 Directed Research **Credit Hours: 1-19**

Other Requirements and Information:

Advising

When a student is admitted to the Major, the student, with the assistance of the Graduate Director, will have an initial advisor based upon mutual interests of the student and faculty member. The role of the advisor is to guide the student in selecting appropriate coursework for his/her program of study and to work with the student in developing research ideas and an eventual dissertation topic. In consultation with his/her advisor, the student will select a committee that will serve not only as the student's dissertation committee, but as the qualifying exam committee as well (See procedures for Academic Progress for SGS Ph.D. students).

Geography, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33 Thesis Option; 36 Non-Thesis Option
Level: Masters
CIP Code: 45.0701
Dept. Code: SGS
Major/College Codes: GPY AS
Approved: 1970

Concentrations:

Human Geography (USG)
Environmental Geography (EVG)
Geographic Information Science & Spatial Analysis (TGP)

Contact Information

College: Arts and Sciences
Department: Geography, Environment, and Planning

Contact Information: http://www.grad.usf.edu/majors

Geography is the study of the human-environment relationship either in a global or more regional context.

Human Geography studies the construction of space, place, and power. It encompasses the study of economic geographies (e.g., globalization and development), political geographies (e.g. geopolitical struggles and new social movements), and social and cultural geographies (e.g. identities and exclusions). Human geography is key to providing insights into contemporary spatial arrangements, including the role of cities within the global economy, locating urban-rural intersections in the production of uneven development, and how class, gender, and race shape struggles for social justice.

Environmental Geography links the study of nature and society and considers the ways in which conventional divisions between human and non-human (natural) worlds are bridged through the production of socio-natures. This understanding is crucial to explaining and ameliorating contemporary environmental problems, including the privatization of natural resources, inequalities in access to food and water, injustices associated with environmental hazards and undesirable land uses, and the role of human activities in spurring large-scale environmental change

GI Science and Spatial Analysis concentrates on the use of advanced geospatial technologies, and the development and use of spatial analysis methodologies, to applied research problems in human and environmental geography. A thorough understanding of such geospatial technologies as Remote Sensing, GIS, and GPS, as well as modern methods of spatial statistical analysis and emerging spatial analytical techniques such as agent-based modeling, is a critical aspect of developing appropriate approaches to the analysis of geographic data.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- At least two letters of recommendation
- Transcripts
- A letter of intent
- A graduate assistant application if the applicant is applying for a GA position.
- GRE is required

Curriculum Requirements

Total Minimum Hours – 33

Core – 6 Credit Hours
Additional Required Courses – 3 Credit Hours
Regional Courses – 3 Credit Hours
Concentration – 9 Credit Hours
Electives – 6 Credit Hours
Non-Thesis – 9 Credit Hours
Thesis – 6 Credit Hours

Core Requirements (6 Credit Hours)

- GEO 6058 Geographic Literature and History **Credit Hours: 3**
- GEO 6116 Perspectives on Environmental Thought **Credit Hours: 3**

Additional Required Courses (3 Credit Hours)

Based on the student's area of interest, he/she must take one course from the following Quantitative or Qualitative course offerings:

- GEO 6119 Geographical Techniques and Methodology **Credit Hours: 3**
- GEO 6166 Multivariate Statistical Analysis **Credit Hours: 3**

Regional Courses (3 Credit Hours)

Students are required to complete at least one of the following regional courses:

- GEA 6195 Seminar in Advanced Regional Geography **Credit Hours: 3**
- GEA 6215 Seminar in North American Geography **Credit Hours: 3**
- GEA 6406 Seminar in Latin American and Caribbean Geography **Credit Hours: 3**
- GEA 6504 Seminar in European Geography **Credit Hours: 3**
- GEA 6745 Asian Geography Seminar **Credit Hours: 3**

Concentration Requirements (9 Credit Hour)

Students select one of the following concentrations:

Human Geography

Select three of the following. Students may also take GEO 6166 or GEO 6119 if not taken for the additional course requirement. A regional geography (GEA) course may be substituted for a course in the Human Geography concentration.

- GEO 6345 Technological Hazards and Environmental Justice **Credit Hours: 3**
- GEO 6428 Seminar in Advanced Human Geography **Credit Hours: 3**
- GEO 6475 Political Geography Seminar **Credit Hours: 3**
- GEO 6545 Economic Geography Seminar **Credit Hours: 3**
- GEO 6605 Contemporary Urban Issues **Credit Hours: 3**
- GEO 6627 Site Feasibility Analysis **Credit Hours: 3**
- GEO 6704 Advanced Transportation Geography **Credit Hours: 3**
- GEO 7606 Seminar in Urban Environments **Credit Hours: 3**
- GIS 6307 GIS Seminar **Credit Hours: 3** (Socioeconomic Applications of GIS)

Environmental Geography

Select three of the following. Students may also take GEO 6166 or GEO 6119 if not taken for the additional course requirement.

- GEO 6209C Physical Geography Seminar **Credit Hours: 3**
- GEO 6215 Geomorphology Seminar **Credit Hours: 3**
- GEO 6217 Karst Geomorphology **Credit Hours: 3**
- GEO 6255 Weather, Climate, and Society **Credit Hours: 3**
- GEO 6263 Soils Seminar **Credit Hours: 3**
- GEO 6286 Advances in Water Resources **Credit Hours: 3**
- GEO 6288 Hydrological Systems **Credit Hours: 3**
- GEO 6345 Technological Hazards and Environmental Justice **Credit Hours: 3**
- GEO 6347 Natural Hazards **Credit Hours: 3**
- GIS 6038C Remote Sensing **Credit Hours: 3**
- GIS 6039 Remote Sensing Seminar **Credit Hours: 3**
- GIS 6306 Environmental Applications of Geographic Information Systems **Credit Hours: 3**
- GIS 6355 Water Resources Applications of GIS **Credit Hours: 3**

Geographic Information Science and Spatial Analysis

Select three of the following. Students may also take GEO 6166 or GEO 6119 if not taken for the additional course requirement.

- GEO 6115 Advanced Field Techniques **Credit Hours: 3**
- GIS 6038C Remote Sensing **Credit Hours: 3**
- GIS 6039 Remote Sensing Seminar **Credit Hours: 3**
- GIS 6100 Advanced Geographic Information Systems **Credit Hours: 3**
- GIS 6103 Programming for GIS **Credit Hours: 3**
- GIS 6112 Spatial Database Development **Credit Hours: 3**
- GIS 6306 Environmental Applications of Geographic Information Systems **Credit Hours: 3**
- GIS 6307 GIS Seminar **Credit Hours: 3**
- GIS 6355 Water Resources Applications of GIS **Credit Hours: 3**

Electives (6 Credit Hours)

Selected in consultation with the Graduate Director. At least one of the electives must be taken outside of the student's concentration excluding GEO 6908, GEO 6918 , and GEO 6944 . Electives may also be selected from courses offered outside of the Department, with the consent of the student's advisor and the graduate coordinator. A maximum of six approved hours taken outside the department can be used in the student's major.

Non-Thesis Option (9 Credit Hours)

Students in the non-thesis option complete an additional nine (9) hours of electives, which may include up to nine hours at the graduate level outside the department with the consent of their advisor and the Graduate Coordinator. Students can apply three credit hours of Internship (GEO 6944), three credit hours of Directed Research (GEO 6918) and/or Independent Research (GEO 6908) toward their major.

Thesis Option (6 Credit Hours)

- GEO 6971 Thesis: Master's **Credit Hours: 2-19**

Students in the thesis option can only apply three credit hours of Internship (GEO 6944), and three credit hours of Directed Research (GEO 6918) or Independent Research (GEO 6908) toward the degree. Upon completion of a minimum of 18 hours students are required to defend a thesis proposal. Students must also complete a thesis defense during the semester they plan to graduate.

Comprehensive Exam

Non-thesis students must pass a comprehensive written examination that is administered during the semester in which they plan to graduate. For thesis students, the thesis defense serves in lieu of the Comprehensive Exam.

Geology, M.S.

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors
**Spring admission available only for students entering the Professional Science Master's Degree option*

Minimum Total Hours: 30
Level: Masters
CIP Code: 40.0601
Dept. Code: GLY
Major/College Codes: GLY AS
Approved: 1976

Contact Information

College: Arts and Sciences
Department: Geology

Contact Information: http://www.grad.usf.edu/majors

*Deadline for students seeking assistantship/fellowship support is one month earlier. Foreign student applicants should provide their materials as early as is feasible to permit time to meet immigration and visa requirements if admitted.

Geology incorporates the fundamentals of biology, chemistry, mathematics, and physics to study the earth and the processes that affect our planet.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- 3 letters of recommendation,
- personal statement,
- listing of previous coursework,
- transcripts, and
- GRE required, but no minimum specified.

Curriculum Requirements

Total Minimum Hours: 30 hours

Core Requirements (24 Credit Hours)

Structured coursework, of which at least ten hours must be at 6000 level, selected with the advisor from the following list, or other course as approved by the Graduate Director:

- GLY 5786 Geological Field Excursion **Credit Hours: 2**

- GLY 5865 Statistical Models in Geology **Credit Hours: 3**
- GLY 5932 Selected Topics in Geology **Credit Hours: 1-4**
- GLY 6075 Greenhouse-Icehouse Earth **Credit Hours: 3**
- GLY 6156 - Geology of North America **Credit(s): 3**
- GLY 6246 General Geochemistry **Credit Hours: 3**
- GLY 6248 - Sedimentary Geochemistry **Credit(s): 3**
- GLY 6255 Tracer Geochemistry **Credit Hours: 3**
- GLY 6285C Analytical Techniques in Geology **Credit Hours: 3**
- GLY 6345 - Sedimentary Petrography **Credit(s): 3**
- GLY 6395C Topics in Igneous and Metamorphic Petrology **Credit Hours: 2-4**
- GLY 6424 - Global Tectonics **Credit(s): 2**
- GLY 6475C Principles of Applied Geophysics **Credit Hours: 4**
- GLY 6492 Hydrogeology Internship Project **Credit Hours: 3**
- GLY 6573 Fluvial Hydrology and Geomorphology **Credit Hours: 3**
- GLY 6575C Coastal Sedimentation **Credit Hours: 3**
- GLY 6739 Selected Topics in Geology **Credit Hours: 1-4**
- GLY 6824 Ecohydrology **Credit Hours: 3**
- GLY 6827C Advanced Hydrogeology **Credit Hours: 4**
- GLY 6828 Ground-Water Geochemistry **Credit Hours: 3**
- GLY 6836 Numerical Modeling of Hydrogeologic Systems **Credit Hours: 3**
- GLY 6905 Independent Study **Credit Hours: 1-19**

Thesis Option:

- GLY 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**

Professional Science Masters (PSM) Degree Option (6 Credit Hours)

The Professional Internship projects are typically supervised by a Professional Geologists (PG) and must receive prior approval by the internship coordinator. The student must submit an Internship Project Report approved by the supervising PG. The student must then present the results of their projects at an evening public meeting hosted by the Geology Alumni Society typically at the Southwest Florida Water Management District (SWFWMD) Tampa office.

- GLY 6xxx - Introduction to Professional Geology **Credit(s): 3**
- GLY 6492 Hydrogeology Internship Project **Credit Hours: 3**

Comprehensive Exam

For students in the thesis option, the thesis defense serves as the comprehensive exam. For students in the Professional Science Master's Degree option, the comprehensive exit exam is based on coursework and an internship project. Before the exam, the student must submit an Internship Project Report approved by the supervising PG. The internship committee determines the format of the exam. Normally, it is an oral examination following the student's presentation of the results of the internship project to the hydrogeology internship committee.

Other Information:

The curriculum for a Geology graduate student varies depending on the area of research interest. Specific course work for the degree is determined via consultation between the student, his/her primary advisor and his/her student advisory committee. Other pertinent information regarding graduate study is contained in the Department's Graduate Student Handbook, which is available upon request.

All degree candidates are required to maintain satisfactory academic progress at all times. Satisfactory academic progress in this major is defined as progress in course and thesis work. Evidence of academic progress includes timely completion of departmental requirements such as selecting a primary advisor, forming a student advisory committee, completion of any prerequisites or deficiencies, timely progress toward completion of the thesis, maintaining a satisfactory GPA, defending a thesis proposal, and making a public presentation. A schedule for meeting these requirements is contained in the Department's Graduate Student Handbook.

Geology, Ph.D.

Degree Information

Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours:
60 (post-master's)
90 (post-bachelor's)
Program Level: Doctoral
CIP Code: 40.0601
Dept. Code: GLY
Program (Major/College): GLY AS
Approved: 1976

Contact Information

College: Arts and Sciences
Department: Geology

Contact Information: http://www.grad.usf.edu/majors

*Deadline for students seeking assistantship/fellowship support is one month earlier. Foreign student applicants should provide their materials as early as is feasible to permit time to meet immigration and visa requirements if admitted.

Geology incorporates the fundamentals of biology, chemistry, mathematics, and physics to study the earth and the processes that affect our planet.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- 3 letters of recommendation,
- personal statement,
- listing of previous coursework,
- transcripts, and
- GRE is required, but no minimum specified.

Curriculum Requirements

Total Minimum Hours:

60 hours post master's
90 hours post bachelors

Post-Master's

Core Requirements (15 Credit Hours)

Structured coursework, of which at least fifteen hours must be at 6000 level, selected with the advisor from the following list, or other graduate course as approved by the Graduate Director:

- GLY 5786 Geological Field Excursion **Credit Hours: 2**
- GLY 5865 Statistical Models in Geology **Credit Hours: 3**
- GLY 5932 Selected Topics in Geology **Credit Hours: 1-4**
- GLY 6075 Greenhouse-Icehouse Earth **Credit Hours: 3**
- GLY 6156 - Geology of North America **Credit(s): 2**
- GLY 6246 General Geochemistry **Credit Hours: 3**
- GLY 6248 - Sedimentary Geochemistry **Credit(s): 3**
- GLY 6255 Tracer Geochemistry **Credit Hours: 3**
- GLY 6285C Analytical Techniques in Geology **Credit Hours: 3**
- GLY 6345 - Sedimentary Petrography **Credit(s): 3**
- GLY 6395C Topics in Igneous and Metamorphic Petrology **Credit Hours: 2-4**
- GLY 6424 - Global Tectonics **Credit(s): 2**
- GLY 6475C Principles of Applied Geophysics **Credit Hours: 4**
- GLY 6492 Hydrogeology Internship Project **Credit Hours: 3**
- GLY 6573 Fluvial Hydrology and Geomorphology **Credit Hours: 3**
- GLY 6575C Coastal Sedimentation **Credit Hours: 3**
- GLY 6739 Selected Topics in Geology **Credit Hours: 1-4**
- GLY 6824 Ecohydrology **Credit Hours: 3**
- GLY 6827C Advanced Hydrogeology **Credit Hours: 4**
- GLY 6828 Ground-Water Geochemistry **Credit Hours: 3**
- GLY 6836 Numerical Modeling of Hydrogeologic Systems **Credit Hours: 3**
- GLY 6905 Independent Study **Credit Hours: 1-19**

Other Course Requirements (33 Credit Hours)

Determined at the discretion of the student's committee

May include

- GLY 7912 Directed Research **Credit Hours: 1-30**

Qualifying Exam and Admission to Candidacy

Admission to candidacy will be based on the results of a general examination administered by the student's committee. The format of the exam will be determined by the committee at least one week prior to the onset of the examination. Normally, it will consist of a written section or sections, followed by an oral examination chaired by the student's research advisor. After admission to candidacy, all doctoral students will make at least one formal presentation of their research prior to graduation. Any appropriate venue is acceptable, e.g., Dept. colloquium, oral or poster sessions at a scientific meeting of at least regional scope.

General examinations and presentations of dissertation proposals should be completed no later than the end of the second year in the doctoral major or at the time determined by the student's committee. The examining and dissertation committees are the same and will be comprised of no less than five members, at least three of which must be USF faculty, and at least one member from outside the department.

Dissertation (12 Credit Hours)

- GLY 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Other Information

A minimum of 90 credit hours will be required for students pursuing a Ph.D. degree from a B.S. degree. This includes any graduate credits earned prior to admission to the doctoral major. Compared to the requirements starting from a M.S. degree as described in the paragraph below, 30 additional credit hours are required for students starting from a B.S. degree. Students are recommended to satisfy the requirements similar to that of a MS degree during the first two years of the Ph.D. study.

All doctoral students must maintain good standing in the Office of Graduate Studies (overall GPA =3.0) and maintain satisfactory academic progress toward the degree. Any student who receives a C in a structured course will be placed on academic probation. This probation can be terminated by achieving grades of B or higher in the subsequent semester of full-time enrollment. If a second grade of C is received, the student is terminated from the doctoral major. Only courses in which the student receives at least a B may be counted toward the structured-course requirement. There is also a requirement that Ph.D. students have at least two semesters of full-time residence. While meeting the residency requirements, candidates must be full-time students in good academic standing.

Environmental Policy & Management Graduate Certificate

This program is offered fully online.

Curriculum Code: **XEP**

Description

The Graduate Certificate in Environmental Policy and Management prepares industrial and government professionals, regular practitioners, local citizens, and university students who wish to acquire or strengthen their knowledge of the environment through formal graduate-level coursework. The curriculum is designed to allow students to choose courses from across the spectrum of disciplines that explore the human and natural environments. The curriculum consists of 15 - 18 graduate credit hours. The normal total requirement is 5 courses, or 15 hours; however, a maximum of 6 courses, or 18 hours, are allowed while registered for the certificate.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

1 Letter of Recommendation

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

- GEO 6116 Perspectives on Environmental Thought **Credit Hours: 3**
- EVR 6922 ESP Capstone Seminar **Credit Hours: 3**

Select two of the following:

- PAD 5605 Administrative Law and Regulation **Credit Hours: 3**
- PHI 6934 Selected Topics **Credit Hours: 1-3**
- EVR 6320 Environmental Management **Credit Hours: 3**

- POS 6933 Selected Topics in Political Science **Credit Hours: 3**
- GEO 6605 Contemporary Urban Issues **Credit Hours: 3**
- EVR 6216 Advances in Water Quality Policy and Management **Credit Hours: 3**
- EVR 6937 Seminar in Environmental Policy **Credit Hours: 3**
- EIN 6634
- EVR 6936 Seminar in Environmental Science **Credit Hours: 3**

Electives

Select 1 or 2:

- PHC 6357 Environmental and Occupational Health **Credit Hours: 3**
- GEO 6286 Advances in Water Resources **Credit Hours: 3**
- PHI 6405 Seminar in the Philosophy of Natural Science **Credit Hours: 3**
- PUP 6007 Seminar in Public Policy **Credit Hours: 3**
- PHI 6425 Seminar in the Philosophy of Social Science **Credit Hours: 3**
- ECO 6305 History of Economic Thought **Credit Hours: 3**
- ANG 6197 Public Archaeology **Credit Hours: 3**
- ANG 5937 Seminar in Anthropology **Credit Hours: 2-4**
- GEO 6255 Weather, Climate, and Society **Credit Hours: 3**
- GEO 6345 Technological Hazards and Environmental Justice **Credit Hours: 3**
- GEO 6347 Natural Hazards **Credit Hours: 3**
- GIS 6306 Environmental Applications of Geographic Information Systems **Credit Hours: 3**
- PAD 6307 Policy Design and Implementation **Credit Hours: 3**
- or any add. Core courses

Time Limit

3 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Geographical Information Systems Graduate Certificate

This program is offered fully online.

Curriculum Code: **XGI**

Description

The Graduate Certificate in Geographic Information Systems is directed at managers and administrators in the public and private sectors, technical professionals, decision-makers, and others involved in the planning, implementation and use of Geographical Information Systems. Individuals who have recently completed formal post-secondary education in GIS-related disciplines, as well as those individuals who have substantial relevant work experience and who wish to upgrade their skills, will benefit from this certificate program. The emphasis in the program is on the advanced applications of GIS and statistical methods to spatial problem solving.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Expected

Requirements of this Certificate (15 Credit Hours)

- GIS 6100 Advanced Geographic Information Systems **Credit Hours: 3**

Electives

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Hydrogeology Graduate Certificate

This program is offered fully online.

Curriculum Code: **XHY**

Description

The Certificate broadens the knowledge base for practicing groundwater professionals holding advanced degrees in Geology with other field specializations. Additionally, the curriculum may interest other scientific graduate students. This Certificate, with 15 additional hours of geology at the undergraduate or graduate level, meets the education requirement for certification as a professional Geologist by the Florida Department of Professional Regulation.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

B.S. in Geology

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

1 yr. of Calculus, Physics, & Chemistry prior to entering Cert. program

Requirements of this Certificate (15 Credit Hours)

- GLY 5932 Selected Topics in Geology **Credit Hours: 1-4**
- GLY 6827
- GLY 6246 General Geochemistry **Credit Hours: 3**
- GLY 6828 Ground-Water Geochemistry **Credit Hours: 3**

Electives

consult dept

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

College of Arts and Sciences: School of Social Sciences

AS - Updates for 2019-20

CAS - School of Social Sciences Programs

University of South Florida
College of Arts and Sciences
4202 E. Fowler Ave BEH107
Tampa, FL 33620

Web address: http://www.cas.usf.edu/
Email: see individual department listings
Phone: 813-974-6957
Fax: 813-974-4075

College Dean: Eric Eisenberg, Ph.D.
Sr. Associate Dean: Robert Potter, Ph.D.
Associate Dean: Allison Cleveland Roberts

College Structure

The College of Arts and Sciences is USF's largest college. The College is comprised of three schools including the School of Social Sciences, the School of Natural Sciences & Mathematics, and the School of Humanities, all with strong interdisciplinary connections among them and throughout the University.

Mission Statement

The College of Arts and Sciences is a community of scholars dedicated to the idea that educated people are the basis of a just and free society. The essences of education are a capacity for the appreciation of social change within a context of prior human achievement. The faculty of the Arts and Sciences strive to instill in their students a history of human ideas, a love of learning, and an understanding of the means that scholars have used in their search for beauty and order in the natural world. The education provided by the disciplines of the Arts and Sciences is the foundation upon which the lives and professions of our students are built, and the basis from which personal growth occurs.

The College of Arts and Sciences takes as its goal a melding of the natural, humanistic and social philosophies into a comprehensive whole that encourages the development of new ideas and new approaches to the understanding of our universe. It is the responsibility of scholars to share their discoveries for the betterment of society. Thus, the Arts and Sciences embrace the disciplines that strive to make immediate use of knowledge in the service of social goals as well as the disciplines whose discoveries contribute to the fund of basic information that is the stepping stone of applied knowledge.

College Requirements

Thesis Enrollment

Upon successful completion of all M.A./M.S. degree requirements except for thesis, Arts and Sciences graduate students must enroll in a minimum of two (2) credit hours of Thesis each semester (except Summers) until the completion of the master's degree.

Dissertation Enrollment

Doctoral students who have been admitted to candidacy are required to accumulate a minimum of six (6) credit hours of Dissertation during each previous 12-month period (previous three (3) terms, e.g., Fall, Spring, Summer) until the degree is granted.

Department of Anthropology

Applied Anthropology, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 40
Level: Masters
CIP Code: 45.0201
Dept. Code: ANT
Major/College Code: APA AS
Implemented: 1985

Concentrations:

Archaeological and Forensic Science (AAF) (2014)
Bio-cultural Medical Anthropology (BCM) (2006)
Cultural Resource Management (CRM) (2007)
Heritage Studies (HGS) (2008)

Also offered as a Concurrent Degree

Contact Information

College: Arts and Sciences
Department: Anthropology

Contact Information: http://www.grad.usf.edu/majors
Other Resources: http://anthropology.usf.edu/graduate/

The Applied Anthropology major, initiated in 1974, was the first in the country to focus on career training for the practice of Applied Anthropology. Faculty at USF specialize in various areas, including medical anthropology, biological anthropology, urban policy and community development, education, archaeology, cultural resource management (CRM), economic development, immigration, media, and issues pertaining to race, gender, and ethnicity. Geographic specializations emphasize the Caribbean, Latin America, Sub-Saharan Africa, Europe, and the United States. More than 240 graduates have received an education in anthropology and its practical uses, leading to employment in government and private sector agencies and organizations. For many, the MA is a terminal degree that qualifies them for professional careers in administration, program evaluation, planning, research, and cultural resource management. Others have gone on to earn doctoral degrees and have gained employment in academic or higher level nonacademic positions.

Students entering the Applied Anthropology major at USF choose from one of four tracks: Archaeology, Biological Anthropology, Cultural Anthropology, or Medical Anthropology. Although these four tracks share some common requirements, and are bound by general rules of the USF Office of Graduate Studies, they have different curricula and employment trajectories. Archaeology Track graduates typically enter careers in contract archaeology, or public and private agencies and museums responsible for managing archaeological resources. The Cultural Anthropology Track is designed to lead to employment in diverse areas that include education, urban planning, human services, private sector consulting and research, and non-governmental community organizations. Museum and heritage programming represent an area of overlap between the two emphases. Students who wish to pursue these kinds of specialties will develop curricula that draw from both applied and public archaeology requirements in consultation with their advisors. Biological Anthropology students are trained to work in law enforcement, private sector consulting and research, and non-governmental organizations. The Medical Anthropology track prepares students to conduct research, evaluation, and consulting in a variety of settings, including community-based organizations, county and state health departments, and non-

governmental organizations. In addition to following the curriculum of a track, M.A. students can select elective courses to fulfill one of four concentrations in Archaeological and Forensic Sciences, Bio cultural Medical Anthropology, Cultural Resource Management, or Heritage Studies.

Our M.A. offers flexibility, depending on the student's career plans. Students choose from one of three professional development options: research, internship, and internship-based research (a hybrid of the other two). All three options are expected to have an applied component, but differ in emphasis and setting.

Major Research Areas:
Human biology; bio cultural medical anthropology; nutrition/diet; growth and development; population genetics; forensic anthropology and human rights; neuroanthropology; stress; immune function; maternal and child health; reproductive health; HIV/AIDS; disasters; water and sanitation; migrant health; health policy; sociocultural and historical anthropology; transnational migration; labor; neoliberal globalization; citizenship; media and visual anthropology; environmental anthropology; urban anthropology; pedagogy and educational anthropology; heritage and memory studies; Florida archaeology; Eastern U.S. prehistory; Mesoamerican archaeology; Mediterranean prehistory; archaeological science; bioarcheaology; cultural resource management; public archeology.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE is required, however, there is no minimum score for admission into the major
- a statement of purpose
- a signed research ethics statement
- at least three letters of recommendation
- a resume or curriculum vitae
- graduate assistant application form (optional)
- writing sample (optional)

Curriculum Requirements

Total Minimum Hours - 40 credit hours

Core Requirements - 6 hours
Required Track - 24 hours
Optional Concentrations 9-12 hours
Internship – 0-7 hours, depending on the option
Thesis - 6 hours

Core Requirements (6 Credit Hours)

- ANG 6705 Foundations of Applied Anthropology I **Credit Hours: 3**
- ANG 5486 Quantitative Methods in Anthropology **Credit Hours: 3** (or equivalent in another department)

Required Track (24 Credit Hours)

Students select from one of the following Tracks:

Archaeology Track

- ANG 6198 Regional Problems in Methods of Public Archaeology **Credit Hours: 3**
- ANG 6110 Archaeology Theory and Current Issues **Credit Hours: 3**
- ANG 6197 Public Archaeology **Credit Hours: 3**
- Electives - Two electives in Archaeology **Credit(s): 6**
- Electives - One elective in Biological Anthropology **Credit(s): 3**
- Electives - One elective from any graduate seminar in Anthropology **Credit(s): 3**
- Seminar - One graduate seminar outside the Department **Credit(s): 3**

Biological Anthropology Track

- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- ANG 6516 Human Variation **Credit Hours: 3**

- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**

or

- ANG 6585 Theories in Applied Bioanthropology **Credit Hours: 3**

- Seminars - Three additional graduate seminars in Anthropology **Credit(s): 9**
- Seminar - One graduate seminar outside the Department **Credit(s): 3**

Cultural Anthropology Track

- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- Seminars - Five elective graduate seminars in Anthropology **Credit(s): 15**
- Seminar - One graduate seminar outside the Anthropology Department **Credit(s): 3**

Medical Anthropology Track

- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**
- Seminars - Four elective graduate seminars in Anthropology **Credit(s): 12**
- Seminar - One graduate seminar outside the Anthropology Department **Credit(s): 3**

Paul D. Coverdell Fellows Program in Applied Anthropology for Returning Peace Corps Volunteers

Students in the Coverdell Program are required to complete internships related to the program of study in underserved American Communities.

For more information on the Fellows Program:
https://www.peacecorps.gov/volunteer/university-programs/coverdell-fellows/

Concentration Requirements (Optional)

Students may select one of the following concentrations:

Concentration in Archaeological and Forensic Sciences (12 Credit Hours)

Two required courses (3 credits each), consisting of

- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (Archaeological Science)

- ANG 6745 Forensic Anthropology **Credit Hours: 3**

or

- ANG 6511 Seminar in Physical Anthropology **Credit Hours: 3** (Forensic Science)

Electives (6 Credit Hours)

Two elective courses (3 credits each; one may be outside Anthropology):

- ANG 6189 Ancient Diets **Credit Hours: 3**
- ANG 6195 Ancient Trade **Credit Hours: 3**
- ANG 6511 Seminar in Physical Anthropology **Credit Hours: 3** (Anthrogenetics)
- ANG 6536 Bioarchaeology **Credit Hours: 3**
- ANG 6745 Forensic Anthropology **Credit Hours: 3**
- ANG 6741 Introduction to Forensic Sciences **Credit Hours: 3**
- ANG 6511 Seminar in Physical Anthropology **Credit(s): 3** (Advanced Methods in Forensic Anthropology)
- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (Soils)
- ANG 6115 Seminar in Archaeology **Credit(s): 3** (Technologies for Heritage Preservation)

External Electives That Also Qualify

(only one can count towards concentration):

- GIS 6038C Remote Sensing **Credit Hours: 3**
- GIS 6039 Remote Sensing Seminar **Credit Hours: 3**
- GLY 6255 Tracer Geochemistry **Credit Hours: 3**
- GLY 6285C Analytical Techniques in Geology **Credit Hours: 3**
- GLY 6475 - Principles of Applied Geophysics
- GLY 6739 Selected Topics in Geology **Credit Hours: 1-4**

Concentration in Bio-cultural Medical Anthropology (12 Credit Hours)

Please Note: the Foundations of Medical Anthropology on-line course offered through the School of Sustainability is a service course intended for non-anthropology students and cannot count towards the Applied Anthropology degree.

Four Graduate Medical Anthropology Courses with the ANG Prefix:

- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3** (Theory and Methods in Medical Anthropology)
- ANG 6511 Seminar in Physical Anthropology **Credit Hours: 3** (Theory and Methods of Applied Biological Anthropology)

- ANG 6511 Seminar in Physical Anthropology **Credit(s): 3** (e.g. Human Variation, Anthropology of Growth and Development, or Forensic Anthropology)

Or one of the following:

- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3** (e.g. Issues in Migrant Health, Anthropology and Development, Reproductive Health, Health & Medical System, Socio-Cultural Aspects of HIV/AIDS)
- ANG 5937 Seminar in Anthropology **Credit Hours: 2-4**

Concentration in Cultural Resource Management (9 Credit Hours)

Graduate class in Geographic Information Systems, whether offered in Anthropology or another department.

Graduate students pursuing a concentration in Cultural Resource Management must take the basic course requirements of their graduate program.

- ANG 6197 Public Archaeology **Credit Hours: 3**
- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (Current Issues and Techniques in Cultural Resources Management)

One of the following electives

(or other as approved by Graduate Director):

- ANG 6448 Regional Problems in Urban Anthropology **Credit Hours: 3** (Issues in Heritage Tourism)
- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (e.g. Historical Archaeology, Florida Archaeology, Southeastern Archaeology, Museum Methods)

Concentration in Heritage Studies (9 Credit Hours)

- ANG 6436 Issues in Heritage Tourism **Credit Hours: 3**

Electives (6 Credit Hours)

Two electives from among the following options:

- ANG 5395 Visual Anthropology **Credit Hours: 3**
- ANG 6081 Museum Methods **Credit Hours: 4**
- ANG 6197 Public Archaeology **Credit Hours: 3**
- ANG 6436 Issues in Heritage Tourism **Credit Hours: 3**
- ANG 6448 Regional Problems in Urban Anthropology **Credit Hours: 3** (topics include Ethnohistory, Museums in Culture, Ethnicity and Public Policy, Heritage Research and Management, Culture and Environmental Resources)
- ANG 7487 Advanced Quantitative Research Methods Applied Anthropology **Credit Hours: 3**

Comprehensive Exam

The comprehensive exam requirement is satisfied upon successful completion of ANG 6705 Foundations of Applied Anthropology I. Successful completion entails earning a final grade of "B" or better in this course.

The MA offers flexibility, depending on the student's career plans. Students choose from one of three professional development options, which must be decided in consultation with their major professor before the proposal is delivered. All three options are expected to have an applied component, but differ in emphasis and setting.

- **Research Option** – This option is designed for students who are planning a career in applied research and are considering a Ph.D. degree. The final product is a thesis, which may be delivered as either a traditional thesis or as a peer-reviewed journal article. If an article is submitted, the student must be first author and the journal selected in consultation with the M.A. Committee. The publication must be formally accepted, but not necessarily published, to fulfill this requirement.

- **Internship-based Research Option:** This option is designed for students who are planning a career in applied research and practice. It is designed for students whose thesis research is situated in an Internship setting. A formal Internship is required, and the final product is a thesis, which may be delivered as either a traditional thesis or a peer-reviewed journal article (same guidelines apply as in the Research option).

- **Internship Option:** This option is designed for students who are planning a career in applied research and practice. A formal Internship is required, and the final product consists of 1) a technical report or installation delivered to the host agency and 2) a substantial Internship report delivered to the M.A. committee. The student must be the first author on the technical report, and it must represent new and original work. The targeted length and substance of the Internship report should be discussed with the M.A. committee and agreement reached in advance.

Internship

0-7 hours minimum, depending on the option

Research Option

no internship hour requirement

Internship-Based Research Option:

- ANG 6915 Directed Research Internship **Credit Hours: 1-19 (4 credits for this program)**

Internship Option

- ANG 6915 Directed Research Internship **Credit Hours: 1-19 (7 credits for this program)**

Thesis

3-6 hours minimum, depending on the option

At least 2 credit hours per semester until thesis is accepted.

Research Option

- ANG 6917 - Thesis **Credit(s): 10**

Internship-Based Research Option

- ANG 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**

Internship Option

- ANG 6971 Thesis: Master's **Credit Hours: 2-19 (3 credits for this program)**

Concurrent Degree

Also available as a Concurrent Degrees

Applied Anthropology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 46 beyond MA
Level: Doctoral
CIP Code: 45.0201
Dept. Code: ANT
Major/College Codes: APA AS
Effective: 1984

Concentrations:

Archaeological and Forensic Sciences (AAF)
Bio-cultural Medical Anthropology (BCM)
Cultural Resource Management (CRM)
Heritage Studies (HGS)

Also offered as a Concurrent Degree

Contact Information

College: Arts and Sciences
Department: Anthropology

Contact Information:
http://www.grad.usf.edu/majors
http://anthropology.usf.edu/graduate/
The Ph.D. in Applied Anthropology, initiated in 1984, was the first doctoral major of its kind and has to date awarded more than 140 degrees. The major is designed to prepare students to conduct research, teach, and practice in both academic and nonacademic settings. Students participate in either a structured research internship or independent field research for two consecutive semesters. Students must choose one of four tracks, which guide curriculum and required courses: Archaeology, Biological Anthropology, Cultural Anthropology, or Medical Anthropology. In addition, students can select elective courses to fulfill an optional concentration in Archaeological and Forensic Sciences, Biocultural Medical Anthropology, Cultural Resource Management, or Heritage Studies.

Major Research Areas:
Human biology; biocultural medical anthropology; nutrition/diet; growth and development; population genetics; forensic anthropology and human rights; neuroanthropology; stress; immune function; maternal and child health; reproductive health; HIV/AIDS; disasters; water and sanitation; migrant health; health policy; sociocultural and historical anthropology; transnational migration; labor; neoliberal globalization; citizenship; media and visual anthropology; environmental anthropology; urban anthropology; pedagogy and educational anthropology; heritage and memory studies; Florida archaeology; Eastern U.S. prehistory; Mesoamerican archaeology; Mediterranean prehistory; archaeological science; bioarcheaology; cultural resource management; public archeology.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE required
- Concurrent Degree applicants (Anthropology/Public Health) must also meet GRE requirements for the MPH)
- a statement of purpose
- a signed research ethics statement
- at least 3 letters of recommendation
- a resume or curriculum vitae
- graduate assistant application form (optional)
- writing sample (optional)

Curriculum Requirements

Total minimum required hours - 46 hours beyond the M.A.

Core Requirements - 3 hours
Track - 24 hours
Electives - 6 hours minimum
External Curriculum Requirement - 6 hours minimum
Internship - 4 hours
Dissertation - 6 hours
Concentration – Optional – 9-12 hours

Core Requirements (3 Credit Hours)

Must receive a grade of "B" or better. Ph.D. students with a recent (within the past five years) M.A. in Anthropology are not required to take Foundations of Applied Anthropology, although they may do so if their advisor recommends it.

- ANG 6705 Foundations of Applied Anthropology I **Credit Hours: 3**

Tracks (24 Credit Hours)

Students select one of the following tracks:

Archaeology Track:

- ANG 6198 Regional Problems in Methods of Public Archaeology **Credit Hours: 3**
- ANG 6110 Archaeology Theory and Current Issues **Credit Hours: 3**
- ANG 6197 Public Archaeology **Credit Hours: 3**
- ANG 7487 Advanced Quantitative Research Methods Applied Anthropology **Credit Hours: 3**
- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (Advanced Archaeological Theory)

Biological Anthropology Track

- ANG 7487 Advanced Quantitative Research Methods Applied Anthropology **Credit Hours: 3**
- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**

- ANG 6516 Human Variation **Credit Hours: 3**
- ANG 6585 Theories in Applied Bioanthropology **Credit Hours: 3**
- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**

Cultural Anthropology Track

- ANG 6494 - Anthropological Theory Today **Credit(s): 3**
- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- ANG 7704 Legal and Ethical Aspects of Applied Anthropology **Credit Hours: 3**
- ANG 7487 Advanced Quantitative Research Methods Applied Anthropology **Credit Hours: 3**

Medical Anthropology Track

- ANG 6494 - Anthropological Theory Today **Credit(s): 3**
- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- ANG 7704 Legal and Ethical Aspects of Applied Anthropology **Credit Hours: 3**
- ANG 7487 Advanced Quantitative Research Methods Applied Anthropology **Credit Hours: 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**

Concentration Requirements (Optional, not required)

Students may select one of the following concentrations:

Concentration in Archaeological and Forensic Sciences (12 Credit Hours)

Two required courses, consisting of

(3 credits each)

- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (Archaeological Science)

- ANG 6588 - Forensic Anthropology **Credit(s): 3**

or

- ANG 6511 Seminar in Physical Anthropology **Credit Hours: 3** (Forensic Science)

Two elective courses (6 Credit Hours)

(3 credits each; one may be outside Anthropology)

- ANG 6145 - Ancient Diets **Credit(s): 3**
- ANG 6193 - Ancient Trade **Credit(s): 3**
- ANG 6511 Seminar in Physical Anthropology **Credit Hours: 3** (Anthrogenetics)
- ANB 6586 - Bioarchaeology **Credit(s): 3**

- ANG 6588 - Forensic Anthropology **Credit(s): 3**
- ANG 6515 - Intro to Forensic Science **Credit(s): 3**
- ANG 6511 Seminar in Physical Anthropology **Credit(s): 3** (Advanced Methods in Forensic Anthropology)
- ANG 5520 - Human Osteology **Credit(s): 3**
- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (Soils)
- ANG 6115 Seminar in Archaeology **Credit(s): 3** (Technologies for Heritage Preservation)

External electives that also qualify

(only 1 can count towards concentration):

- GIS 6038C Remote Sensing **Credit Hours: 3**
- GIS 6039 Remote Sensing Seminar **Credit Hours: 3**
- GLY 6255 Tracer Geochemistry **Credit Hours: 3**
- GLY 6285C Analytical Techniques in Geology **Credit Hours: 3**
- GLY 6475 - Principles of Applied Geophysics
- GLY 6739 Selected Topics in Geology **Credit Hours: 1-4**

Concentration in Bio-Cultural Medical Anthropology (12 Credit Hours)

Please Note: the Foundations of Medical Anthropology on-line course offered through the School of Sustainability is a service course intended for non-anthropology students and cannot count towards the Applied Anthropology degree.

Four graduate medical anthropology courses with the ANG prefix:

- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**
- ANG 6511 Seminar in Physical Anthropology **Credit Hours: 3** (Theory and Methods of Applied Biological Anthropology)
- ANG 6511 Seminar in Physical Anthropology **Credit(s): 3** (e.g. Human Variation, Anthropology of Growth and Development, Forensic Anthropology)
- ANG 6566, ANG 6569, ANG 6469, or ANG 5937 (e.g. Nutritional Anthropology, Socio-Cultural Aspects of HIV/AIDS, Issues in Migrant Health, Anthropology and Development, Reproductive Health, ANG 6404 Health and Medical Systems)

Concentration in Cultural Resource Management (9 Credit Hours)

Required:

- ANG 6197 Public Archaeology **Credit Hours: 3**
- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (Current Issues & Techniques in Cultural Resource Management)

One of the following electives:

- ANG 6448 Regional Problems in Urban Anthropology **Credit Hours: 3** (Issues in Heritage Tourism) (or other as approved by Graduate Director)
- ANG 6115 Seminar in Archaeology **Credit Hours: 3** (Historical Archaeology, Florida Archaeology, Southeastern Archaeology, Museum Methods, or other as approved by Graduate Director)

Graduate Class in Geographic Information Systems

whether offered in Anthropology or another department.

Concentration in Heritage Studies (9 Credit Hours)

Required

- ANG 6437 - Selected Topics in Applied Anthropology: Issues in Heritage Studies **Credit(s): 3**

Two electives from among the following options:

- ANG 5395 Visual Anthropology **Credit Hours: 3**
- ANG 6081 Museum Methods **Credit Hours: 4**
- ANG 6197 Public Archaeology **Credit Hours: 3**
- ANG 6436 Issues in Heritage Tourism **Credit Hours: 3**
- ANG 6448 Regional Problems in Urban Anthropology **Credit Hours: 3** (*Topics include 'Ethnohistory,' 'Museums in Culture,' 'Ethnicity and Public Policy,' 'Heritage Research and Management,' 'Culture and Environmental Resources,')
- ANG 6676 - Seminar in Anthropological Linguistics **Credit(s): 3** (When the topic is 'Language and Culture' or 'Language and Racism')
- ANG 7487 Advanced Quantitative Research Methods Applied Anthropology **Credit Hours: 3**

Electives (6 Credit Hours Minimum)

Three elective graduate-level Anthropology courses. Two elective graduate-level Anthropology courses for students in the medical anthropology track.

External Curriculum Requirement (6 Credit Hours Minimum)

The external curriculum requirement is designed to promote interdisciplinary perspectives. Students are expected to enroll in a minimum of two (2) or a maximum of three (3) graduate-level courses in departments other than Anthropology, selected on the basis of professional interests and in consultation with the major advisor (if the student takes only two external courses, he/she must take an additional anthropology elective). Students who enter the Ph.D. program with post-baccalaureate degrees in disciplines other than Anthropology may be able to use that expertise to satisfy the requirement, after consultation with the major advisor and approval of the Graduate Director. In these cases, the remaining credit hours will be fulfilled through additional coursework in Anthropology.

Language Requirement

All Ph.D. students are required to demonstrate proficiency in a foreign language, the specifics to be determined by the student and the supervisory committee, taking into account the nature of the student's research. Minimal proficiency is demonstrated by the ability to satisfactorily translate a selection of the scholarly literature in the foreign language, with the occasional aid of a dictionary. The supervisory committee may require additional levels of proficiency depending on the nature of individual student research. The language requirement must be satisfied no later than the date of the dissertation defense.

Internship and Qualifying Examination (4 Credit Hours Minimum)

Qualifying examination covering area of specialization within applied anthropology and external specialization. Two-semester internship or dissertation research ANG 7940 Doctoral Internship in Applied Anthropology (minimum of 4 credit hours).

Paul D. Coverdell Fellows Program in Applied Anthropology for Returning Peace Corps Volunteers

Students in the Coverdell Program are required to complete internships related to the program of study in underserved American Communities.

For more information on the Fellows Program:
https://www.peacecorps.gov/volunteer/university-programs/coverdell-fellows/

Dissertation (6 Credit Hours Minimum)

- ANG 7980 Dissertation: Doctoral **Credit Hours: 2-15** (Dissertation, based on research or internship.)

Concurrent Degree

Also available as a Concurrent Degrees

Crime Scene Investigation for Violent Crimes Graduate Certificate

This program is offered fully online.

Curriculum Code: **XVC**

Description

The three components of crime scene investigations include the: (1) specific incident reconstruction, (2) event reconstruction, and (3) physical evidence reconstruction. Establishing these events and using reason and logic, physical evidence, witness testimony, scientific methods and their relationships to one another is paramount for investigating violent crimes. The Crime Scene Investigations for Violent Crimes Graduate Certificate incorporates the ways in which these elements are discovered, tested, analyzed, preserved, presented in court, and utilized in violent crimes against persons, such as homicide, rape, missing persons, and child abuse.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (18 Credit Hours)

- ANG 6515 - Forensic Science **Credit(s): 3**
- ANG 6770 Crime Scene Reconstruction **Credit Hours: 3**
- ANG 6771 The Science of Missing and Unidentified Persons **Credit Hours: 3**
- ANG 6772 Homicide Investigations **Credit Hours: 3**
- ANG 6519 - Evidence in Court & Expert Testimony **Credit(s): 3**
- ANG 6520 - Practical Investigation Techniques of Crimes Against Children **Credit(s): 3**

Electives

Time Limit

1 year

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Medical Anthropology Graduate Certificate

This program is offered fully online.

Curriculum Code: **XMY**

Description

Upon completion of the Medical Anthropology certificate students will be sensitized to being able to conduct a cultural analysis of issues related to global health, international development, and cross-cultural understandings of health and illness. They will have been exposed to an array of critical thinkers from medical anthropology and other social sciences, and will have read fascinating and intriguing ethnographies that capture the experiences of being engaged in cross-cultural research. The wide range of electives available to students will strengthen their disciplinary training by offering them insights concerning the medical anthropological study of nutrition, disasters, reproduction, migrant and minority health, neuroanthropology, HIV/AIDS, and other significant topics. The certificate is designed to complement and build on students' specialized interests and areas of concern.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit(s): 3**
- ANG 6447 Selected Topics in Urban Anthropology **Credit Hours: 3**

Electives

Select 1:

- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**
- ANG 6649
- ANG 6460
- ANG 6469 Selected Topics in Medical Anthropology **Credit(s): 3**

- ANG 6460
- ANG 6469 Selected Topics in Medical Anthropology **Credit(s): 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit(s): 3**

Time Limit

4 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Economics

Economics, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 45.0601
Dept. Code: ECN
Major/College Codes: ECO/AS
Approved: 2010

Contact Information

College: Arts and Sciences
Department: Economics

Contact Information: http://www.grad.usf.edu/majors

The M.A. in Economics prepares students for careers as professional economists in business and government. It is also excellent preparation for continued graduate study in economics.

Major Research Areas:
Health economics, public economics, urban and regional economics, international trade, economic development, industrial organization, advanced theory, and advanced econometrics

Admission Information

Must meet University requirements (see Graduate Admissions), as well as requirements for admission to the major, listed below.

- GRE with target scores of 152 (490) on the verbal portion and 152 (670) on the quantitative portion.
- Minimum of 1 course in calculus.*
- Minimum of 1 course in statistics.*
- Undergraduate Intermediate-level microeconomics and undergraduate intermediate-level macroeconomics*

*Applicants must earn a grade of B or better in each of these courses.

Curriculum Requirements

Total Minimum hours - 30 hours

All students are required to take courses in advanced economic theory and econometrics. Students preparing for doctoral studies select from these and additional courses in economic theory, mathematics, and quantitative methods. Where appropriate students may select courses in other departments in the University. At least 24 hours must be in Economics not including ECO 6906 Independent Study and ECO 6917 Directed Research.

Core - 12 credit hours

Electives - 18 credit hours

Core Requirements (12 Credit Hours)

- ECO 6115 Microeconomics I **Credit Hours: 3**
- ECO 6206 Macroeconomics I **Credit Hours: 3**
- ECO 6405 Mathematical Economics I **Credit Hours: 3**
- ECO 6424 Econometrics I **Credit Hours: 3**

Electives (18 Credit Hours)

Economics electives must be drawn from the following set of graduate-level courses offered in the Department of Economics. With the approval of the Graduate Director, at most two unrestricted elective courses may be satisfied by graduate-level courses offered by any department within the University.

- ECO 6120 Economic Policy Analysis **Credit Hours: 3**
- ECO 6305 History of Economic Thought **Credit Hours: 3**
- ECO 6425 Econometrics II **Credit Hours: 3**
- ECO 6505 Public Finance **Credit Hours: 3**
- ECO 6525 Public Sector Economics **Credit Hours: 3**
- ECO 6706 International Trade: Theory and Policy **Credit Hours: 3**
- ECO 6936 Selected Topics in Economics **Credit Hours: 1-4** *Behavioral Economics* **(3 credit hours)**

Forecasting and Time Series Analysis (3 credit hours)

- ECO 7116 Microeconomics II **Credit Hours: 3**
- ECO 7207 Macroeconomics II **Credit Hours: 3**
- ECO 7406 Mathematical Economics II **Credit Hours: 3**
- ECO 7426 Econometrics III **Credit Hours: 3**
- ECP 6205 Labor Economics I **Credit Hours: 3**
- ECP 6405 Industrial Organization I **Credit Hours: 3**
- ECP 6408 Economics of Organization **Credit Hours: 3**
- ECP 6415 Issues in Regulation and Antitrust **Credit Hours: 3**
- ECP 6456 Law and Economics **Credit Hours: 3**
- ECP 6536 Economics of Health Care I **Credit Hours: 3**
- ECP 6614 Urban Economics **Credit Hours: 3**
- ECP 6624 Regional Economics **Credit Hours: 3**
- ECP 7207 Labor Economics II **Credit Hours: 3**
- ECP 7406 Industrial Organization II **Credit Hours: 3**
- ECP 7537 Economics of Health Care II **Credit Hours: 3**
- ECS 6015 Economic Development **Credit Hours: 3**

Comprehensive Exam

Students must pass an oral examination conducted by a panel of three faculty members who have taught courses in the student's major. At least one faculty member must be drawn from those who teach the core courses. The oral examination provides a forum for the student to provide evidence that s/he has

sufficient knowledge and breadth of fundamental economic concepts so as to be able to undertake rigorous economic analysis, both theoretical and empirical in nature.

Non-Thesis

There is no thesis required for this major.

Economics, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 72 post-bacc
Level: Doctoral
CIP Code: 45.0601
Dept. Code: ECN
Major/College Codes: ECO/AS
Approved: 2010

Contact Information

College: Arts and Sciences
Department: Economics

Contact Information: http://www.grad.usf.edu/majors

The Doctor of Philosophy in Economics prepares students for careers as professional economists in academia, business and government.

Major Research Areas: Health Economics, Industrial Organization, International Trade/Economic Development, Public Economics, Urban and Regional Economics

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Must have taken the GRE within the preceding five years with target scores of 65th percentile on the verbal portion and 65th percentile on the quantitative portion.
- Minimum of 2 courses in calculus*
- Minimum of 1 course in probability and statistics*
- Undergraduate Intermediate-level microeconomics and undergraduate intermediate-level macroeconomics*

*Applicants must earn a grade of B or better in each of these courses.

Curriculum Requirements

Total Minimum Hours - 72 hours

Core Requirements - 27
Fields - 12
Electives/Dir Research- 22
Dissertation - 11

Core Requirements (27 Credit Hours)

- ECO 6115 Microeconomics I **Credit Hours: 3**
- ECO 6206 Macroeconomics I **Credit Hours: 3**
- ECO 6405 Mathematical Economics I **Credit Hours: 3**
- ECO 6424 Econometrics I **Credit Hours: 3**
- ECO 6425 Econometrics II **Credit Hours: 3**
- ECO 7116 Microeconomics II **Credit Hours: 3**
- ECO 7207 Macroeconomics II **Credit Hours: 3**
- ECO 7406 Mathematical Economics II **Credit Hours: 3**
- ECO 7426 Econometrics III **Credit Hours: 3**

Fields (12 Credit Hours)

Select two pairs from the groupings below or from other pairs that the department may choose to offer:

- ECP 6536 Economics of Health Care I **Credit Hours: 3**
- ECP 7537 Economics of Health Care II **Credit Hours: 3**

- ECS 6015 Economic Development **Credit Hours: 3**
- ECO 6706 International Trade: Theory and Policy **Credit Hours: 3**

- ECP 6405 Industrial Organization I **Credit Hours: 3**
- ECP 7406 Industrial Organization II **Credit Hours: 3**

- ECO 6505 Public Finance **Credit Hours: 3**
- ECO 6525 Public Sector Economics **Credit Hours: 3**

- ECP 6614 Urban Economics **Credit Hours: 3**
- ECP 6624 Regional Economics **Credit Hours: 3**

Electives/Directed Research/Dissertation (33 Credit Hours)

Of this 33 hours minimum at least six hours must be met with additional graduate-level structured coursework approved by either the Graduate Director or the student's (Co-) Major Professor(s) and at least 21 hours by a combination of ECO 6917 Directed Research and ECO 7980 Dissertation with Dissertation comprising at least 11 of these 21 hours.

Qualifying Examination

The qualifying examination is offered in two parts.

The First Part Covers

- ECO 6405 Mathematical Economics I **Credit Hours: 3**
- ECO 7406 Mathematical Economics II **Credit Hours: 3**

- ECO 6115 Microeconomics I **Credit Hours: 3**
- ECO 6206 Macroeconomics I **Credit Hours: 3**

The Second Part Covers

- ECO 7116 Microeconomics II **Credit Hours: 3**
- ECO 6425 Econometrics II **Credit Hours: 3**
- ECO 7426 Econometrics III **Credit Hours: 3**

Dissertation (11 Credit Hours Minimum)

- ECO 7980 Dissertation **Credit Hours: 2-19**

Graduation Requirements:

- Complete 27 credit hours of required coursework with required GPA.
- Complete 12 credit hours of economics field coursework with required GPA.
- Complete all credit hours of electives, of which there must be at least six with the required GPA.
- Pass both parts of the qualifying examination
- Complete at least 21 credit hours of directed research/dissertation with a minimum of 11 of these credit hours being dissertation.
- Write and successfully defend the doctoral dissertation proposal.
- The sum total of elective/directed research/dissertation credit hours must be at least 33.
- Write and successfully defend the doctoral dissertation.

Students with M.A. Degrees in Economics from External Institution

Students who already hold an M.A. degree in Economics from an external institution prior to entering the Ph.D. program are offered the opportunity to take the First-Year Qualifying Examination in the summer before entering the program. Students who chose this option and pass the exam are waived from taking the associated four required classes: Mathematical Economics I, Mathematical Economics II, Microeconomics I, and Macroeconomics I. In addition, the total number of coursework credit hours for these students is reduced from 45 to 39. The minimum total number of graduate level credit hours required is still 72. Students who choose to take the First-Year Qualifying Exam, but do not pass, will take these four required courses during their first year in the major. They will then take the First-Year Qualifying Exam the following summer.

Department of Sociology

Sociology, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 45.1101
Dept. Code: SOC
Major/College Codes: SOC AS
Approved: 1967

Contact Information

College: Arts and Sciences
Department: Sociology

Contact Information: http://www.grad.usf.edu/majors

The Sociology M.A. provides a foundation in a broad range of sociological theories and research methods and an opportunity for pursuing specialized interests in elective Sociology courses, courses in other departments, and thesis research. Many of our M.A. recipients continue in a sociology Ph.D. Others teach in secondary schools and junior colleges, are employed in mental health services and research, in human resources management, and government organizations, or work as research consultants and market analysts.

Major Research Areas:
Identities and Communities; Social Inequalities and Social Justice; Social Movements and Globalization; Urban Problems and Culture; Immigration and Migration; Race and Ethnicity; Networks, Health and Wellbeing; Gender, Sexualities, and Families; Childhood, Youth, and Education

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- three letters of recommendation
- personal statement
- a writing sample that demonstrates strong scholarly research
- GRE required – preferred scores of 153V (61st percentile), 144Q (17th percentile)

Curriculum Requirements

Total Minimum Hours: 36

Core - 9 credit hours

Electives - 21 credit hours

Thesis - 6 credit hours

Core Requirements (9 Credit Hours)

- SYA 6126 Contemporary Sociological Theory **Credit Hours: 3**
- SYA 6305 Methods of Research **Credit Hours: 3**
- SYA 6405 Sociological Statistics **Credit Hours: 3**

Electives (21 Credit Hours)

This 21 hours of electives must include at least 12 hours in scheduled graduate courses in Sociology). With approval of the Graduate Director, a student may transfer up to six (6) hours of credit from another university or up to 12 hours of credit taken as a non-degree seeking student at USF. With Graduate Director's approval, up to nine (9) hours of elective credit may be taken in a department other than Sociology.

Comprehensive Exam

Students are required to complete a thesis proposal defense in lieu of a comprehensive exam.

Thesis (6 Credit Hours)

The Sociology Department requires a thesis for the capstone course to be completed under the supervision of a thesis committee (see Guide to Graduate Programs for more information).

- SYA 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**

Sociology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 60 (post masters)
Level: Doctoral
CIP Code: 45.1101
Dept. Code: SOC
Major/College Codes: SOC AS
Approved: 2009

Contact Information

College: Arts and Sciences
Department: Sociology

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. program provides a foundation in a broad range of sociological theories and research methods, and an opportunity for pursuing specialized interests in elective Sociology courses, courses in other departments, and dissertation research.

Major Research Areas:

Identities and Communities; Social Inequalities and Social Justice; Social Movements and Globalization; Urban Problems and Culture; Immigration and Migration; Race and Ethnicity; Networks, Health and Wellbeing; Gender, Sexualities, and Families; Childhood, Youth, and Education

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below. Note: meeting these minimum requirements does not guarantee admission into the major. Applicants must have:

- Three letters of reference
- Personal Statement
- Example of Written Work
- GRE Required – preferred scores 160V (86th percentile), 144Q (17th percentile)

Curriculum Requirements

Total Minimum Hours: 60 credit hours post-Masters

Core - 6 credit hours

Disciplinary Requirements - 9 credit hours

Specialty Research Methods - 6 credit hours

Electives - 12 credit hours

Other Coursework - 9 credit hours

Dissertation - 18 credit hours

Core Requirements (6 Credit Hours)

- SYA 7939 Selected Topics for Ph.D. Students **Credit Hours: 3**

Interdisciplinary Ph.D. Professional Seminar (required as a first course for all students) (3 credit hours)
Interdisciplinary Capstone Seminar (Required as a final course for all students) (3 credit hours)

Disciplinary Requirements (9 Credit Hours) *

- SYA 7939 Selected Topics for Ph.D. Students **Credit Hours: 3**

Advanced Theory and Methods (3 credit hours)
Advanced Theory and Methods II (3 credit hours)

- SYG 6936 Seminar in Teaching Sociology **Credit Hours: 3**

Specialty Research Methods Course (6 Credit Hours)

Two research methods courses in any discipline chosen in consultation with advisor.

Electives (12 Credit Hours)

Students must complete two sociology electives and two interdisciplinary electives to be chosen in consultation with the faculty advisor.

Other Coursework (9 credit hours)

Students complete a combination of the following as determined by student and faculty mentor.

- SYA 7980 Doctoral Dissertation **Credit Hours: 2-20**

(Dissertation Proposal Development)

- SYA 6909 Independent Study **Credit Hours: 1-19**
- SYA 6912 Directed Research **Credit Hours: 1-19**

Other sociology courses approved by advisor.

Comprehensive Qualifying Exam

Students also are required to complete a comprehensive portfolio of competencies which takes the place of a qualifying exam. The portfolio will measure theoretical and methodological knowledge, substantive knowledge beyond the particular topic of the dissertation and professional level proficiency.

Dissertation (18 Credit Hours)

- SYA 7980 Doctoral Dissertation **Credit Hours: 2-20 (18 credits for this program)**

Department of Women's and Gender Studies

Women's and Gender Studies, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 05.0207
Dept. Code: WGS
Major/College: WST AS
Approved: 1997

Contact Information

College: Arts and Sciences
Department: Women's and Gender Studies

Contact Information: http://www.grad.usf.edu/majors

The M.A. in Women's and Gender Studies is designed to serve the needs of a variety of students. This program prepares students both for continued academic study and for positions outside the academy, especially in social-justice and public-service organizations. Graduates are prepared for Ph.D. and counseling programs, law schools, and public and private sector careers. The thesis option is recommended for students who intend eventually to pursue a doctoral or other advanced degree. Either the portfolio option or the internship option is recommended for students who seek the M.A. as a terminal degree.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below. Applicants without training in Women's and Gender Studies are admitted on a conditional basis. In addition, applicants must submit the following requirements:

- GRE scores (preferred percentiles for Verbal Reasoning at 75 or better and Analytical Writing at 70 or better)
- A personal narrative statement of purpose
- A writing sample (appropriate examples include a term paper or research paper)
- Three letters of recommendation
- Resume or Curriculum Vita (CV)

Curriculum Requirements

Minimum Hours: 36 credit hours

Core – 9 hours
Electives – 21 hours
Thesis/Internship/Portfolio Option – 6 hours

Core Requirements (9 Credit Hours)

- WST 6001 Feminist Research and Methodology **Credit Hours: 3**
- WST 6560 Advanced Feminist Theory **Credit Hours: 3**
- WST 6003 Feminist Scholarship and Pedagogy **Credit Hours: 3**

Electives (21 Credit Hours)

To be selected from

- WST graduate elective and special topics course offerings;
- Graduate courses on issues surrounding the intersection of gender/class/race/sexuality offered by other departments and approved by the WGS graduate director or student's major professor;
- No more than one other graduate-level course approved by the WGS graduate director.

Comprehensive Examinations

In lieu of comprehensive examination, defense of final projects is used as the culminating assessment: defense of thesis for the thesis option, defense of internship narrative for the internship option, and defense of portfolio for the portfolio option.

Thesis, Internship, or Portfolio Option (6 credit hours)

At the end of 18 hours of coursework, students select the thesis, internship, or portfolio option.

Thesis

- WST 6971 Thesis **Credit Hours: 1-9**

Taken over two semesters, the student will develop a thesis proposal approved by the student's thesis committee and complete a Master's thesis on the approved topic. The completed thesis must be defended at an oral defense.

Internship

- WST 5940 Internship in Women's Studies **Credit Hours: 3-6**

The internship experience, typically over two semesters, should take place in a human service agency or other organization that focuses on women, sexualities, or gender issues. The internship is approved by the student's internship committee. The student will be required to write a narrative report that describes the internship in detail and analyzes the experience in terms of appropriate theoretical frameworks. The completed narrative must be defended at an oral defense.

Portfolio

In lieu of thesis or internship hours, students must take two additional electives and prepare a portfolio under the guidance of the major professor. The portfolio, approved by the student's committee, will consist of one to two polished academic papers produced for graduate courses, academic conferences, or scholarly publication.

Women's and Gender Studies Graduate Certificate

This program is offered fully online.

Curriculum Code: **XWS**

Description

The Women's Studies Graduate Certificate provides an opportunity for graduate students and other professionals to gain a more inclusive knowledge of women and gender issues in society, including feminist studies. Feminist scholarship enhances any educational and professional background, including areas of social or health services that serve women, as well as any national/international based profession in today's diverse society. Students will investigate theories pertaining to the roles of gender, race, class and sexuality within various cultural systems.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

12 credit hours with a grade of B or higher. Three (3) credit hours of coursework are required:

- WST 6001 Feminist Research and Methodology **Credit Hours: 3**
- Select nine(9) credit hours of elective coursework from the list below, or consult with the certificate program advisor about current course offerings that may apply as electives. Up to 3 credit hours from the student's graduate discipline may be applied

Electives

- WST - Feminist Scholarhip and Pedagogy **Credit(s): 3**
- WST 6560 Advanced Feminist Theory **Credit Hours: 3**
- WST 6936 Selected Topics in Women's Studies **Credit Hours: 3**

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

School of Information

Intelligence Studies, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 11.0401
Dept Code: LIS
Major/College Codes: ILS / AS

Concentrations:

Cyber Intelligence CYI
Strategic Intelligence SGI

Contact Information

College: Arts and Sciences
Department: School of Information

Contact Information: http://www.grad.usf.edu/majors

The Master of Science (MS) in Intelligence Studies is an online, applied graduate major designed to train a "next generation" of information and intelligence professionals for the private and public sectors. USF's Intelligence Studies major is built around an innovative STEM-based model for professional analytic education. The curriculum focuses primarily on developing analytic competencies, and subsequently allows students to focus on specialized subject-matter areas. The principal aim is to train problem-solvers who understand strategic concepts and analytic methodologies and can apply that knowledge to advance an organization's interests and objectives. Graduates will be capable of developing and evaluating new knowledge; generating and analyzing courses of action; expressing clearly reasoned opinions; and communicating effectively in writing, oral presentation, and visual display.

Major Research Areas: Strategic Intelligence, Cyber Intelligence, Intelligence Analysis, Information Studies, Information Analytics, Cybersecurity

Admissions Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE is not required
- 250-500 word essay describing academic and professional background, reasons for pursuing the degree, and professional goals pertaining to intelligence, analytics, and/or information
- Professional resume or CV
- Students applying to the Cyber Intelligence Concentration must also have technical knowledge, to include a basic understanding of:
  - Programming/coding (e.g. Python, Java, C++), computational problem solving, and of
  - major computer Operating Systems and how they function

Curriculum Requirements

Minimum Hours - 36 Credit Hours

Core Requirements – 18 Credit Hours
Concentrations - 6-12 Credit Hours
Electives – 6 Credit Hours (Strategic Intelligence Only)
Comprehensive Exam/Capstone- 3 Credit Hours
Internship – 3 Credit Hours

This program is offered partially online. Courses may be taken online or on-campus, pending availability.

Core Requirements (18 Credit Hours)

- LIS 6700 Information Strategy and Decision-Making **Credit Hours: 3**
- LIS 5802 Information Analytics **Credit Hours: 3** (using R)
- LIS 5937 Selected Topics in Library Studies **Credit Hours: 1-4**

Open Source Intelligence (OSINT)) (3 Credit Hours) (Proposed LIS 6673)
Project Management (3 Credit Hours) (Proposed 6674)

- LIS 6260 Foundations of Information Science and Technology **Credit Hours: 3**
- LIS 6107 Advanced Professional & Technical Communication for Analysts **Credit Hours: 3**

Concentrations

Students select from the following Concentrations:

Strategic Intelligence (12 Credit Hours)

- LIS 6703 Core Concepts in Intelligence **Credit Hours: 3**
- LIS 6702 Advanced Intelligence Analytic Methods **Credit Hours: 3**
- An additional 6 hours chosen with consultation from the Graduate Director

Cyber Intelligence (12 Credit Hours)

- LIS 6703 Core Concepts in Intelligence **Credit Hours: 3**
- LIS 6702 Advanced Intelligence Analytic Methods **Credit Hours: 3**
- LIS 6709 Cyber Intelligence **Credit Hours: 3**
- LIS 6670 Advanced Cyber Intelligence **Credit Hours: 3**

Thesis/Non-Thesis:

No thesis is required.

Comprehensive Exam (3 Credit Hours)

The successful completion of the Capstone Portfolio serves in lieu of the Comprehensive Exam.

- LIS 6906 Independent Study **Credit Hours: 1-4 (3 credits for the program)** (or equivalent) - Capstone (Integrated Portfolio of Competencies)

Internship (3 Credit Hours)

- LIS 6946 Supervised Field Work **Credit Hours: 3** (Experiential Learning (Internship or Equivalent))

Library and Information Science, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 39
Level: Masters
CIP Code: 25.0101
Dept. Code: LIS
Major/College Codes: LIS AS
Approved: 1988

Contact Information

College: Arts and Sciences
Department: School of Information

Contact Information: http://www.grad.usf.edu/majors

The M.A. in Library and Information Science (LIS) is designed to prepare students for careers and leadership roles in library and information professions that serve the needs of a culturally diverse, technological society. The program is fully online, and offers student a flexible curriculum for them to meet their professional goals. Graduates of USF's LIS program work in libraries, businesses, and various information agencies across the state, nationally, and internationally.

Accreditation

The M.A. in Library and Information has been continually accredited by the American Library Association (ALA) since 1974, with the most recent review for continued accreditation occurring in 2016. Completion of the degree provides the professional credential commonly required for employment in many libraries and other information agencies. For those interested in becoming School Library Media Specialists, the degree offers coursework that will prepare students to pass the examination for certification required by the State of Florida. For more information, http://si.usf.edu/ma/library-program/

Major Research Areas

Information Storage and Retrieval
Metadata
Public Librarianship
Academic Librarianship
School Media Specialist
Archives and Records Management
Visualization of Information
Information Technology
Human Information Behavior
Information Policy
Information Literacy

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

GRE is required with preferred minimum scores of 73rd percentile (156V), 10th percentile (141) Q.

However, the LIS program will waive the GRE requirement if the student meets one of the following criteria:

- A 3.50 or higher GPA in a completed master's degree program from a regionally accredited institution
- A 3.25 or higher GPA in upper division undergraduate work from a regionally accredited institution.
- Doctoral degree (including professional degrees such as the JD and MD) from a regionally accredited institution.

All students not meeting one of the above criteria will be considered for conditional admission based on all of the following criteria:

- GRE - preferred minimum score of 156 (73rd percentile) Verbal; 141 (10th percentile) Quantitative
- An academic writing sample
- Three written letters of recommendation
- Resume
- Statement of Purpose

Conditional admission status will be converted to regular status upon completion of the first three LIS courses with a GPA of 3.50 or above. LIS 5020 must be included as one of these courses.

Curriculum Requirements

Total Minimum Hours - 39 credit hours minimum

Core courses – 18 credit hours
Technology Elective – 3 credit hours
Electives – 18 credit hours
Comp Exam/Portfolio

Students must maintain a 3.00 grade point average of "B" or better and no more than two grades below "B" will be accepted. Transfer credit from other recognized graduate schools is limited to six semester hours taken within the last five years with grades of "B" or better. All transfers must be approved by the candidate's faculty advisor. Transfer credits must be posted to a student's permanent record no later than one full term prior to graduation.

Core Requirements (18 Credit Hours)

- LIS 5020 Foundations of Library and Information Science **Credit Hours: 3**
- LIS 6603 Basic Information Sources and Services **Credit Hours: 3**
- LIS 6271 Research Methods in Library and Information Science **Credit Hours: 3**
- LIS 6409 Introduction to Library Administration **Credit Hours: 3**
- LIS 6511 Collection Development and Maintenance **Credit Hours: 3**
- LIS 6711 Organization of Knowledge I **Credit Hours: 3**

Technology Elective (3 Credit Hours)

Students must determine with their faculty advisor a suitable technology elective that best meets the requirement and takes into account a student's existing understanding and competencies of theory, application, and use of technology. For many students, the following course will count toward the IT Elective:

- LIS 5268 Microcomputer Applications Library and Information Centers **Credit Hours: 3**

Electives (18 Credit Hours)

Eighteen (18) credit hours approved in coordination with the student's advisor.

Courses Outside the School

Degree-seeking students are permitted to enroll in courses, usually limited to six semester hours, outside the School of Information when, in the context of the development of a purposeful program, an interdisciplinary approach seems appropriate. Students must obtain the prior approval of their Faculty advisor.

Compehensive Exam (Portfolio)

Assessment of Competencies for the Master's Degree in Library and Information Science - In lieu of a Comprehensive Examination, students are required to submit a portfolio in accordance with program provided guidelines which exhibit competencies acquired during their master's program based on standards of the American Library Association.

Portfolio timeline: Students will begin creating and collecting artifacts and other examples of work beginning in their first semester of study. Portfolios must be reviewed by an advisor or other major designee midway through the student's major and then submitted prior to graduation according to the major guidelines for final approval as part of graduation requirements.

Cyber Intelligence Graduate Certificate

This program is offered fully online.

Certificate Code: XCB
Approved 201408

Description

The graduate certificate in cyber intelligence prepares you to acquire and assess the intentions, capabilities, and activities of potential adversaries and insiders who pose a threat, including attack methods that target people to penetrate systems, sometimes referred to as social engineering.

Learn to generate and evaluate courses of action to manage risks, counter vulnerabilities and enhance organizational decision-making as you develop an understanding of how intelligence drives a cybersecurity mission.

Course Location/Delivery

This Certificate is offered online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None

Curriculum Requirements (18 Credit Hours)

- LIS 6107 Advanced Professional & Technical Communication for Analysts **Credit Hours: 3**
- LIS 6700 Information Strategy and Decision-Making **Credit Hours: 3**
- LIS 6702 Advanced Intelligence Analytic Methods **Credit Hours: 3**
- LIS 6703 Core Concepts in Intelligence **Credit Hours: 3**
- LIS 6709 Cyber Intelligence **Credit Hours: 3**
- LIS 6670 Advanced Cyber Intelligence **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Health Information Graduate Certificate

This program is offered fully online.

Certificate Code: XHF
Approved 201508

The Graduate Certificate in Health Information is intended for those interested in careers in Health Sciences Librarianship or Health Information. Professionals with training in Health Information Services and Management are able to take advantage of growing employment opportunities in academic medical centers; hospitals and health care systems; federal, state and local government; private corporations and other health-resources centers.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process. In addition, to the application forms please submit:

- Official transcripts
- A resume
- Letter of Intent

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

Required:

- LIS 6475 Health Sciences Librarianship **Credit Hours: 3**
- LIS 5631 Health Information Sources **Credit Hours: 3**

- LIS 5418 Health Informatics for Medical Librarians **Credit Hours: 3**

And select two of the following:

- LIS 6946 Supervised Field Work **Credit Hours: 3**
- LIS 5937 Selected Topics in Library Studies **Credit Hours: 1-4**
- LIS 6630 Information Sources and Services in Science and Technology **Credit Hours: 3**

Other graduate courses as approved by the Certificate Director

Contacts

Contact Information: http://www.grad.usf.edu/cert

Library Information Technology Graduate Certificate

This program is offered fully online.

Certificate Code: XLT
Approved 201508

The online Graduate Certificate in Library Information Technology serves the needs of those who wish to enter the rapidly expanding information field. This certificate seeks to provide students and information professionals with the tools needed to use technology efficiently and effectively for gathering, storing, and disseminating information. This Graduate Certificate also serves the needs of those with graduate degrees who wish to improve technology skills.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process. In addition, to the application forms please submit:

- Official transcripts
- A resume
- Letter of Intent

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

- LIS 5268 Microcomputer Applications Library and Information Centers **Credit Hours: 3**

Students must choose from the following courses for the remaining 12 credits:

- LIS 5937 Selected Topics in Library Studies **Credit Hours: 1-4**

Wikipedia Governance
Search Engine Society and Digital Natives
Introduction to Big Data
Social Media for Information Professionals

- LIS 6303 Preparing Instructional Media **Credit Hours: 3**
- LIS 5315 Instructional Graphics **Credit Hours: 3**
- LIS 6316 Visualization of Knowledge **Credit Hours: 3**
- LIS 6463 Library Networks and Systems **Credit Hours: 3**

LIS 5937 Online Information Systems and Courses (Proposed LIS 6609)

Contacts

Contact Information: http://www.grad.usf.edu/cert

Post Master's Library and Information Science Graduate Certificate

This program is offered fully online.

Certificate Code: XLI
Approved 200308

The exponential growth of recorded knowledge and the advent of digital technology have combined to transform librarianship. This transformation means an entirely new skill set is required of librarians today. Librarians enrolled in this certificate will update their skills and renew their knowledge in light of the new technological change in the profession. Many of the courses are either partially or fully online.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. Students must hold a master's degree from an ALA and regionally accredited institution with a minimum 3.0 GPA.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Credit hours from this Certificate may be eligible to apply toward a graduate degree. Check with the department for information.

Time Limit / Average time to Completion

Three years

Pre-Requisites

None

Curriculum Requirements (18 Credit Hours)

Students, in consultation with an advisor, will choose 6 courses (18 hours) from the list below.

- ECP 6305 Environmental Economics and Policy **Credit Hours: 3**
- LIS 5268 Microcomputer Applications Library and Information Centers **Credit Hours: 3**

- LIS 5315 Instructional Graphics **Credit Hours: 3**
- LIS 6514 Digital Libraries **Credit Hours: 3**
- LIS 5566 Multicultural Literature for Children and Young Adults **Credit Hours: 3**
- LIS 6316 Visualization of Knowledge **Credit Hours: 3**
- LIS 5937 Selected Topics in Library Studies **Credit Hours: 1-4**

Current Issues in Technology (3 Credit Hours)
Libraries as Multicultural Heritage Institutions (3 Credit Hours)

- LIS 6260 Foundations of Information Science and Technology **Credit Hours: 3**
- LIS 6402 Advanced Library Administration **Credit Hours: 3**
- LIS 6624 Information Sources and Services in Business and Law **Credit Hours: 3**
- LIS 6630 Information Sources and Services in Science and Technology **Credit Hours: 3**
- LIS 6726C Metadata **Credit Hours: 3**

Students may also choose any other 6000 level course from the Master's program course listing that they have not previously taken.

- LIS 6110 History of Libraries **Credit Hours: 3**
- LIS 6111 History of Children's Literature **Credit Hours: 3**
- LIS 6271 Research Methods in Library and Information Science **Credit Hours: 3**
- LIS 6303 Preparing Instructional Media **Credit Hours: 3**
- LIS 6409 Introduction to Library Administration **Credit Hours: 3**
- LIS 6432 Seminar in Academic Libraries **Credit Hours: 3**
- LIS 6445 Seminar in Public Libraries **Credit Hours: 3**
- LIS 6455 Organization and Administration of the School Media Center **Credit Hours: 3**
- LIS 6463 Library Networks and Systems **Credit Hours: 3**
- LIS 6472 Seminar in Special Libraries **Credit Hours: 3**
- LIS 6473 Law Librarianship **Credit Hours: 3**
- LIS 6475 Health Sciences Librarianship **Credit Hours: 3**
- LIS 6511 Collection Development and Maintenance **Credit Hours: 3**
- LIS 6523 Adult Services in Libraries **Credit Hours: 3**
- LIS 6542 The Curriculum and Instructional Technology **Credit Hours: 3**
- LIS 6564 Materials for Children **Credit Hours: 3**
- LIS 6565 Books and Related Materials for Young Adults **Credit Hours: 3**
- LIS 6610 Information Sources and Services in the Humanities **Credit Hours: 3**
- LIS 6620 Information Sources and Services in the Social Sciences **Credit Hours: 3**
- LIS 6661 Government Documents **Credit Hours: 3**
- LIS 6724 Cataloging and Classification **Credit Hours: 3**
- LIS 6735 Technical Services in Small Libraries **Credit Hours: 3**
- LIS 6906 Independent Study **Credit Hours: 1-4**
- LIS 6946 Supervised Field Work **Credit Hours: 3**
- LIS 6528 Storytelling **Credit Hours: 3**

LIS 5937 Reading Guidance Programs in Libraries and Classrooms (3 Credit Hours) (LIS 6212)
LIS 5937 Library Systems Analysis and Planning (3 Credit Hours) (LIS 6464)
LIS 5937 Organization of Knowledge I (3 Credit Hours) (LIS 6725)
LIS 5937 Organization of Knowledge II (3 Credit Hours) (LIS 6745)

Contacts

Contact Information: http://www.grad.usf.edu/cert

School Library Media Specialist Graduate Certificate

This program is offered fully online.

Certificate Code XLM
Approved 200308

This certificate is designed to enhance the knowledge and capabilities of those persons who wish to take the FTCE subject area exam for school media specialist K-12. Alternatively it would also be valuable for those persons who have taken and passed the FTCE subject area test and are eligible for certification as school library media specialist but wish to become more aware of the roles and responsibilities of the media specialist.

Location/Delivery

Certificate courses are offered at the Tampa campus, web-based, or a combination of the two.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

In addition to a bachelor's degree from a regionally accredited institution, or its equivalent, with a minimum 3.0 GPA, students must currently hold a valid teaching certificate or show proof of coursework leading to a valid teaching certificate.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Course credits earned in the certificates may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years.

Pre-Requisites

None

Curriculum Requirements (18 Credit Hours)

The student's individualized certificate program will be comprised of six courses chosen from the list below. These choices will be made in consultation with an advisor from the School of Library and Information Science.

- LIS 6603 Basic Information Sources and Services **Credit Hours: 3**
- LIS 6735 Technical Services in Small Libraries **Credit Hours: 3**
- LIS 6271 Research Methods in Library and Information Science **Credit Hours: 3**
- LIS 6303 Preparing Instructional Media **Credit Hours: 3**
- LIS 6455 Organization and Administration of the School Media Center **Credit Hours: 3**
- PHC 6197 Secondary Data Analysis in Maternal and Child Health **Credit Hours: 3**
- LIS 6542 The Curriculum and Instructional Technology **Credit Hours: 3**
- LIS 6511 Collection Development and Maintenance **Credit Hours: 3**
- LIS 6565 Books and Related Materials for Young Adults **Credit Hours: 3**
- LIS 6564 Materials for Children **Credit Hours: 3**
- LIS 6946 Supervised Field Work **Credit Hours: 3**
- LIS 5020 Foundations of Library and Information Science **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Strategic Intelligence Graduate Certificate

This program is offered fully online.

Certificate Code: XSI
Approved 201708

The Graduate Certificate in Strategic Intelligence will provide a state-of-the-art, academic foundation in the discipline of intelligence studies. That foundation can prepare the individual to pursue further graduate study or to develop and apply this critical set of professional skills. The curriculum follows the guidelines for the International Association for Intelligence Education (IAFIE), covering strategic thinking, core concepts, analytic methods, and analytic communication (writing and briefing).

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

In addition, to the application forms please submit:

- Official transcripts
- A resume
- Letter of Intent

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

- LIS 6700 Information Strategy and Decision-Making **Credit Hours: 3**
- LIS 6702 Advanced Intelligence Analytic Methods **Credit Hours: 3**

- LIS 6703 Core Concepts in Intelligence **Credit Hours: 3**
- LIS 6107 Advanced Professional & Technical Communication for Analysts **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

School of Interdisciplinary Global Studies

Latin American, Caribbean, and Latino Studies, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 5.0107
Dept. Code: IGS
Major/College Codes: LAS AS
Approved: 2000

Contact Information

College: Arts and Sciences
Department: School of Interdisciplinary Global Studies

Contact Information: http://www.grad.usf.edu/majors

The mission of ISLAC is to promote research and study in and about Latin America and the Caribbean. ISLAC is an academic unit devoted to interdisciplinary research and teaching focused on economic, social, political and cultural formations in Latin America and the Caribbean and among the Hispanic/Latino populations in North America.

The Institute fosters greater knowledge of Latin America and the Caribbean and Latino issues, through partnerships with community organizations and other USF departments to sponsor lectures and cultural events that are open to the public throughout the year. We also support graduate students and faculty research in the area, and provide opportunities for Latin Americanist scholars at USF to collaborate and disseminate their work.

Faculty Interests Include:
ISLAC's affiliate faculty members are drawn from the social sciences, humanities, arts, and human service fields. We include faculty from the following departments: History, Spanish-American and Caribbean Languages and Literature, Humanities, Anthropology, Political Science, Sociology, Economics, Business, Geography, Public Administration, Fine Arts, Public Health, Education, Africana Studies, Women's and Gender Studies and Mental Health.

Research Areas:
Includes, but is not limited to: Afro-descendants in Latin America and the Caribbean, transatlantic studies, human rights, citizenship, race and ethnicity, education and public health migration and Diaspora.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- three letters of recommendation

- statement of purpose
- resume
- GRE not required, but suggested for full financial consideration

Curriculum Requirements

Total Minimum Hours: 36 Credit Hours

Core – 6 Credit Hours
Methods - 3 Credit Hours
Specialization – 12 Credit Hours
Electives – 9 Credit Hours
Thesis/Non-Thesis – 6 Credit Hours

Core Requirements (6 Credit Hours)

- LAS 6220 Issues and Perspectives in Latin American Studies **Credit Hours: 3**
- AFA 6120 Social Theory and Social Thought **Credit Hours: 3**

Methods Requirement (3 Credit Hours)

Eligible courses include, but are not limited to:

- AMS 6156 Theories and Methods of Cultural Studies **Credit Hours: 3**
- ANG 5486 Quantitative Methods in Anthropology **Credit Hours: 3**
- COM 6306 Action Research **Credit Hours: 3**
- HUM 6801 Theories and Methods of Cultural Studies **Credit Hours: 3**
- LIN 6748 Contrastive Analysis **Credit Hours: 3**
- LIN 7885 Discourse Analysis **Credit Hours: 3**
- POS 6707 Qualitative Analysis **Credit Hours: 3**
- POS 6746 Quantitative Analysis I **Credit Hours: 3**
- SPC 6214 Ethnography of Communication **Credit Hours: 3**
- SYA 6305 Methods of Research **Credit Hours: 3**
- SYA 6315 Qualitative Research Methods **Credit Hours: 3**
- SYA 6316 Ethnography **Credit Hours: 3**
- SYA 6405 Sociological Statistics **Credit Hours: 3**

Major and Minor Fields

With the concurrence of the ISLAC advisor, students will select major and minor fields during their first semester. These fields will draw heavily on participating departments (e.g. Anthropology, History, Government and International Affairs, Art History). At that time the student will constitute a supervisory committee, made up of two professors from the major field and one from the minor field.

Specialization (12 Credit Hours)

Students complete 12 hours of courses in their specialization. Courses may be taken from participating Departments, such as Anthropology, Government and International Affairs, Sociology, Mass Communication, Geography, Social Work, Women's and Gender Studies, Global Health, Philosophy, Economics, History, World Languages, Humanities and American Studies, Art History, Africana Studies and Education. Students may also request to have courses from other departments count toward major or minor fields.

Eligible courses include, but are not limited to:

- LAS 6936 Seminar in Latin American Studies I **Credit Hours: 3**

Electives (9 Credit Hours)

Students can take three electives from outside the major field. Elective courses must be approved by the Graduate Director and must have 50% of the course content focus on Latin America, the Caribbean, or Latinos. Eligible courses include, but are not limited to those listed under specialization.

- AFA 6932 Topics in Africana Studies **Credit Hours: 3**
- AMS 6156 Theories and Methods of Cultural Studies **Credit Hours: 3**
- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- HIS 6939 Seminar in History **Credit Hours: 3**
- HUM 6801 Theories and Methods of Cultural Studies **Credit Hours: 3**
- INR 6690 Research Seminar in Globalization **Credit Hours: 3**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**
- POS 6933 Selected Topics in Political Science **Credit Hours: 3**
- SPW 5135 Colonial Spanish American Literature **Credit Hours: 3**
- SPW 6775 Caribbean Literature **Credit Hours: 3**
- SPW 6806 Introduction to Hispanic Graduate Studies **Credit Hours: 3**
- SYA 6933 Special Topics-Sociology **Credit Hours: 3**
- SYD 6605 City and Community **Credit Hours: 3**
- SYO 6255 Seminar in Sociology of Education **Credit Hours: 3**
- WST 6560 Advanced Feminist Theory **Credit Hours: 3**

Or other graduate course approved by the Graduate Director.

To count towards this degree, 50% of the course content must focus on Latin America, the Caribbean, or Latinos.

Thesis/Non Thesis (6 Credit Hours Minimum)

Students select either the thesis or non-thesis option.

Thesis:

- LAS 6971 Thesis in Latin America and Caribbean **Credit Hours: 1-12 (6 credits)**

In their thesis, students must provide new insight into a relevant topic in political science or international studies. As students approach the thesis stage, they need to compose a thesis committee consisting of a major professor, who must be a member of the Department of Government and International Affairs, and two readers. One of the two readers can be from another department, but that person must first be approved by the Graduate Director. The thesis committee must approve proposals before students embark on their thesis. Students must prepare a written thesis and defend their work in a formal oral presentation before their committee.

Non-Thesis:

- TBA **Credit(s): 3** (Elective structured class approved by the Graduate Director)
- LAS 6913 Independent Study and Research in Latin American **Credit Hours: 1-9 (3 Credits Hours)** (Literature Review of approximately 50 pages)

Students who choose a non-thesis option will be required to complete an additional six (6) hours of course work at the 6000 level. The student is required to demonstrate competency by successfully completing a substantial literature review in his or her field of concentration.

Comprehensive Examination

For students in the thesis option, successful completion of the Thesis serves in lieu of the Comprehensive Exam. For students in the non-thesis option, the extensive literature review determines competency and serves as the equivalent of a comprehensive examination.

Foreign Language Requirement

At the time of graduation, students must submit proof of proficiency in Spanish, Portuguese, or another language spoken in Latin America or the Caribbean.

Political Science, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 45.1001
Dept. Code: IGS
Major/College Codes: POL AS
Approved: 1969

Concentrations:

Africana Studies (AFA)

Contact Information

College: Arts and Sciences
Department: School of Interdisciplinary Global Studies (SIGS)

Contact Information: http://www.grad.usf.edu/majors

The graduate major leading to the M.A. in Political Science is designed to offer advanced general instruction in Political Science. It prepares its graduates for positions of responsibility in the public and private sectors, as well as in research, teaching, and study at the doctoral level.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE required
- Three (3) letters of recommendation, preferably from an academic source
- A 500-word statement of academic interest
- Official transcripts
- Must have an undergraduate background in political science.

Curriculum Requirements

Total Minimum Hours: 36 credit hours

Common Core – 12 credit hours
Major Field or Concentration 9 credit hours

Electives – 9 credit hours minimum
Thesis/Non-Thesis – 6 credit hours

For instructional purposes, the graduate curriculum in Political Science has been divided into four fields:

Field 1 Comparative Politics (courses with a CPO prefix)
Field 2 International Relations (courses with an INR prefix)
Field 3 American Government (courses with a PUP, POS, or URP prefix)
Field 4 Political Theory (courses with a POT prefix)

Common Core Courses (12 Credit Hours)

- POS 6735 Foundations of Political Inquiry **Credit Hours: 3**

Disciplinary Seminar Requirements

Select two:

- POS 6045 Seminar in American Government & Politics **Credit Hours: 3**
- POT 6007 Seminar in Political Theory **Credit Hours: 3**
- INR 6007 Seminar in International Relations **Credit Hours: 3**
- CPO 6091 Seminar in Comparative Politics **Credit Hours: 3**

Required Research Methods Sequence

Select one:

- POS 6746 Quantitative Analysis I **Credit Hours: 3**
- POS 6707 Qualitative Analysis **Credit Hours: 3**

Major Field or Concentration

Students may either choose a Major Field of study, or the concentration in Africana Studies

Major Field (9 Credit Hours)

In addition to the core course in major area, three additional courses in the core area are chosen from American Government, Political Theory, International Relations, or Comparative Politics.

Concentration in Africana Studies (9 Credit Hours)

- AFA 6932 Topics in Africana Studies **Credit Hours: 3**
- AFA 6120 Social Theory and Social Thought **Credit Hours: 3**
- AFA 6108 Social Construction of Race and Racism **Credit Hours: 3**

Electives (9 Credit Hours Minimum)

Electives have to be approved by the Graduate Director. Other graduate courses may also be taken as electives, with approval by the Graduate Director.

Electives include, but are not limited to:

- AFA 6207 African American Historiography **Credit Hours: 3**
- AFA 6805 African Historiography **Credit Hours: 3**
- AFA 6355 African American Community Research: Ethnography **Credit Hours: 3**
- AFA 6387 Seminar on Genocide and Human Rights **Credit Hours: 3**
- AFA 6932 Topics in Africana Studies **Credit Hours: 3**
- AFA 6905 Independent Study **Credit Hours: 1-19**
- AFA 6910 Directed Research **Credit Hours: 1-12**
- CPO 5934 Selected Topics in Comparative Politics **Credit Hours: 3**
- POS 6933 Selected Topics in Political Science **Credit Hours: 3**

Thesis/Non Thesis (6 Credit Hours Minimum)

Thesis:

Students must enroll in either POS 6971 or AFA 6971 (Africana Studies Concentration students)Thesis: Master's for a minimum of 6 credit hours. In their thesis, students must provide new insight into a relevant topic in political science or international studies. As students approach the thesis stage, they need to compose a thesis committee consisting of a major professor, who must be a member of the Department of Government and International Affairs, and two readers. One of the two readers can be from another department, but that person must first be approved by the Graduate Director. The thesis committee must approve proposals before students embark on their projects. Students must prepare a written thesis and defend their work in a formal oral presentation before their committee.

- POS 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**
- AFA 6971 Thesis **Credit Hours: 2-19 (6 credits for this program)**

Non-Thesis:

Students who choose a non-thesis option will be required to complete an additional 6 hours of course work at the 6000 level. The student is required to demonstrate competency by successfully completing a substantial literature review of approximately 50 pages in his or her major field, or in the Africana Studies Concentration.

- Elective - Structured course approved by the Graduate Director **Credit(s): 3**

And one of the following:

- POS 6909 Independent Study **Credit Hours: 1-3** (for students in a major field) **(3 credits for this program)**
- AFA 6905 Independent Study **Credit Hours: 1-19** (for students in the Africana Studies Concentration) **(3 credits for this program)**

Comprehensive Examination

For students in the thesis option, successful completion of the Thesis serves in lieu of the Comprehensive Exam. For students in the non-thesis option, the extensive literature review determines competency and serves as the equivalent of a comprehensive examination.

Course Listings

Students may take a maximum of 3 credit hours of POS 6909 Independent Study and 3 credit hours of POS 6919 Directed Research

- CPO 5934 Selected Topics in Comparative Politics **Credit Hours: 3**
- CPO 6091 Seminar in Comparative Politics **Credit Hours: 3**
- CPO 6077 Social Movements **Credit Hours: 3**
- INR 5012 Globalization **Credit Hours: 3**
- INR 5086 Issues in International Relations **Credit Hours: 3**
- INR 6007 Seminar in International Relations **Credit Hours: 3**
- INR 6036 Seminar in International Political Economy **Credit Hours: 3**
- INR 6107 American Foreign Policy **Credit Hours: 3**
- LAS 6933 - Seminar in Latin American Studies **Credit(s): 3**
- POS 5159 Urban Policy Analysis **Credit Hours: 3**
- POS 6045 Seminar in American Government & Politics **Credit Hours: 3**
- POS 6127 Issues in State Government and Politics **Credit Hours: 3**
- POS 6455 Political Parties and Interest Groups **Credit Hours: 3**
- POS 6707 Qualitative Analysis **Credit Hours: 3**
- POS 6746 Quantitative Analysis I **Credit Hours: 3**
- POS 6735 Foundations of Political Inquiry **Credit Hours: 3**
- POS 6909 Independent Study **Credit Hours: 1-3**
- POS 6919 Directed Research **Credit Hours: 1-19**
- POT 6007 Seminar in Political Theory **Credit Hours: 3**
- POS 6971 Thesis: Master's **Credit Hours: 2-19**

Politics and International Affairs, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 72-hours post-bachelors
Level: Doctoral
CIP Code: 45.0901
Dept. Code: IGS
Major/College Codes: PIA AS
Approved: 2009; title change 2019

Contact Information

College: Arts and Sciences
Department: School of Interdisciplinary Global Studies (SIGS)

Contact Information: http://www.grad.usf.edu/majors

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below. Students apply for admission directly into the Ph.D.. Those who are interested in first earning a Master's in Political Science need to apply to that major separately.

- GRE Required
- 3 letters of recommendation (from academic sources or from those able to judge the applicant's academic abilities)
- a 500 word personal statement expressing reasons for pursuing a Ph.D. in Government at the University of South Florida, and
- a writing sample

A Master's degree in Political Science, Public Administration, International Studies, or a related field will count favorably towards admission, but it is not a requirement for admission.

Curriculum Requirements

Total Minimum hours - 72 credit hours post-bachelor's

Core – 6 Credit Hours
Disciplinary Requirements – 9 Credit Hours
Methods – 9 Credit Hours
Primary Fields – 18 Credit Hours total
Electives – 9 Credit Hours
Teacher Training – 3 Credit Hours
Dissertation Proposal/Capstone – 3 Credit Hours
Dissertation – 15 Credit Hours

Core Requirements (6 Credit Hours)

- POS 6735 Foundations of Political Inquiry **Credit Hours: 3**
- POS 6933 Selected Topics in Political Science **Credit Hours: 3**

Interdisciplinary Professional Seminar (3 Credit Hours) (Proposed POS 6015)

Disciplinary Requirements (9 Credit Hours)

Select three of the following:

- POS 6045 Seminar in American Government & Politics **Credit Hours: 3**
- POT 6007 Seminar in Political Theory **Credit Hours: 3**
- INR 6007 Seminar in International Relations **Credit Hours: 3**
- CPO 6091 Seminar in Comparative Politics **Credit Hours: 3**

Methods Requirements (9 Credit Hours)

- POS 6746 Quantitative Analysis I **Credit Hours: 3**
- POS 6707 Qualitative Analysis **Credit Hours: 3**

Select one of the following:

- POS 6918 Seminar in Quantitative Methods **Credit Hours: 3**
- POS 6942 Field Work in Political Science **Credit Hours: 1-3 (3 credits for this program)**
- AFA 6355 African American Community Research: Ethnography **Credit Hours: 3**
- Or other graduate course approved by the Graduate Director

Primary Fields (2) - (18 Credit Hours)

Students complete two primary fields with nine (9) credit hours each. The options for primarymajor field are International Relations, Comparative Politics, American Government and Political Theory. With graduate committee approval, students will be encouraged to take courses in other disciplines.

Electives (9 Credit Hours)

Students will enhance their major or minor areas of specialization with a elective courses.
With graduate committee approval, students will be encouraged to take courses in other disciplines.

Students Teacher Training Requirement (3 Credit Hours)

- POS 6702 Teaching Political Science **Credit Hours: 3**

Foreign Language

All students must demonstrate competency in at least one foreign language. Students must pass the competency exam administrated by the World Language Education Department. Additionally, students, whose research focuses on a particular area of the world, must be proficient in language(s) native to that region.

Comprehensive Exam

Ph.D. students will be required to take in-class examinations in two core fields and a chosen subfield. The examinations will be developed by a standing committee of faculty with expertise in the chosen fields. Field exams will be administered on designated, nonconsecutive days and limited to eight hours for each field of specialization. Four hours will be allotted for the subfield. An ad hoc committee consisting of one member from each appropriate standing committee and a faculty member with expertise in the tested subfield will conduct an oral exam approximately three weeks after the written exams have been completed. The oral exam will be limited to two hours.

Dissertation Proposal – Capstone (3 Credit Hours)

- POS 6933 Selected Topics in Political Science **Credit Hours: 3**

Capstone Interdisciplinary Seminar (3 Credit Hours)

Students will enroll inPOS 6933 Selected Topics in Political Science as their Capstone Interdisciplinary Seminar. During the Seminar, students develop their dissertation proposals. Students must present their dissertation proposal to their dissertation committee and obtain consent from all committee members before proceeding to the dissertation work.

Dissertation (18 Credit Hours)

- POS 7980 Dissertation **Credit Hours: 2-19 (15 credits)**

Students must present their dissertation at an oral defense, and their committees determine whether the student passed. Finally, students must submit written copies of their dissertation with signature of their committee members. All dissertations must conform to University of South Florida format rules.

Africana Studies Graduate Certificate

This program is offered fully online.

Certificate Code: **XAF**

Description

The Graduate Certificate in Africana Studies offers students the opportunity to do graduate-level study that focuses on the African, African-American, Afro-Caribbean and/or other African Diaspora histories and cultures. This certificate also allows students to study the social construction of race, as well as the role of Africa and peoples of African descent in the construction of the West.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have:

2-3 page essay

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

15 Cr Hrs (9 Cr Core + 6 Cr Electives)

- AFA 6805 African Historiography **Credit Hours: 3**
- AFA 6207 African American Historiography **Credit Hours: 3**

- AFA 6120 Social Theory and Social Thought **Credit Hours: 3**

or

- AFA 6355 African American Community Research: Ethnography **Credit Hours: 3**

Electives

3 Cr of Africana Studies + 3 Cr outside depart Select:

- AFA 6275
- AFA 6313
- ISS 5294
- AML 6027 Studies in Modern American Literature **Credit Hours: 3**
- AMS 6375
- ANT 6447
- ANT 6448
- ANT 6469
- COM 5930 Topics in Communication Studies **Credit Hours: 3**
- COM 5930 Topics in Communication Studies **Credit(s): 3**
- COM 5930 Topics in Communication Studies **Credit(s): 3**
- GEY 6934 Special Topics in Gerontology **Credit Hours: 3**
- HIS 6939 Seminar in History **Credit Hours: 3**
- WST 5266
- REL 6447
- LIT 6934 Selected Topics in English Studies **Credit Hours: 1-6**
- PAD 6417 Human Resources Management **Credit Hours: 3**
- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- PHC 7935

Time Limit

3 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Genocide and Human Rights Graduate Certificate

Certificate Code: XGC
Approved 201008
The Certificate in Genocide and Human Rights (CGHR) is broad in its conceptual scope, methodology and focus. It examines, from a comparative and global perspective, organized violence intended to destroy particular groups of people. It pays particular attention to the similarities and differences in the causes and patterns of these forms of state-sanctioned violence against groups and the effects they have had on the memory and mental health of the surviving victims and perpetrators. It will also assess how the societies in which these type of violence occur address those painful memories through measures aimed at seeking justice and reconciliation. In concept and objective, this certificate goes beyond the study of wholesale or partial extermination of groups (genocide). It incorporates the study of systemic and systematic abuses of fundamental human rights which often constitute the precursors of genocide. These forms of violence include enslavement; organized lynching of groups; systemic rape of women in conflict situations; political mass murder; ethnic cleansing; and forced deportations aimed at dehumanizing and undermining the survival of target groups. This certificate is an intellectual inquiry into human behavior and the ramifications of prejudice in pluralistic societies.

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Five years

Pre-Requisites

None

Curriculum Requirements (18 Credit Hours)

Required:

- AFA 6108 Social Construction of Race and Racism **Credit Hours: 3**
- AFA 6387 Seminar on Genocide and Human Rights **Credit Hours: 3**
- AFA 6945 Internship **Credit Hours: 1-3**

- AFA 6355 African American Community Research: Ethnography **Credit Hours: 3**

Choose TWO graduate courses below, or choose graduate courses on genocide and/or human rights elsewhere in the University after prior approval from Graduate Certificate Director:

Africana Studies:

- AFA 6932 Topics in Africana Studies **Credit Hours: 3**

Global Challenge of Diversity (3 Credit Hours) (Proposed AFA 6700)
Afro Latin Caribbean History (3 Credit Hours)

Public Health:

- PHC 6230 Foundations of Humanitarian Assistance **Credit Hours: 3**

Philosophy:

- PHI 6934 Selected Topics **Credit Hours: 1-3**

Philosophy of Culture (3 Credit Hours)
Environmental Ethics (3 Credit Hours)

- PHI 6645 Developmental Ethics **Credit Hours: 3**

Religious Studies:

- RLG 6938 Special Topics in Religious Studies **Credit Hours: 2-4**

Liberation Theology (3 Credit Hours)

Latin American Studies:

- LAS 6936 Seminar in Latin American Studies I **Credit Hours: 3**

Citizenship and Democracy in Latin America (3 Credit Hours)

Contacts

Contact Information: http://www.grad.usf.edu/cert

Latin American & Caribbean Studies Graduate Certificate

This program is offered fully online.

Curriculum Code: **XLS**

Description

The University of South Florida's international programs educate and train students to prepare them for positions in the changing global economy, culture and polity. The Latin American and Caribbean region is just "next door." It is also the United States' most important import and export market, surpassing trade flows with the European Union. In addition, it is an area of enormous cultural and ecological diversity and cultural creativity. The need to understand this rapidly changing and expanding area of the "other" America is fundamental for those who are interested in conducting business in the region, who are involved with security issues, or who wish to engage in artistic contemplation. This certificate, offered through USF's Latin American and Caribbean Studies Department, provides students with the opportunity to benefit from lectures by distinguished writers and scholars and to travel to various locations under the Study Abroad credit course.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

15 credit hours. Students will be required to take six credits from each of the two areas (social science and humanities).

- The humanities courses will include all LACS courses from humanities and cultural studies, world languages, literature (including the English department), religion, the College of the Arts, and history, as well as select courses from Africana Studies and Women's Studies and some LAS courses which are offered through ISLAC.
- The social science courses will include all LACS courses from GIA, Sociology, Geography, Criminology, the College of Education, the College of Public Health, select courses from Women's Studies and Africana Studies, and some LAS courses which are offered from ISLAC.
- Learning Assessment - Student must submit a 4 - 6 page reflective essay.

Electives

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

School of Public Affairs

Public Administration, M.P.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 45
Level: Masters
CIP Code: 44.0401
Dept. Code: SPF
Major/College Codes: PAD AS
Approved: 1977

Contact Information

College: Arts and Sciences
Department: School of Public Affairs

Contact Information: http://www.grad.usf.edu/majors

Other Resources: https://www.usf.edu/arts-sciences/departments/public-affairs/mpa/index.aspx

The Public Administration major offers a multi-disciplinary course of study leading to a Master of Public Administration (M.P.A.) degree. This degree is designed primarily to prepare students for successful leadership roles and management careers in the public (i.e., governmental and quasi-governmental organizations), non-profit, and private sectors. Students enrolled in the M.P.A. program pursue careers in local, state, or federal agencies of government, non-profit organizations, and special service districts. Those employed in public management positions may wish to pursue an M.P.A. degree in order to broaden their educational backgrounds to prepare for increased job responsibilities, or to change career paths.

The Public Administration major also offers courses of study leading to a Graduate Certificate in Public Management (GCPM) or a Graduate Certificate in Management of Non-Governmental and Non-Profit Organizations (GCNM). These options are designed for individuals who wish to acquire knowledge of public and non-profit management theory and practices, but who do not find it necessary or feasible to pursue the M.P.A. degree.

Accreditation:
Accredited by the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Admission decisions to the M.P.A. degree program are based on an overall assessment of the applicant's potential for successfully completing the M.P.A. degree. General admission criteria include scores obtained on the Graduate Record Examination (GRE) and performance as an undergraduate. Specific criteria includes:

- Two letters of recommendation minimum, one from a faculty member familiar with the applicant's academic performance and potential, and the other from a work supervisor or manager.
- Personal statement detailing the applicant's career goals and aspirations, including ways in which the applicant believes the M.P.A. degree can help to facilitate the stated goals.
- Resume or curiculum vitae showing work experience.
- Approval by the M.P.A. Admissions Committee and, if deemed necessary, an admissions interview.
- GRE is required with preferred scores of V 153 (60%), Q 146 (25%), and AW 4.0 (59%). At the discretion of the M.P.A. Director, the GRE may be waived under one of the following conditions:
  - Applicant already possesses a graduate degree from a regionally accredited university;
  - Applicant has a 3.25, or higher, overall undergraduate GPA;
  - Applicant has five years or more of practical, professional experience at a senior level documentation of experience required through letters of recommendation from senior management; or
  - Completion of the Graduate Certificate in Public Management or Graduate Certificate in Management of Non-Governmental and Non-Profit Organizations with a GPA of 3.50 or higher.

Curriculum Requirements

Total Minimum Hours: 45 credit hours

Core – 27 credit hours
Electives – 15 credit hours
Capstone – 3 credit hours
Internship (if required) – 3 credit hours

Core Requirements (27 Credit Hours)

Performance in core courses: Students will only be allowed to have a maximum of two "C" letter grades in their core courses. Any student who obtains a third "C" letter grade will be required to retake one of the applicable courses.

- PAD 5700 Research Methods in Public Administration **Credit Hours: 3**
- PAD 6060 Public Administration Theory **Credit Hours: 3**
- PAD 6105 Organization Theory and Leadership **Credit Hours: 3**
- PAD 6227 Public Budgeting **Credit Hours: 3**
- PAD 6275 Political Economy for Public Managers **Credit Hours: 3**
- PAD 6307 Policy Design and Implementation **Credit Hours: 3**
- PAD 6417 Human Resources Management **Credit Hours: 3**
- PAD 6703 Quantitative Analysis in Public Administration **Credit Hours: 3**
- PAD 6710 Public Information Management **Credit Hours: 3**

Elective Requirements (15 Credit Hours)

Each student must take 15 elective credit hours. Students should refer to the M.P.A. website https://www.usf.edu/arts-sciences/departments/public-affairs/mpa/curriculum.aspx for courses approved by the department. Students wishing to take courses from outside this list must obtain approval from the M.P.A. Director before registering.

Internship (if required) (3 Credit Hours)

Pre-service students are required to complete a supervised internship in a governmental or nonprofit organization. Internships provide students the opportunity to gain valuable experience in the public sector, thereby enhancing the academic course of study. Credit must be earned while the student is in residence and before the student has completed all coursework requirements. Exceptions to this rule can only be made by the MPA Director and must be made in advance. In-service students, who have appropriate managerial/work experience commensurate with their career goals, may not be required to complete an internship. After consultation with the student, the MPA Director may choose to waive the internship requirement.

- PAD 6946 Internship in Public Administration **Credit Hours: 2-6 (3 credits for this program)**

Comprehensive Exam

In lieu of a comprehensive exam, students must successfully complete the Capstone course as a culminating experience.

Capstone (exit requirement) (3 Credit Hours)

This is the final step before graduation. The course is designed to provide students with the opportunity to apply their knowledge, leadership, communication, and decision-making skills acquired throughout the M.P.A. program. This course is designed to challenge students to demonstrate their capability in synthesizing and integrating conceptual frameworks, and relate these skills to managerial or administrative situations. To be eligible for the Capstone course, students must have already completed all of their core course requirements prior to enrolling in this course. A minimum grade of "B-" must be earned in the Capstone to pass. No other course can substitute this requirement.

- PAD 6056 Practice of Public Management **Credit Hours: 3**

Urban and Regional Planning, M.U.R.P.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 48
Level: Masters
CIP Code: 04.0301
Dept. Code: SPF
Major/College Codes: URP AS
Approved: 2008

Contact Information

College: Arts and Sciences
Department: School of Public Affairs

Contact Information:
http://www.grad.usf.edu/majors
www.spa.usf.edu

The goal of the major is to train students to become planning practitioners capable of working in a variety of public, nonprofit, and private sector environments in a number of different fields. We prepare leaders in the field of urban and regional planning to meet community, national and global needs.

The major recognizes the need for effective planners to possess diverse skills in the planning and management of human settlements. Accordingly, the MURP core coursework includes thematically-related courses in land use planning, research methods, quantitative analysis, planning theory and history, planning policy and politics, community and economic development, and geographic information systems (GIS). Students have the option of enrolling in electives that focus on housing & community development, land use planning, local economic development, GIS, coastal zone management, housing & community development, environmental and natural resources planning, natural hazards and resilience planning, and transportation planning. These areas of specialization build on the strengths of existing faculty in our sister-major in Public Administration, as well as with colleagues and facilities across the university. The major is thus distinct in its flexibility. Graduates of the major will be able to:

1. Engage in policy-related research relevant to urban and regional issues.
2. Assume positions of leadership in public, private and nonprofit organizations engaged in planning, land use, and public policy.
3. Further public discourse on the problems confronting cities and regions.
4. Utilize communications and technical skills to become successful at all levels of the planning profession.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Two letters of recommendation (one from a faculty member if BS/BA, in last 5 years);
- A "letter of intent" explaining your background and interest in Urban and Regional Planning;

- GRE is required with preferred minimum scores of 153 Verbal (59th percentile) and 144 Quantitative (18th percentile.) However, the MURP major will waive the GRE requirement if the student meets at least one of the following criteria:
  - A completed master's degree from a regionally accredited institution.
  - A 3.25 or higher GPA in upper division undergraduate work from a regionally accredited institution.
  - A doctorate (including professional degrees such as the JD and MD) from a regionally accredited institution.
- All Students not meeting one of the above criteria will be considered for conditional admission based on the following criteria:
  - A preferred minimum score of 153 Verbal (61st percentile) and 144 Quantitative (17th percentile) on the GRE.
  - An academic writing sample.
  - Three written letters of recommendation, with at least one from a faculty member familiar with the applicant's academic performance and potential. Should the applicant be unable to provide the letter from a former professor, with the Director's approval, letters from other sources will be accepted.

Conditional admission status will be converted to regular status upon completion of three courses from the MURP core requirements with a GPA of 3.50 or above.

All applicants are required to write a statement describing their purpose and goals in the MURP statements.

Curriculum Requirements

Total Minimum Hours: 48 hours

Core – 24 credit hours
Electives – 15 credit hours
Thesis option – 6 credit hours
Internship or Additional Elective – 3 credit hours

Core Requirement (24 Credit Hours)

Foundational Core Courses

- URP 6058 Community Development Planning **Credit Hours: 3**
- URP 6100 Planning Theory and History **Credit Hours: 3**
- URP 6115 Planning, policy and politics **Credit Hours: 3**
- URP 6316 Land Use Planning **Credit Hours: 3**
- URP 6549 Urban & Metropolitan Economic Development Strategies **Credit Hours: 3**

Analytical Methods Core Courses

- URP 6232 Research Methods for Urban and Research Planning **Credit Hours: 3**
- PAD 6703 Quantitative Analysis in Public Administration **Credit Hours: 3**

Planning Practice & Techniques Core Courses

- GIS 5049 GIS for Non-Majors **Credit Hours: 3**

Electives (15 Credit Hours Minimum)

The elective coursework allows the URP student an opportunity to explore one or more fields of urban & regional planning through approved electives within and outside the School of Public Affairs. Depending on personal interest, students may choose course work in the following areas:

- Land Use and Comprehensive Planning
- Community Development and Engagement
- Economic Development
- Environmental and Natural Resources Planning
- Hazard Mitigation and Resiliency Planning

Comprehensive Exam

This is the default option for the MURP major. All MURP Students are required to take this examination at the end of, or during, the last semester of the major coursework. The examination is waived for students who elect, with the approval of the Graduate Director, to pursue the thesis option. The thesis defense serves in lieu of the exam. (See below for more on the thesis option)

Non-Thesis (6 Credit Hours Minimum)

Non-thesis students take an additional 6 hours of elective credits.

Thesis (6 Credit Hours Minimum)

- URP 6971 Thesis **Credit Hours: 2-19**

Students who request to change from thesis to non-thesis must complete the necessary hours for the non-thesis option.

Internship or Additional Elective (3 Credit Hours)

All MURP students are required to complete at least 180 hours of work in a planning agency to earn the 3 credit hours stipulated as part of the core requirements above. This requirement is waived for students with at least 5 years of relevant planning experience; in lieu of the internship, an additional elective will be completed.

- URP 6940 - Internship in Urban and Regional Planning **Credit(s): 3**

Community Development Graduate Certificate

Certificate Code: XCO
Approved 200001

Description

The Graduate Certificate in Community Development allows students to explore the urban communities that have suffered from decades of disinvestment and to examine the efforts of their residents to revitalize them. The approach is interdisciplinary, weaving together a variety of perspectives so that students come to understand what communities are and how they differ; how communities fit into broader social systems; and what strategies are necessary to develop communities. The certificate is also applied, focusing on the current issues and efforts of community development in the Tampa area.

The certificate is designed to attract students from three distinct pools:
1. Students who have completed an undergraduate degree but are uncertain as to the graduate program they want to pursue;
2. Students enrolled in USF graduate programs who want to focus on community development.
3. Professionals already working in the field that want a graduate-level credential.

Course Location/Delivery

This graduate certificate curriculum is offered at the Tampa campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (15 Credit Hours)

- URP 6549 Urban & Metropolitan Economic Development Strategies **Credit Hours: 3**
- URP 6058 Community Development Planning **Credit Hours: 3**
- URP 6930 Special Topics in Urban and Regional Planning **Credit Hours: 3**

CRED Course (Florida Institute of Government) (3 Credit Hours)

- URP 6316 Land Use Planning **Credit Hours: 3**

Additional Course (3 Credit Hours)

With the approval of the Certificate Director, student choose one graduate course(3 credits) relevant to community development from the School of Public Affairs course offerings. In some cases an appropriate class from another department may be approved.

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is three years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval

Contacts

Contact Information: http://www.grad.usf.edu/cert

Data Science for Public Administration Graduate Certificate

This program is offered partially online.

Certificate Code: XDAP
Approved 201808

Description

This graduate certificate addresses growing demand for more quantitatively-based, data-informed policy and program analysis and decision making the public and nonprofit sectors, as well as the concomitant demand for public and non-profit sector professional swith the advanced data analytics competencies to conduct them. The Certificate is designed for current and prospective public and non-profit sector professionals, as well as degree-seeking MPA students who wish to enhance their quantitative competence in data science and decision analytics in order to meet those demands.

Course Location/Delivery

Offered at USF Tampa and/or online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

3.50 GPA preferred

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

Completion of PAD 6703 and instructors approval.

Curriculum Requirements (15 Credit Hours)

- PAD 6703 Quantitative Analysis in Public Administration **Credit Hours: 3**
- URP 6930 Special Topics in Urban and Regional Planning **Credit Hours: 3**

GIS for Planners (3 Credit Hours)

Select three of the following courses:

- LIS 5802 Information Analytics **Credit Hours: 3**
- MAN 6347 People Analytics **Credit Hours: 3**

- LIS 5937 Selected Topics in Library Studies **Credit Hours: 1-4**

Visualization of Big Data (3 Credit Hours)

- QMB 6358 Data Analytics for Business **Credit Hours: 2**
- ISM 6137 Statistical Data Mining **Credit Hours: 3**
- SYA 7357 Introduction to Social Network Analysis **Credit Hours: 3**

Time Limit / Average Time to Completion

Five years

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Leadership for Coastal Resiliency Planning Graduate Certificate

This program is offered partially online

Certificate Code: XLP
Approved 201808

Description

Prepares students who will be working in the areas of planning, development and policy, largelyin the public and non-profit sector, in the areas on or near the coast.

Trains planners, policy makers and public/non-profit managers to address the growing challenges facing coastal communities Course content covers land use and economic development planning, environmental policies, disaster preparation and recovery.

Course Location/Delivery

Partially online. Courses may be located at USF Tampa or USF St. Petersburg

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

- URP 6422 Environmental & Planning Issues in Coastal Communities **Credit Hours: 3**
- URP 6401 Planning for Resilient Communities **Credit Hours: 3**
- URP 6439C Disaster Resilient Community **Credit Hours: 3**
- URP 6406 Urban Environmental Policy **Credit Hours: 3**
- PAD 6710 Public Information Management **Credit Hours: 3**

Time Limit / Average Time to Completion

Five years

Credit Toward Graduate Degree

Credit hours from this Certificate may be eligible to apply toward a graduate degree. Check with the department for information.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Management of Non-Governmental and Non-Profit Organizations Graduate Certificate

Certificate Code: XMGO
Approved 201808

Description

Non-profit administrators as well as those who aspire to work for non-profit organizaitons will benefit from this graduate certificate curriclulum, which covers leadership, fund raising, and strategic planning issues.

Course Location/Delivery

Offered at USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None

Curriculum Requirements (18 Credit Hours)

- PAD 6146 Nonprofit Management and Leadership **Credit Hours: 3**
- PAD 6208 Financial Oversight for Nonprofit Organizations **Credit Hours: 3**
- PAD 6231 Resource Development: Fundraising and Grantsmanship **Credit Hours: 3**
- PAD 6335 Strategic Planning and Social Innovation for Public and Nonprofit Organizations **Credit Hours: 3**

In addition, students complete two graduate courses from the School of Public Affairs which are relevant to the study of non-profit management or another graduate program.

Time Limit / Average Time to Completion

Students should complete the certificate within 2-3 years.

Credit Toward Graduate Degree

All 18 credit hours may be transferred into the Master of Public Administration (M.P.A.) program as long as a grade of B (3.00) or higher was received in the certificate classes.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Public Management Graduate Certificate

Certificate Code: XPO
Approved 201701
The graduate certificate in Public Management will benefit those who currently hold positions in governmental management as well as those who administer governmental contracts and programs. This course of study develops competencies required for effective public management.

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Standardized tests are not required for admission to this certificate. However, should a graduate certificate student subsequently apply to the master's degree program in Public Management, the GRE is required.

Application Process

To learn about the application process, and to access the application, please review our application process.

In addition to your completed application form, transcripts, resume and letter of interest, you will need to submit the following documents:

- Submit two letters of recommendation

Credit Toward Graduate Degree

All 18 hours/six courses from this certificate may be transferred into the Master in Public Administration program as long as a grade of B or higher was received in the certificate classes.

Time Limit / Average time to Completion

Students should complete the certificate within 2-3 years.

Pre-Requisites

None

Curriculum Requirements (18 Credit Hours)

Complete this:

- PAD 6060 Public Administration Theory **Credit Hours: 3**

And select 6 credit hours from the following:

- PAD 6041 Ethics and Public Service **Credit Hours: 3**

- PAD 6227 Public Budgeting **Credit Hours: 3**
- PAD 6307 Policy Design and Implementation **Credit Hours: 3**
- PAD 6703 Quantitative Analysis in Public Administration **Credit Hours: 3**
- PAD 6710 Public Information Management **Credit Hours: 3**
- PAD 6275 Political Economy for Public Managers **Credit Hours: 3**
- PAD 6417 Human Resources Management **Credit Hours: 3**

Remaining 9 Credit hours to be approved in advance by the Certificate Director.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Zimmerman School of Advertising and Mass Communications

Advertising, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 09.0903
Dept. Code: MCM
Major/College Codes: ADVT/ AS
Effective: 201808

Also offered as an Accelerated Major.

Contact Information

College: Arts and Sciences
Department: Zimmerman School of Advertising and Mass Communications

Contact Information: http://www.grad.usf.edu/majors

The M.S. in Advertising provides in-depth training in extracting, analyzing and utilizing analytics associated with advertising media and how those analytics shape strategy and creative content. It is useful both for mid-career professionals and those seeking entry-level advertising positions.

Major Research Areas: Advertising, Mass Communications, Marketing, Communication, Media

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- Appropriate bachelor's degree from a regionally-accredited institution (e.g. Mass Communications, Communication, Marketing)
- 153V (60th percentile), 144Q (18th percentile) preferred on the GRE
- a resume
- three letters of recommendation (academic recommendations preferred)
- a strong cover letter of intent
- Students who lack an appropriate background in the selected concentration may be required to take additional courses to meet concentration minimums.

Curriculum Requirements

Total Minimum Hours: 36

Core Requirements (24 Credit Hours)

- MMC 6447 Quantitative Research Methods in Mass Communications **Credit Hours: 3**
- ADV 5825 Advertising Proseminar **Credit Hours: 3**
- ADV 6602 Advanced Advertising Management **Credit Hours: 3**
- ADV 6505 Advertising Research **Credit Hours: 3**
- MMC 6449 Advertising Analytics **Credit Hours: 3**
- ADV 5508 Return on Advertising Investment **Credit Hours: 3**
- ADV 5005 Advertising Planning **Credit Hours: 3**
- ADV 6305 Advertising Media Strategy **Credit Hours: 3**

Applied Research (6 Credit Hours)

- MMC 6950 Applied Research Project **Credit Hours: 1-6 (6 credits for this program)**

Marketing Courses (6 Credit Hours)

- MAR 6815 Marketing Management **Credit Hours: 2-3 (3 credits for this program)**
- MAR 6555 - Consumer Behavior Insights **Credit(s): 3**

Comprehensive Exam

Requires successful completion of an Applied Research Project in lieu of a comprehensive exam.

Non-Thesis

This is a non-thesis major.

Accelerated Major

Also available as an Accelerated Majors

Mass Communications, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 39
Level: Masters
CIP Code: 9.0102
Dept. Code: MCM
Major/College Codes: COM AS
Approved: 1978

Concentrations:

Media Studies (MCM)
Strategic Communication Management (PRS)
Multimedia Journalism (MMJ)

Contact Information

College: Arts and Sciences
Department: Zimmerman School of Advertising and Mass Communications

Contact Information: http://www.grad.usf.edu/majors

The M.A. in Mass Communications is designed for students who are seeking advanced studies in preparation for professional and academic careers in mass communications. The program offers one degree, the Master of Arts in Mass Communications.

The Media Studies Concentration emphasizes the theoretical principles and research methods of mass communications. The Strategic Communication Management Concentration emphasizes public relations management and social science research. The Multimedia Journalism Studies Concentration focuses on storytelling through the integration of different delivery platforms, and on management issues in converged newsrooms.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- 153V (61th percentile), 144Q (17th percentile) preferred on the GRE
- a resume
- three letters of recommendation (academic recommendations preferred)
- a strong letter of intent
- Students who lack an appropriate background in the selected concentration may be required to take additional courses to meet concentration minimums.

Curriculum Requirements

Total Minimum Hours: 39

Core – 12 Credit Hours
Concentration – 21 Credit Hours minimum
Thesis or Applied Research Project – 6 Credit Hours

Core Requirements (12 Credit Hours)

- MMC 6920 Introductory Mass Communications Seminar **Credit Hours: 3**
- MMC 6400 Mass Communication Theory **Credit Hours: 3**
- MMC 6447 Quantitative Research Methods in Mass Communications **Credit Hours: 3**
- MMC 6448 Qualitative Research Methods in Mass Communications **Credit Hours: 3**

Concentration Requirements (12 Credit Hours)

Students select from the following concentration options:

Concentration in Media Studies

At least twenty-four hours are taken in the Zimmerman School of Advertising and Mass Communications. The remaining 9-12 hours may be taken in graduate-level courses offered in other departments of the University.

Concentration in Multimedia Journalism

The graduate concentration in Multimedia Journalism prepares students to take leadership positions in journalism through their knowledge of the field of mass communications, management in the media environment and the ability to combine storytelling skills in the areas of print, broadcast and electronic communication. This option requires a total of 39 hours of which 12 are core requirements, 12 are in the multimedia core, 6 are thesis or applied research project, 6 are electives in the Mass Communications graduate program and 3 are in an outside requirement.

Requirements (12 Credit Hours)

- JOU 6501 Media Management **Credit Hours: 3**
- JOU 5344 Multimedia Journalism **Credit Hours: 3**
- JOU 6349 Advanced Multimedia Journalism **Credit Hours: 3**
- MMC 6612 Seminar: Law and the Mass Media **Credit Hours: 3**

- Thesis **Credit(s): 6**

or

- MMC 6950 Applied Research Project **Credit Hours: 1-6 (6 credits for this program)**

- Electives **Credit(s): 6**

1 Outside Requirement:

- EME 6936 Applications of Computers as Educational Tools **Credit Hours: 3**

Concentration in Strategic Communication Management

The Strategic Communication Management Concentration emphasizes the integration of organizational communication functions such as public relations and advertising into a single communication management function. This option requires 39 hours of course work, including six (6) hours of thesis or six (6) hours of an applied research project, twelve (12) hours of the mass communications core, fifteen (15) hours of the strategic communication core, three (3) hours in management or leadership studies, and six (6) hours of electives.

Core Requirements (15 Credit Hours)

- PUR 6603 Strategic Communication Campaigns **Credit Hours: 3**
- PUR 6607 Strategic Communication Management **Credit Hours: 3**
- PUR 5505 Introduction to Strategic Communication Theory and Practice **Credit Hours: 3**
- MMC 6415 Strategic Communication Media **Credit Hours: 3**
- MMC 6418 Strategic Message Design **Credit Hours: 3**

Outside requirement **Credit(s): 3** (A course in organizational communication, management or leadership.)
Thesis OR Applied research project **Credit(s): 3** (arranged with project committee chair.)
Mass Communications or other electives **Credit(s): 3**

Comprehensive Exam

Students in these concentrations are required to take a comprehensive written examination after they have completed at least 21 hours of mass communications course work, including the required courses for each concentration of study.

Thesis or Applied Research Project (6 Credit Hours)

Students complete either a Thesis or Applied Research Project.

- MMC 6971 Thesis: Master's **Credit Hours: 2-3**
- MMC 6950 Applied Research Project **Credit Hours: 1-6**

College of Behavioral and Community Sciences

Graduate Council approved the changes on the date noted.

Concurrent Degrees

Audiology (Au.D.)/Communication Sciences and Disorders (Ph.D.)	Change for compliance	4/15/19

Majors

Aging Studies	Ph.D.	Change curriculum for compliance	3/4/19
Applied Behavior Analysis	M.A.	Non-substantive changes	3/4/19
Applied Behavior Analysis	M.S.	Change curriculum for compliance	4/29/19
Applied Behavior Analysis	Ph.D.	Change curriculum for compliance	4/29/19
Behavioral and Community Sciences	Ph.D.	Change curriculum for compliance	3/4/19
Child and Adolescent Behavioral Health	M.S.	Non-subtantive changes	4/15/19
Child and Adolescent Behavioral Health	M.S.	Change curriculum for compliance; delete all concentrations	3/4/19
Communication Sciences and Disorders	Ph.D.	Change hours from 90 to 72 and 53 to 42; delete all concentrations	9/10/18
Criminal Justice Administration	M.A.	Change curriculum - portfolio	3/4/19
Criminology	M.A.	Change curriculum for compliance; shared core with Cybercrime	3/4/19
Criminology	Ph.D.	Change curriculum for compliance	3/4/19
Criminology	M.A.	Change from direct receipt to regular admission	3/4/19
Criminology	Ph.D.	Change from direct receipt to regular admission	3/4/19
Cybercrime	M.S.	Change curriculum for compliance; shared core wtih Criminology	3/4/19
Gerontology	M.A.	Change curriculum	3/4/19
Social Work	M.S.W.	Change curriculum for compliance	4/1/19

Graduate Certificates

Bridge	Terminate Certificate	4/15/19

College of Behavioral and Community Sciences

BC - Updates for 2019-20

BC - Programs

University of South Florida
College of Behavioral and Community Sciences
4202 E Fowler Ave MHC 1110
Tampa, FL 33620

Web address: http://www.bcs.usf.edu
Email: See departmental listings
Phone: 813-974-4602
Fax: 813-974-4699

College Dean: Julianne Serovich, Ph.D.
Associate Dean: Alicia Mendoza, Ph.D.
Associate Dean of Research: Howard Goldstein, Ph.D.

Mission Statement:

The College of Behavioral and Community Sciences prepares students, scholars, human service providers, policy makers, and other professionals to improve the quality of life, health, and safety of diverse populations and to promote positive change in individuals, groups, communities, organizations and systems. Through multidisciplinary teaching and research, service, and engagement with community partners, the College focuses on the rigorous development, dissemination/implementation, and analysis of innovative solutions to the complex challenges that affect the behavior and well-being of individuals, families, populations, and the communities in which we live.

The College offers eight majors at the master's level and seven majors at the doctoral level. Master's majors are available in Applied Behavior Analysis, Child and Adolescent Behavioral Health, Criminal Justice Administration, Criminology, Cybercrime, Gerontology, Rehabilitation & Mental Health Counseling, Social Work, and Speech-Language Pathology. Doctoral majors are offered in Aging Studies, Audiology, Behavioral and Community Sciences, Communication Sciences & Disorders, Criminology, and Social Work. Concurrent degrees are offered in Social Work/Public Health at the master's level and Audiology/Communication Sciences and Disorders at the doctoral level.

The College is also home to the Louis de la Parte Florida Mental Health Institute whose mission is to improve the lives of individuals with mental, addictive, and developmental disorders. Graduate studies in Behavioral Health are offered in collaboration with the College of Public Health at both the master's and doctoral levels and in collaboration with the College of Education at the doctoral level. The Institute houses a Research Library, a Behavioral Health Research Data Center, and a Survey Research Unit that can support the research theses and dissertations of graduate students.

Interdisciplinary Opportunities

The College of Behavioral and Community Sciences (BCS) works with other colleges in interdisciplinary efforts, such as the jointly offered specialty concentration in Behavioral Health as part of the master's and doctoral programs in the Department of Community and Family Health (DCFH) in the College of Public Health (COPH). For information about this, and other opportunities, contact either BCS or COPH for information.

College Requirements

Thesis Enrollment

Upon successful completion of all M.A./M.S. degree requirements except for thesis, Behavioral & Community Sciences graduate students must enroll in a minimum of two (2) credit hours of Thesis each semester (except Summers) until the completion of the master's degree.

Dissertation Enrollment

Doctoral students who have been admitted to candidacy, are required to accumulate a minimum of six (6) credit hours of Dissertation during each previous 12-month period (previous three 3 terms, e.g., Fall, Spring, Summer) until the degree is granted.

Behavioral and Community Sciences, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90 post-bachelor's
Level: Doctoral
CIP Code: 51.2212
Dept Code: DEA
Major/College: BCV BC
Approved: Effective 2017

Contact Information

College: Behavioral & Community Sciences
Contact Information: http://www.grad.usf.edu/majors

The Ph.D. in Behavioral & Community Sciences is an interdisciplinary major focusing on research and policy in the area of behavioral health and community sciences. Behavioral and Community Sciences refers to the development and evaluation of services and interventions that promote resiliency and social well-being for at-risk populations and addresses these issues within the context of community settings.

Major Research Areas: Substance Abuse & Co-Occurring Disorders; Community Based Behavioral Health Systems & Services; Child & Adolescent Behavioral Health; Behavioral Health, Law, and the Justice System; Disability & Rehabilitation Studies; Behavioral Health Disparities; and Positive Behavior Intervention & Support.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

To be given full consideration for financial assistance, students should apply by December 15 for admission for the Fall semester.

- A bachelor's GPA of 3.50 or higher based on a 4.00 grading scale. The completed degree must be in a field related to behavioral and community sciences, e.g., behavioral healthcare, human services, human development, psychology, sociology, anthropology, economics, public health, social work, counseling education, education.
- GRE taken within five years of application with a preferred minimum of Verbal - 150 (50th percentile), Quantitative- 147 (30th percentile), and Analytical Writing - 4.0 (50th percentile). Although students who have completed a master's degree are not required to submit GRE scores, all students are encouraged to submit GRE scores because they are considered in applications for fellowship, scholarship, and assistantship opportunities.
- Students who do not meet the minimum criteria may be admitted based on strong records reflected by other aspects of their applications (GPA, Letters of Recommendation, Writing Samples, and prior research experiences).
- Evidence of written/analytical skills which will take two-forms:
  - A writing sample, such as a major paper, thesis, or research paper of which the student is the sole author, and
  - A personal goal statement of 2-3 pages that describes why you want to obtain the Ph.D. in Behavioral & Community Sciences. Applicants are expected to communicate with potential advisors to find a good match for one's research training. The personal statement should cover: how the degree will help you in achieving your professional goals; unique qualities, life experiences, and knowledge related to the field; obstacles overcome to achieve your

educational goals thus far; obstacles that may challenge you in pursuing a graduate degree; your research and teaching goals; and the USF professor you would like to work with and why.

- Two formal letters of recommendation from faculty members or other professional personnel who have knowledge of the applicant's academic background, potential for success in graduate school, and/or commitment to a research career.
- Applicants with a master's degree: Transcripts from the master's degree will be evaluated to determine coursework that will be applicable toward the 90 hours of credit required for the doctoral major

Prior to applying for the major, applicants are encouraged to contact faculty with whom they would like to study and discuss the fit between the student's area of research interest and the faculty member's research focus.

Curriculum Requirements

Total Minimum Hours - 90 (Post-Bachelor's)

Core requirements - 12 credit hours
Additional required courses - 3
Research/statistics foundation courses - 6 credit hours
Advanced research courses - 12 credit hours
Didactic courses in behavioral & community sciences - 18 credit hours
Specialization courses - 9 credit hours
Directed research - 18 credit hours
Dissertation - 12 credit hours

Core Requirements (12 Credit Hours)

- MHS 6742 Community Based Research & Evaluation in Behavioral Sciences **Credit Hours: 3**
- MHS 6409 Evidence Based Practices in Behavioral & Community Sciences **Credit Hours: 3**
- MHS 7707 Interdisciplinary Approaches to Policy and System Change in Behavioral Health **Credit Hours: 3**
- MHS 7720 Proseminar in Behavioral & Community Sciences **Credit Hours: 1-3 (3 credits for this program)**

Additional Required Courses (3 Credit Hours)

- EDF 6213 Biological Bases for Learning Behavior **Credit Hours: 3**
- PSB 6056 Physiological Psychology **Credit Hours: 3**

Research/Statistics Foundation Courses (6 Credit Hours)

Such as:

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- MHS 5746 Applied Quantitative Research Methods **Credit Hours: 3**
- GEY 6402 Statistical Methods in Aging Research **Credit Hours: 3**
- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- MHS 6743 Qualitative Research Foundations **Credit Hours: 3**

Advanced Research Courses (12 Credit Hours)

Students will select four courses from at least two of the following areas. Courses such as those listed across multiple departments will be considered to best fit the student's individualized plan of study.

Advanced Statistics

- MHS 7748 Statistical Applications in Translational Research and Evaluation **Credit Hours: 3**
- GEY 6403 Multivariate Statistical Analysis for Aging Research **Credit Hours: 3**
- PHC 7054 - Advanced Biostatistical Methods **Credit(s): 3**
- PHC 7056 Longitudinal Data Analysis **Credit Hours: 3**
- EDF 7412 Application of Structural Equation Modeling in Education **Credit Hours: 3**
- EDF 7474 Applied Multilevel Modeling in Education **Credit Hours: 3**

Research Design

- PSY 6217 Research Methods and Measurement **Credit Hours: 2-4 (3 credits for this program)**

Program Evaluation

- MHS 7740 Survey Course in Planning, Evaluation and Accountability **Credit Hours: 3**
- PHC 6708 Evaluation Methods in Community Health **Credit Hours: 3**

Qualitative Methods

- PHC 6193 Qualitative Methods in Community Health Research **Credit Hours: 3**
- PHC 6725 Focus Group Research Strategies **Credit Hours: 3**

Measurement

**Pre requisite course EDF 6432 or equivalent*

- MHS 7747 Measurement Issues in Behavioral Health Services Research and Evaluation **Credit Hours: 3**
- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- EDF 7436 Rasch Measurement Models **Credit Hours: 3** *
- EDF 7439 Foundations of Item Response Theory **Credit Hours: 3** *

Didactic Courses in Behavioral & Community Sciences (18 Credit Hours)

- MHS 7749 Applications in Dissemination and Implementation Science **Credit Hours: 3**
- MHS 6065 Issues and Trends in Developmental Disabilities **Credit Hours: 3**
- MHS 6066 Systems, Services, and Supports for Children and Adolescents with Developmental Disabilities **Credit Hours: 3**
- MHS 6067 Evidence-based Practices in Behavioral Health for Children and Adolescents with Developmental Disabilities **Credit Hours: 3**
- MHS 6068 Community-Based Behavioral Health Interventions for Culturally Diverse Youth **Credit Hours: 3**
- MHS 6069 Child and Adolescent Behavioral Health **Credit Hours: 3**
- MHS 6072 Epidemiology and Prevention in Children's Mental Health **Credit Hours: 3**
- MHS 6095 Family-Centered Interdisciplinary Practice: SOC **Credit Hours: 3**

- MHS 6410 Intensive Individualize Positive Behavior Support **Credit Hours: 3**
- MHS 6437 Family Perspectives on Behavioral Health Disparities **Credit Hours: 3**
- MHS 6494 Women's Mental Health **Credit Hours: 3**
- MHS 6508 Wraparound Interventions and the System of Care **Credit Hours: 3**
- MHS 6605 Addressing Behavior Challenges in Young Children **Credit Hours: 3**
- MHS 6607 Behavior Consultation and Collaborative Systems Change **Credit Hours: 3**
- MHS 6608 Schoolwide Positive Behavior Support **Credit Hours: 3**
- MHS 6645 Mental Health Informatics **Credit Hours: 3**
- MHS 6706 Child and Adolescent Behavioral Health Policy **Credit Hours: 3**
- MHS 6900 Special Topics in Planning, Evaluation and Accountability **Credit Hours: 1-3 (3 credits for this program)**
- PHC 6035 Comorbidity of Mental and Physical Disorders **Credit Hours: 3**
- MHS 6938 Applied Behavior Analysis in Community Settings **Credit Hours: 1-4 (3 credits for this program)**
- GEY 7404 Ph.D. Seminar in Grant Writing **Credit Hours: 3**
- RCS 5080 Medical Aspects of Disability **Credit Hours: 3**
- RCS 5480 - Selected Topics **Credit(s): 3** (Human Growth & Development)
- RCS 5780 Legal, Ethical, Professional Standards and Issues in Counseling **Credit Hours: 3**
- RCS 5450 Fundamentals of Substance Abuse Counseling **Credit Hours: 3**
- RCS 6440 Social and Cultural Foundations of Counseling **Credit Hours: 3**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit Hours: 1-4 (3 credits for this program)**
- PHC 6401 Homelessness: Implications for Behavioral Healthcare **Credit Hours: 3**
- PHC 6539 Foundations in Adolescent Behavioral Health **Credit Hours: 3**
- PUP 5607 Public Policy and Health Care **Credit Hours: 3**

Specialization Courses (9 Credit Hours)

Students will complete a minimum of nine hours in a specialty area. The specialty area will be developed on an individual basis with each student and the student's faculty advisor. Examples of possible specialties include:

- Child & Adolescent Behavioral Health
- Positive Behavior Intervention & Support
- Substance Abuse & Co-Occurring Disorders
- Community Based Behavioral Health Systems & Services
- Behavioral Health, Law, and the Justice System
- Recovery Oriented Behavioral Health
- Disability & Rehabilitation Studies
- Behavioral Health Disparities

Directed Research (18 Credit Hours)

Following the completion of the first six-hours of directed research, students will complete a research "product" such as a conference presentation, poster session, publication, portions of a grant proposal, literature review or other comparable product to demonstrate their progress in developing research proficiency. Ideally, this product will be associated with their dissertation topic. The remaining 12 hours of Directed Research will be conducted during the second and third year of study and will be conducted with the guidance of the student's major professor with research outcomes specified in the student's plan of study related to their eventual dissertation proposal.

- MHS 6915 Directed Research in Behavioral and Social Sciences **Credit Hours: 1-6**

Qualifying Exam/Doctoral Candidacy

Students will be admitted to doctoral candidacy upon completion of a qualifying exam. The qualifying exam will require completion of a grant proposal suitable for supporting dissertation or early career research (e.g., F31 or R03) and an oral examination.

Dissertation (12 Credit Hours Minimum)

The dissertation will consist of original research designed and supervised by a faculty advisor. The student will select the faculty member who will serve as the major advisor within the first year of study. Each student will have a dissertation committee consisting of the major advisor and three other faculty members from different disciplines to reflect the interdisciplinary approach of the major. The student will write a dissertation proposal that outlines the completed project and will defend the proposal to obtain committee approval for beginning the dissertation. The dissertation will consist of a series of three articles with an introductory and conclusion chapter. The student will complete a public oral defense of the dissertation and the committee will judge the adequacy of the final document and the oral defense for approval for the Ph.D. degree.

Other Requirements
The Plan of Study must include at least 18 hours of coursework in an area that will fulfill the SACS teaching requirement of 18 hours in the field to ensure eligibility for university positions.

- MHS 7980 Dissertation **Credit Hours: 2-30**

Department of Child and Family Studies

Applied Behavior Analysis, M.A.

This program is offered online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 41
Level: Masters
CIP Code: 42.2814
Dept Code: CFS
Major/College Codes: ABB BC
Approved: 2000

This major shares core requirements with the M.S. in Applied Behavior Analysis.

Contact Information

College: Behavioral & Community Sciences
Department: Child and Family Studies (CFS)

Contact Information: http://www.grad.usf.edu/majors

The online master's degree in Applied Behavior Analysis (ABA) is designed to meet growing needs in Florida and nationally for practitioners who can work effectively in the fields of developmental disabilities, autism, education, child protective services, child behavior disorders, rehabilitation, mental health, and business and technology. ABA provides an approach for developing, implementing, and evaluating practical strategies to produce changes in socially significant behaviors of individuals in the context of community settings. Three important features characterize the scientific basis upon which ABA is built: a) it focuses upon objectively measurable behavior of individuals; b) it studies environmental influences upon the targeted behaviors; and c) it places a premium upon single-subject research designs to analyze the effects of different environmental variables.

The master's degree in ABA is in the department of Child and Family Studies in the College of Behavioral and Community Sciences is fully online. Students demonstrate knowledge of behavioral principles and procedures in courses that constitute a core curriculum, demonstrate applied behavior analysis skills through supervised practicum experiences, and complete a data based case-study. The major is designed to prepare students to meet the standards to be Board Certified Behavior Analysts (BCBAs). It will prepare them for employment in a variety of fields where there are growing demands for competent professionals with expertise in applied behavior analysis.

Philosophy

The systematic analysis and application of behavioral principles is an extensive repertoire of professional behaviors. In the USF ABA major, these skills are acquired as students move through the sequenced curriculum of coursework and practicum experiences. The curriculum requires application of behavior analytic principles, with direct supervision by faculty and BCBA supervisors. Students participate in practicum training in community agencies under the supervision of BCBAs. In addition to the 10-25 hours of behavior analysis practice they complete in their practicum sites each week, students also participate in practicum seminars each semester. In these seminars, the instructor discusses important practice issues and facilitates student discussion of their applied work. The supervision of the students' case study research rests in the hands of the on-site supervisor and designated core faculty member. On-site supervisors and ABA faculty serve as mentors for the students by closely supervising their case study research and their progress through the major. Therefore, as students are mentored by their on-site supervisor and USF professors during the major, a meaningful supervisor-student relationship is essential.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Three letters of reference from professors and/or employers who know the applicant well
- Current resume or curriculum vitae
- One-page narrative describing the applicant's experiences, training, and interest in Applied Behavior Analysis and in the Applied Behavior Analysis Major at USF.
- GRE Scores on the general subtests

Specific Procedures

The primary assumption underlying admission to the major is that every student accepted is capable (a) of successfully completing his or her respective program and (b) of performing competently in the field as an Applied Behavior Analyst. Applicants are selected based on their potential to benefit from the major and their potential to contribute both to the Major and the field of Applied Behavior Analysis.

Within the admissions process, a culturally diverse student body is actively recruited, and applicants of academic and professional promise are not systematically excluded on the basis of race, ethnic origin, gender, age, religion, lifestyle, sexual orientation, or physical handicap. The admissions process is selective, but flexible--all pertinent data submitted for consideration will be evaluated as an entire package. The evaluation process, however, does involve both academic and interpersonal considerations. The profession of Applied Behavior Analysis requires that the practitioner possess personal characteristics as well as academic and technical competencies, and the admissions process attempts to evaluate both these areas.

Admission to the major is based on

- past academic work;
- coursework in ABA,
- a CV outlining relevant work,
- volunteer, and extracurricular experience in applied behavior analysis;
- letters of recommendation; and
- a statement of ABA interests, and professional goals.

Students may apply, after conferral or anticipated conferral of their Bachelor's degree. Applications should be submitted by the posted deadline to be considered for application in the following fall term. Late applications will be considered if space in the major is available.

For admission to the major, the student must secure a practicum site and a practicum supervisor approved by the Graduate Director. The practicum supervisor must sign a Memorandum of Agreement agreeing to supervise the student in accordance with the expectations of the Major.

A decision about each applicant's candidacy is made by the Graduate Director based on the strength of the applicant's record and his/her:

- Academic record and experiences as an undergraduate
- Career goals and their compatibility with those of the Major
- Potential for successful completion of the Major
- Sensitivity to the needs of potential client populations
- Interpersonal skills
- Communication skills, both oral and written

NOTE: The Graduate Director reserves the right to contact all references identified by the candidate.

Curriculum Requirements

Total Minimum Hours - 41 hours

Shared Core Requirements – 21 credit hours
Practicum – 15 credit hours
Directed Research – 5 credit hours

This is a cohort model with students completing the Major online. All courses must be earned with a grade of "B-" or better.

Shared Core Requirement (21 Credit Hours)

- MHS 6701 Applied Behavior Analysis Basic Principles **Credit Hours: 3**
- MHS 6937 Behavior Theory **Credit Hours: 3**
- MHS 6615 Observational Methods and Functional Assessment **Credit Hours: 3**
- MHS 6780 Ethics in Applied Behavior Analysis **Credit Hours: 3**
- MHS 6201 Applied Behavior Analysis in Complex Community Environments **Credit Hours: 3**
- MHS 6744 Single Case Experimental Design **Credit Hours: 3**

MHS 6xxx Behavior Analysis and Developmental Disabilities (3 Credit Hours)

Practicum Seminar (15 Credit Hours)

- MHS 6940 Practicum in Behavior Analysis in Community Settings **Credit Hours: 2-4 (3 credits for this program)**

Directed Research (5 Credit Hours)

- MHS 6915 Directed Research in Behavioral and Social Sciences **Credit Hours: 1-6 (1-3 credits in this program)**

Comprehensive Exam

A comprehensive literature review in a selected area of research will serve as the comprehensive exam.

Note:
New accreditation requirements will mandate an additional course for students enrolled in 2020.

Applied Behavior Analysis, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 44
Level: Masters
CIP Code: 42.2814
Dept Code: CFS
Major/College Codes: APB BC
Approved: 2000

This major shares core requirements with the M.A. in Applied Behavior Analysis.

Contact Information

College: Behavioral & Community Sciences
Department: Child and Family Studies (CFS)

Contact Information: http://www.grad.usf.edu/majors

The master's degree in applied behavior analysis (ABA) is designed to meet growing needs in Florida and nationally for practitioners who can work effectively in the fields of developmental disabilities, autism, education, child protective services, child behavior disorders, rehabilitation, mental health, and business and technology. ABA provides an approach for developing, implementing, and evaluating practical strategies to produce changes in socially significant behaviors of individuals in the context of community settings. Three important features characterize the scientific basis upon which ABA is built: a) it focuses upon objectively measurable behavior of individuals; b) it studies environmental influences upon the targeted behaviors; and c) it places a premium upon single-subject research designs to analyze the effects of different environmental variables.

The master's degree in ABA is in the department of Child and Family Studies in the College of Behavioral and Community Sciences. Students demonstrate knowledge of behavioral principles and procedures in courses that constitute a core curriculum, demonstrate applied behavior analysis skills through supervised practicum experiences, and complete a data based thesis. The major is designed to prepare students to meet the standards to be Board Certified Behavior Analysts (BCBAs). It will prepare them for employment in a variety of fields where there are growing demands for competent professionals with expertise in applied behavior analysis.

Philosophy

The systematic analysis and application of behavioral principles is an extensive repertoire of professional behaviors. In the USF ABA major, these skills are acquired as students move through the sequenced curriculum of coursework and practicum experiences. The curriculum requires application of behavior analytic principles, with direct supervision by faculty and BCBA supervisors. Students participate in practicum training in community agencies under the supervision of BCBAs. In addition to the 10-25 hours of behavior analysis practice they complete in their practicum sites each week, students also participate in practicum seminars each semester. In these seminars, the Practicum Coordinator discusses important practice issues and facilitates student discussion of their applied work. The supervision of the students' research theses rests in the hands of designated core faculty members (i.e., "major professors"). Major Professors serve as mentors for the students by closely supervising their research and their progress through the major. Therefore, as students are mentored by their major professors during the major, a meaningful major professor-student relationship is essential..

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Three letters of reference from professors and/or employers who know the applicant well
- Current resume or curriculum vitae
- One-page narrative describing the applicant's experiences, training, and interest in Applied Behavior Analysis and in the Master's in Applied Behavior Analysis at USF.
- GRE Scores on the general subtests

Specific Procedures

The primary assumption underlying admission to the major is that every student accepted is capable (a) of successfully completing his or her respective program and (b) of performing competently in the field as an Applied Behavior Analyst. Applicants are selected based on their potential to benefit from the major and their potential to contribute both to the Major and the field of Applied Behavior Analysis.

Within the admissions process, a culturally diverse student body is actively recruited, and applicants of academic and professional promise are not systematically excluded on the basis of race, ethnic origin, gender, age, religion, lifestyle, sexual orientation, or physical handicap. The admissions process is selective, but flexible--all pertinent data submitted for consideration will be evaluated as an entire package. The evaluation process, however, does involve both academic and interpersonal considerations. The profession of Applied Behavior Analysis requires that the practitioner possess personal characteristics as well as academic and technical competencies, and the admissions process attempts to evaluate both these areas.

Admission to the major is based on

- past academic work;
- coursework in ABA,
- a CV outlining relevant work, volunteer, and extracurricular experience in applied behavior analysis;
- letters of recommendation; and
- a statement of ABA interests, and professional goals.

Students may apply, after conferral or anticipated conferral of their Bachelor's degree. Applications should be submitted by the posted deadline to be considered for application in the following fall term. Late applications will be considered if space in the major is available.

For further Admissions Information, please visit Graduate Admissions.

A decision about each applicant's candidacy is made by the Graduate Director based on the strength of the applicant's record and his/her:

- Academic record and experiences as an undergraduate
- Career goals and their compatibility with those of the Major
- Potential for successful completion of the Major
- Sensitivity to the needs of potential client populations
- Interpersonal skills
- Communication skills, both oral and written

NOTE: The Graduate Director reserves the right to contact all references identified by the candidate.

Curriculum Requirements

Total Minimum Hours - 44 hours

Shared Core Requirements – 21 Credit Hours

Additional Required Courses - 3 Credit Hours
Thesis – 10 Credit Hours
Practicum – 10 Credit Hours

This is a cohort model with students completing Major in a face-to-face format on-campus. All courses must be earned with a grade of "B-" or better.

Shared Core Requirements (21 Credit Hours)

- MHS 6701 Applied Behavior Analysis Basic Principles **Credit Hours: 3**
- MHS 6937 Behavior Theory **Credit Hours: 3**
- MHS 6615 Observational Methods and Functional Assessment **Credit Hours: 3**
- MHS 6780 Ethics in Applied Behavior Analysis **Credit Hours: 3**
- MHS 6201 Applied Behavior Analysis in Complex Community Environments **Credit Hours: 3**
- MHS 6744 Single Case Experimental Design **Credit Hours: 3**
- MHS 6900 Special Topics in Planning, Evaluation and Accountability **Credit Hours: 1-3** *Behavior Analysis and Developmental Disabilities (3 credit hours) (Proposed as MHS 6710)*

Additional Required Course (3 Credit Hours)

- MHS 6708 Experimental Analysis of Behavior 1 **Credit Hours: 3**

Comprehensive Exam

The student's thesis proposal will constitute the comprehensive exam.

Practicum (10 Credit Hours)

- MHS 6940 Practicum in Behavior Analysis in Community Settings **Credit Hours: 2-4**

Thesis (10 Credit Hours)

(Offered face-to-face)

- MHS 6971 Thesis in Applied Behavior Analysis **Credit Hours: 2-6**

Note

New accreditation requirements will mandate an additional course for students enrolled in 2020.

Applied Behavior Analysis, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 54 post masters
Level: Doctoral
CIP Code: 42.2814
Dept Code: CFS
Major/College Codes: APB BC
Approved: 2014

Contact Information

College: Behavioral & Community Sciences
Department: Child and Family Studies (CFS)

Contact Information: http://www.grad.usf.edu/majors

Applied Behavior Analysis (ABA) is widely regarded as the most research-based intervention for individuals with autism. ABA is an applied science and a profession that provides services to meet the diverse needs of individuals. The emphasis of the ABA doctoral major is on the development of behavior analysts who are scientist-practitioners. Students graduating from the major will receive training through coursework and research and practice activities with community partners.

Major Research Areas:
ABA, Applied Behavior Analysis, autism, behavior, behavior analysis, behavior management, behavioral intervention, children, developmental disabilities, experimental analysis of behavior, functional assessment, and positive behavior support.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Master's degree in behavior analysis or related field with strong behavior analysis content
- Minimum 3.50 GPA in a master's major
- GRE required, preferred scores of:
  - Verbal – 40% or above
  - Quantitative – 40% or above
  - Analytical – 40% or above
- Research experiences and expertise
- Three strong letters of recommendation
- Campus visit and interview with ABA faculty members
- Personal statement describing experience and accomplishments in ABA, future goals, and reasons for applying
- CV

Students entering the doctoral major with their master's degree are expected to have completed:

- 18 credit hours of didactic coursework in behavior analysis in the following areas: Basic behavioral principles (3 credits), research methods (3 credits), conceptual foundations (3 credits), applied behavior analysis (6 credits), and ethics (3 credits)
- An accepted master's thesis, and
- 10 hours of practicum seminar.

Students lacking in any of these prerequisites will be required to take classes in the doctoral major to cover the missing prerequisites.

Curriculum Requirements

Total Minimum Hours - 54 (Post-Master's)

Core Requirements (15 Credit Hours)

- MHS 6708 Experimental Analysis of Behavior 1 **Credit Hours: 3**
- MHS 6709 Experimental Analysis of Behavior 2 **Credit Hours: 3**
- MHS 6xxx - Research Methods II **Credit(s):3**
- MHS 7926 College Teaching Seminar **Credit Hours: 3**

Conceptual Foundations

Choose from:

- MHS 6937 Behavior Theory **Credit Hours: 3**
- MHS 7xxx - Verbal Behavior **Credit(s): 3**
- MHS 7xxx - Seminar on Skinner's Writings **Credit(s): 3**
- MHS 7xxx - Relational Frame Theory **Credit(s): 3**

Electives (6 Credit Hours)

Elective courses in two areas of applied behavior analysis or other areas that complement the student's interests.

- 7xxx Applied Behavior Analysis
- Unrestricted content

Independent Research (15 Credit Hours)

15 credit hours of independent research are required.

Qualifying Exam

- Successful completion of two literature review papers (approved by the student's advisor and the graduate director)
- Passing score on the Behavior Analyst Certification Board Certification Exam (Students who do not pass the exam may take the exam a second time)

Dissertation (18 Credit Hours)

The dissertation will consist of original research designed and conducted by the student under the supervision of a faculty adviser. The student will assemble a dissertation committee consisting of the adviser and three other faculty members (see Office of Graduate Studies policy on Doctoral Committees for more details).

- Completion of a dissertation proposal accepted by the dissertation committee
- Successful defense of the dissertation proposal before the committee
- Successful completion of the research
- Successful completion of a dissertation manuscript accepted by the dissertation committee
- Successful defense of the dissertation research before the committee

- MHS 7980 Dissertation **Credit Hours: 2-30**

Child and Adolescent Behavioral Health, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 39
Level: Masters
CIP Code: 44.0000
Dept. Code: CFS
Major/College Codes: CAB/BC
State Approved: Spring 2014

Contact Information

College: Behavioral and Community Sciences
Department: Child and Family Studies (CFS)

Contact Information: http://www.grad.usf.edu/majors

The M.S. in Child and Adolescent Behavioral Health (CABH) is offered by the Department of Child and Family Studies (CFS), College of Behavioral and Community Sciences (CBCS). This major will prepare students for careers in public and non-profit organizations serving youth and their families. This major will prepare students to serve in roles such as director, supervisor, case manager, evaluator, and consultant within these organizations. Students have the opportunity to focus their coursework on individual areas of interest, including leadership, developmental disabilities, research and evaluation, and youth and behavioral health.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE Preferred
- Official transcripts
- Three Letters of recommendation from academic, professional, and/or volunteer supervisors, preferably at least one letter from an academic faculty member
- One page statement of goals/career objectives. This should include why you are applying to this particular program, how you believe the program can help you achieve your goals, and any relevant experience in child & adolescent behavioral health.
- A Resume/CV outlining academic, professional, and/or volunteer work/experience
- Writing sample submitted in Essay portion of the online application. This can be from previous coursework or something written in a professional setting.
- Complete a background check prior to Field Experience placements (if necessary)

Curriculum Requirements

Total Minimum Hours: 39 credit hours
Core - 12 hours
Other Required Courses - 21 hours
Thesis/Non-Thesis - 6 hours

Core Requirements (12 Credit Hours)

- MHS 6069 Child and Adolescent Behavioral Health **Credit Hours: 3**
- MHS 6706 Child and Adolescent Behavioral Health Policy **Credit Hours: 3**
- MHS 6027 Creating Cultural Competence in Behavioral Health Organizations **Credit Hours: 3**
- MHS 6732 Research and Evaluation in Child and Adolescent Behavioral Health **Credit Hours: 3**

Other Required Courses (21 Credit Hours)

Other required courses are selected from the list below or from other departments, and must be approved by the student's advisor.

- MHS 6065 Issues and Trends in Developmental Disabilities **Credit Hours: 3**
- MHS 6066 Systems, Services, and Supports for Children and Adolescents with Developmental Disabilities **Credit Hours: 3**
- MHS 6067 Evidence-based Practices in Behavioral Health for Children and Adolescents with Developmental Disabilities **Credit Hours: 3**
- MHS 6095 Family-Centered Interdisciplinary Practice: SOC **Credit Hours: 3**
- MHS 6096 Program Development and Implementation in Children's Mental Health **Credit Hours: 3**
- MHS 6097 Financing of Children's Mental Health Services **Credit Hours: 3**
- MHS 6626 Applied Leadership in Child and Adolescent Behavioral Health **Credit Hours: 3**
- MHS 6410 Intensive Individualize Positive Behavior Support **Credit Hours: 3**
- MHS 6900 Special Topics in Planning, Evaluation and Accountability **Credit Hours: 1-3**

Co-Occurring Mental & Substance (3 credit hours)

- PHC 6546 Epidemiology of Mental Disorders **Credit Hours: 3**
- MHS 7740 Survey Course in Planning, Evaluation and Accountability **Credit Hours: 3**
- MHS 7748 Statistical Applications in Translational Research and Evaluation **Credit Hours: 3**
- PHC 6728 Translational Research Methods in Adolescent Behavioral Health **Credit Hours: 3**
- PHC 6729 Advanced Research Education in Adolescent Behavioral Health **Credit Hours: 3**

Or other courses approved by the student's advisor

Comprehensive Examination

Students take a written comprehensive exam following completion of all core courses.

Thesis/ Non-Thesis Field Experience (6 Credit Hours Minimum)

Students complete six hours in one of the following:

- MHS 6972 Thesis in Child and Adolescent Behavioral Health **Credit Hours: 2-6 (6 credits in this program)**
- MHS 6941 Applied Field Experience Seminar **Credit Hours: 3-6 (6 credits in this program)**

Rehabilitation and Mental Health Counseling (Post-Bacc), M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 60
Level: Masters
CIP Code: 51.2310
Dept Code: REH
Major/College Codes: REH BC
Approved 1971

Concentrations:

Addictions and Substance Abuse Counseling (ASA)
Marriage and Family Therapy (MFL)

Contact Information

College: Behavioral & Community Sciences
Department: Child and Family Studies (CFS)

Contact Information http://www.grad.usf.edu/majors

The Department of Child and Family Studies trains counselors to work with physically, mentally, emotionally, and chemically disabled individuals. Training emphasizes psychological, social, medical, and vocational aspects of disability, and also the development and refinement of personal adjustment counseling skills. Graduates with this M.A. are prepared for careers as both rehabilitation specialists and mental health counselors.

The Department offers only the M.A. degree. Most students are admitted after earning a baccalaureate degree in one of the behavioral, social, health-related, or educational disciplines (REH). The Major offers two areas of Concentration that may also lead to a certificate: (1) Addictions and Substance Abuse Counseling; and (2) Marriage and Family Therapy. Each student may elect to pursue a program of specialization in any of these areas. The Addictions and Substance Abuse counseling program is approved by the Certification Board for Addictions Professionals of Florida (CBAPF Approved Provider #179A).

Upon completion of at least 75% of the major, students are eligible to sit for the national examination to become a Certified Rehabilitation Counselor (CRC). Upon graduation, individuals are also eligible to take the examination for the state licensure as a Mental Health Counselor. Upon completion of 1500 hours of post-graduate clinical supervision graduates receive their license as a Mental Health Counselor in the State of Florida. For a complete description of the department and its program, visit the department's Web page at:
http://rmhc.bcs.usf.edu

Accreditation:
The Major is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and the Commission on Rehabilitation Education (CORE).

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Three letters of recommendation
- Online department application (which includes a personal statement of intent)
- GRE
- Interview (on campus)
- Undergraduate statistics or research methods course

Curriculum Requirements

Total Minimum Credit Hours - 60 credits

Core Requirements – 60 hours
Optional Thesis – 6 hours
Optional Concentration – 15 hours

The department offers both a thesis and a non-thesis option. There is no language requirement; however, a comprehensive examination is required of all students. The following 60-hour core curriculum is consistent with national certification standards for rehabilitation counselors and must be taken by all students (post-baccalaureate, thesis, and non-thesis). Students must receive a B (3.00) or better in all core curriculum and elective classes.

Core Course Requirements (60 Credit Hours)

- MHS 5020 Foundations of Mental Health Counseling **Credit Hours: 3**
- MHS 5480 Human Growth and Development **Credit Hours: 3**
- RCS 5780 Legal, Ethical, Professional Standards and Issues in Counseling **Credit Hours: 3**
- RCS 5035 Rehabilitation Counseling: Concepts and Applications **Credit Hours: 3**
- RCS 5080 Medical Aspects of Disability **Credit Hours: 3**
- RCS 5450 Fundamentals of Substance Abuse Counseling **Credit Hours: 3**
- RCS 6220 Individual Evaluation and Assessment **Credit Hours: 3**
- RCS 6476 Human Sexuality Counseling **Credit Hours: 3**
- RCS 6301 Career and Lifestyle Assessment **Credit Hours: 3**
- RCS 6408 Diagnosis and Treatment of Psychopathology **Credit Hours: 3**
- RCS 6440 Social and Cultural Foundations of Counseling **Credit Hours: 3**
- RCS 6510 Group Theories and Practice **Credit Hours: 3**
- RCS 6407 Counseling Theories and Practice **Credit Hours: 3**
- RCS 6740 Research and Program Evaluation **Credit Hours: 3**
- RCS 6803 Practicum in Counseling **Credit Hours: 3 (6 credits for this program)**
- RCS 6825 Internship **Credit Hours: 3-6 (6 credits for this program)**
- Two Electives or Thesis Credits **Credit(s): 6**

Optional Thesis (6 Credit Hours)

All students are initially admitted to the non-thesis program. Admitted students may subsequently apply to the faculty for a thesis program. Students in a thesis program must complete a minimum of 60 hours in the Post-Baccalaureate Program (54-hr.) core curriculum including a minimum of 6 hours of RCS 6970. An oral defense of the thesis is required.

- RSC 6970 - Thesis

Optional Concentration Requirements

Addictions and Substance Abuse Counseling (15 Credit Hours)

- RCS 5450 Fundamentals of Substance Abuse Counseling **Credit Hours: 3**
- RCS 6459 Professional Skills for Addictions Counselors **Credit Hours: 3**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit Hours: 1-4 (3 credits in this program)** (Employee Assistance Programs 3 or approved elective)
- RCS 6803 Practicum in Counseling **Credit Hours: 3** (Substance Abuse)
- RCS 6456 Counseling Approaches for Substance Abusers **Credit Hours: 3**

Marriage and Family Therapy (15 Credit Hours)

- RCS 6476 Human Sexuality Counseling **Credit Hours: 3**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit Hours: 1-4 (3 credits in this program)** (Dynamics of Marriage and Family Therapy)
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s): 3 (3 credits in this program)** (Marital Therapy, Theory, and Techniques)
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s): 3 (3 credits in this program)** (Family Therapy, Theory, and Techniques)
- RCS 6803 Practicum in Counseling **Credit Hours: 3**

Comprehensive Examination

In order to graduate from the program students must pass the comprehensive exam. The written comprehensive examination assesses the student's understanding of the significant content and process areas of the entire major curriculum.

Leadership in Child & Adolescent Behavioral Health Graduate Certificate

This program is offered fully online.

Curriculum Code: **XLB**

Description

The Graduate Certificate in Leadership in Child & Adolescent Behavioral Health is designed to provide a rigorous, empirically-based education to individuals who wish to apply leadership skills in work with public and private organizations serving children, adolescents, and their families. Students will gain a broad understanding of leadership theory and practice with a focus on developing their own leadership potential. The graduate certificate will provide students with tools and strategies for leading organizations that serve the behavioral health needs of children, youth, and their families in a variety of contexts including mental health, education, juvenile justice, and child welfare.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

B.S. related to Human Services

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Successful completion of

- MHS 6626 Applied Leadership in Child and Adolescent Behavioral Health **Credit Hours: 3** is a prerequisite for MHS 6900 Special Topics in Planning, Evaluation and Accountability (Applied Leadership 2)

Requirements of this Certificate (15 Credit Hours)

15 credit hours are required for the certificate, There are 9 hours of required core classes.

- MHS 6096 Program Development and Implementation in Children's Mental Health **Credit Hours: 3**
- MHS 6610 - Financing of Children's Mental Health Services **Credit(s): 3**

- MHS 6626 Applied Leadership in Child and Adolescent Behavioral Health **Credit Hours: 3**

Electives

Please select two of the following four courses.

- MHS 6706 Child and Adolescent Behavioral Health Policy **Credit Hours: 3**
- MHS 6069 Child and Adolescent Behavioral Health **Credit Hours: 3**
- MHS 6027 Creating Cultural Competence in Behavioral Health Organizations **Credit Hours: 3**
- MHS 6900 Special Topics in Planning, Evaluation and Accountability **Credit Hours: 1-3**
- Other relevant elective, approved by the certificate director

Time Limit

3 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Positive Behavior Support Graduate Certificate

This program is offered fully online.

Curriculum Code: **XPB**

Description

This graduate certificate program is designed for educators, school or mental health administrators, school psychologists, social workers, school counselors, and behavioral health staff who want to specialize in an evidence-based approach to resolving challenging behavior and supporting the prosocial behavior of children and youth within schools and early education settings. Participants are required to complete 9 credit hours from the list of core courses and one elective, for a total of 12 credit hours. Core courses teach the behavior skills needed to contribute to the development of intensive, individual behavior support and the collaboration skills necessary to make them an effective member of a positive behavior support team. The third required course allows students to develop knowledge and expertise either in school-wide (K-12) or program-wide (early childhood) Positive Behavior Support (PBS). Students may elect to complete the certificate requirements with the fourth core course or one of the six electives. These courses individualize the certificate to meet students' interests in behavioral health o related fields such as behavior analysis, education, and social work. For more information, visit the PBS Certificate Program website. The PBS Graduate Certificate is a program offered as part of the Florida Center for Inclusive Communities (FCIC), a University Center for Excellence in Developmental Disabilities. Participants in the program are FCIC trainees with access to local and national resources.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Consult Advisor

Requirements of this Certificate (9 Credit Hours)

- MHS 6410 Intensive Individualize Positive Behavior Support **Credit Hours: 3**
- MHS 6607 Behavior Consultation and Collaborative Systems Change **Credit Hours: 3**
- MHS 6608 Schoolwide Positive Behavior Support **Credit Hours: 3**

or

- MHS 6605 Addressing Behavior Challenges in Young Children **Credit Hours: 3**

Electives

Select 1 or take 4th Core:

- MHS 6645 Mental Health Informatics **Credit Hours: 3**
- PHC 6240
- MHS 6095 Family-Centered Interdisciplinary Practice: SOC **Credit Hours: 3**
- PHC 6543 Foundations in Behavioral Health Systems **Credit Hours: 3**
- MHS 6901 Independent Studies in Mental Health Studies **Credit Hours: 1-4**
- Other relevent approved by cert advisor

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Communication Sciences and Disorders

Audiology, Au.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 120
Level: Doctoral/Professional
CIP Code: 51.0202
Dept Code: CSD
Major/College Codes: AYD BC
Approved 1999

Also offered as Concurrent Degree

Contact Information

College: Behavioral & Community Sciences
Department: Communication Science and Disorders (CSD)

Contact Information: http://www.grad.usf.edu/majors

The Au.D. is a four-year post-baccalaureate professional degree. The primary objective is to produce audiologists who are competent to perform the wide array of diagnostic, remedial, and other services associated with the practice of Audiology and who meet the standards mandated by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

Accreditation:

Accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

Admission Information

Must meet University requirements (see Graduate Admissions) as well as requirements for admission to the major, listed below.

In addition to the USF Admission Application, applicants to the Au.D. Major are required to complete a CSDCAS application.

- Three 3 letters of recommendation
- A 1-2 page letter of intent
- GRE scores with preferred scores at or above the 33rd percentile on both Verbal and Quantitative sections.
- GRE writing with a preferred score of 4.00 or better
- Demonstration of competency in communication skills as determined by the chairperson or delegate.

Curriculum Requirements

General University requirements for graduate work must be fulfilled and a minimum of 120 hours of regularly scheduled academic course work and clinical practica at the graduate level designed to meet competencies set by the American Speech-Language-Hearing Association. Also required for graduation are the attainment of a "B-" or better in each graduate Audiology course, the attainment of clinical competence determined by a GPA of 3.00 in all clinical practica and academic coursework, satisfactory passage of annual comprehensive didactic and clinical oral examinations, and successful completion of an audiology doctoral project. A student with a bachelor's degree in any field may enter the four-year post-baccalaureate program. However, students who lack undergraduate coursework in Communication Sciences and Disorders may be required to add several courses to their graduate major. A student with a master's degree and State License in Audiology or the Certificate of Clinical Competence in Audiology (CCC-A) may be admitted into an individualized program of study.

Core Requirement

Total Minimum Hours - 120 credit hours
Core - 65 credit hours
Practical Experience - 49 credit hours
Doctoral Project - 6 credit hours

Audiology Science Core (17 Credit Hours)

- SPA 6392 Profession of Audiology **Credit Hours: 2**
- SPA 5303 Auditory Anatomy and Physiology **Credit Hours: 3**
- SPA 5120 Psychoacoustics **Credit Hours: 3**
- SPA 5132 Audiology Instrumentation **Credit Hours: 3**
- SPA 5153 Quantitative Problem Solving in Speech Pathology and Audiology **Credit Hours: 3**
- SPA 6805 Research Procedures in Communication Sciences and Disorders **Credit Hours: 3**

Audiology Practice Core (48 Credit Hours)

- SPA 5328 Rehabilitative Audiology for Adults **Credit Hours: 3**
- SPA 6311 Medical Audiology **Credit Hours: 3**
- SPA 6340 Principles of Amplification I **Credit Hours: 3**
- SPA 6341 Principles of Amplification II **Credit Hours: 3**
- SPA 6307 Speech Perception and Sensorineural Hearing Loss **Credit Hours: 3**
- SPA 6305 Pediatric Audiology **Credit Hours: 3**
- SPA 6314 Electrophysiology **Credit Hours: 3**
- SPA 6316 Vestibular Evaluation and Treatment **Credit Hours: 3**
- SPA 6393 Audiology Practice Management **Credit Hours: 3**
- SPA 6354 Hearing Conservation **Credit Hours: 3**
- SPA 7346 Cochlear Implants **Credit Hours: 3**
- SPA 7150 Advanced Speech Science **Credit Hours: 3**
- SPA 7332 Advanced Electrophysiology **Credit Hours: 3**
- SPA 6324 Aural Rehabilitation: Children **Credit Hours: 3**
- SPA 7330 Advanced Vestibular Evaluation and Treatment **Credit Hours: 3**
- SPA 7331 Advanced Medical Audiology **Credit Hours: 3**

Practical Experience (49 Credit Hours)

- SPA 6535L Audiology Clinical Laboratory I **Credit Hours: 3**
- SPA 6536L Audiology Clinical Laboratory II **Credit Hours: 3**
- SPA 6505 Practicum **Credit Hours: 1-10 (4 credits for this program)** (Clinic I)
- SPA 6505 Practicum **Credit(s): 1-10 (6 credits for this program)** (Clinic II)
- SPA 6505 Practicum **Credit(s): 1-10 (6 credits for this program)** (Clinic III)
- SPA 6508 Advanced Audiology Practicum **Credit Hours: 3-6 (3 credits for this program)** (Clerkship I)
- SPA 6508 Advanced Audiology Practicum **Credit(s): 3-6 (3 credits for this program)** (Clerkship II)
- SPA 6508 Advanced Audiology Practicum **Credit(s): 3-6 (3 credits for this program)** (Clerkship III)
- SPA 6508 Advanced Audiology Practicum **Credit(s): 3-6 (6 credits for this program)** (Externship I)
- SPA 6508 Advanced Audiology Practicum **Credit(s): 3-6 (6 credits for this program)** (Externship II)
- SPA 6508 Advanced Audiology Practicum **Credit(s): 3-6 (6 credits for this program)** (Externship III)

Doctoral Project (6 Credit Hours Minimum)

- SPA 6910 Directed Research **Credit Hours: 1-19 (3 credits for this program)**
- SPA 7834 Audiology Doctoral Project Seminar **Credit Hours: 1 (3 credits for this program)**

Annual Examination

Students in Audiology will be evaluated at the end of each year of coursework. The purpose of these examinations is twofold: 1) Determine eligibility for continuation in academic coursework and practical experiences; and 2) Determine areas of weakness that will require remediation. Individualized remediation programs will be designed, if needed, by the student under the supervision of the Audiology faculty and may include the completion of additional written papers, projects, and/or additional course work.

Audiology Doctoral Project

The goal of the Audiology Doctoral Project (ADP) is to provide an experience in basic or applied research or evidence-based practice. Upon completion of the ADP, students are expected to continue to be critical consumers of research and be able to apply current research findings to their practice of audiology. It is expected that all students will complete the ADP experience before the end of the third year of study. The ADP must be completed and defended prior to graduation.

Concurrent Degree

Also available as a Concurrent Degrees

Communication Sciences and Disorders, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 72 post-bacc; 42 post-masters
Level: Doctoral
CIP Code: 51.0204
Dept Code: CSD
Major/College: CSD BC
Approved 2010

Also offered as a Concurrent Degree

Contact Information

College: Behavioral & Community Sciences
Department: Communication Sciences and Disorders (CSD)

Contact Information: http://www.grad.usf.edu/majors

The Department of Communication Sciences and Disorders provides disciplinary and interdisciplinary education to prepare research scientists capable of addressing both theoretical and applied issues in laboratory, clinical, and classroom settings. Academic preparation emphasizes basic and advanced study in the communicative sciences, interdisciplinary study, and extensive research preparation. The program of study is tailored to meet individual interest areas. The overall aim of the doctoral major is to produce graduates who excel in meeting the rigorous demands of an academic/research career.

Major Research Areas:

- Speech-Language Sciences: Speech perception and production processes, speech perception by normal hearing listeners and listeners with hearing loss, non-native speech, language development in at-risk populations, linguistic and discourse correlates for reading, writing, and spelling, second language learning and literacy learning, and language variation and multiculturalism;
- Hearing Sciences and Audiology: Aural rehabilitation, psychoacoustics, aging, temporal processing, speech perception by impaired listeners, auditory evoked potentials, and otoacoustic emissions;
- Neurocommunicative Sciences: Aphasia, cognitive/linguistic processing in normal aging and adults with neurological disorders, cognitive neuroscience.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Three letters of recommendation
- A letter of intent
- 3.50 GPA undergraduate or graduate

- Students with a non-CSD background may be required to take pre-requisite coursework in the basic speech, language, and hearing sciences depending on career plans and desired area of focus.
- GRE with preferred scores at the 33rd percentile for Verbal and, Quantitative subtests, and a 3.50 or better on the Writing subtest, taken within 5 years preceding the application. Students with lower scores may be offered admission on a conditional basis if the letter of intent and letters of recommendation are particularly strong.

Curriculum Requirements

Total Minimum hours: 72 (post-bacc)
42 (post-master's)

Core - 9 credit hours
Research and Tools of Research - 9 credit hours
Advanced Study - 12 credit hours
Foundation - 30 credit hours (post-bacc only)
Dissertation - 12 credit hours

Completion of the Ph.D. in Communication Sciences and Disorders after the Master's normally requires three years of study; five years after the bachelor's.

Core Requirements (9 credit hours)

- SPA 7802 Critical Analysis of Literature in CSD **Credit Hours: 3**
- SPA 7807 Critical Synthesis of Literature in CSD **Credit Hours: 3**
- SPA 7497 Proseminar in Communication Sciences and Disorders **Credit Hours: 1**

Students will complete two semesters (1 credit per semester) of a professional development seminar. This prepares doctoral students for a successful academic career in communication sciences and disorders. Topics discussed include developing a research agenda, building a curriculum vita, teaching in higher education, balancing career and family, professional networking, and keys to success.

- SPA 6505 Practicum **Credit Hours: 1-10**

Students will complete a one-semester practicum on teaching requirements and practices aimed at preparing them to be graduate assistants or instructors in classes at the University of South Florida or other higher education institutions.

Research and Tools of Research (9 credit hours)

Coursework required for tools of research include any course work required for the student to develop skills in research methodology in their area of specialty. The student's academic advisor, major professor and Doctoral Committee will advise students on the selection of appropriate graduate coursework given the student's area of specialization. For most students, tools of research will consist of research design and/or statistics courses. However, depending on the student's area of specialization, courses such as grant writing, computer programming, instructional design, and many others in a variety of departments may be appropriate.

Advanced Study (12 credit hours)

Coursework required for Advanced Study may take the form of directed research or elective graduate coursework, either within the department or in related departments), directed research, or independent study. The student's academic advisor, major professor and Doctoral Committee will advise students on the selection of the proper mix of directed research, coursework, and other study to support knowledge development in the student's area of specialization. For most students, advanced study will consist primarily of directed research credits with Doctoral Committee members, as they begin directed readings to prepare for the Qualifying Examination.

Foundation (30 credit hours) (post-bacc only)

Bachelor's level students, in consultation with their academic advisor, will design an appropriate curriculum to obtain foundational content and skills in their area of interest that will prepare them for Advanced Study. The credits may take the form of structured coursework, directed research, or independent study. Courses in the Department frequently used to satisfy this requirement are listed below.

Note: Students admitted to the program from a non-CSD background may be required to take pre-requisite coursework at the undergraduate level in the basic speech, language, and hearing sciences, depending on their career plans and desired area of focus:

- SPA 5120 Psychoacoustics **Credit Hours: 3**
- SPA 5132 Audiology Instrumentation **Credit Hours: 3**
- SPA 5153 Quantitative Problem Solving in Speech Pathology and Audiology **Credit Hours: 3**
- SPA 5204 Advanced Clinical Phonology **Credit Hours: 3**
- SPA 5303 Auditory Anatomy and Physiology **Credit Hours: 3**
- SPA 5328 Rehabilitative Audiology for Adults **Credit Hours: 3**
- SPA 5403 Language-Learning in the School-Age Years **Credit Hours: 3**
- SPA 5552 Diagnostic Principles and Practices **Credit Hours: 3**
- SPA 6211 Advanced Vocal Disorders **Credit Hours: 3**
- SPA 6225 Advanced Fluency Disorders **Credit Hours: 3**
- SPA 6232 Neuromotor Communication Disorders **Credit Hours: 3**
- SPA 6245 Craniofacial Communication Disorders **Credit Hours: 3**
- SPA 6305 Pediatric Audiology **Credit Hours: 3**
- SPA 6307 Speech Perception and Sensorineural Hearing Loss **Credit Hours: 3**
- SPA 6311 Medical Audiology **Credit Hours: 3**
- SPA 6314 Electrophysiology **Credit Hours: 3**
- SPA 6316 Vestibular Evaluation and Treatment **Credit Hours: 3**
- SPA 6324 Aural Rehabilitation: Children **Credit Hours: 3**
- SPA 6340 Principles of Amplification I **Credit Hours: 3**
- SPA 6341 Principles of Amplification II **Credit Hours: 3**
- SPA 6354 Hearing Conservation **Credit Hours: 3**
- SPA 6401 Pediatric Language Disorders **Credit Hours: 3**
- SPA 6404 Language Learning Disabilities **Credit Hours: 3**
- SPA 6410 Aphasia and Related Disorders **Credit Hours: 3**
- SPA 6417 Communication + Cognition in Traumatic Brain Injury **Credit Hours: 3**
- SPA 6473 Bilingual Assessment and Intervention **Credit Hours: 3**
- SPA 6559 Augmentative & Alternative Communication **Credit Hours: 3**
- SPA 6564 Seminar in Aging, Cognition, and Communication **Credit Hours: 3**
- SPA 6565 Seminar in Dysphagia **Credit Hours: 3**
- SPA 6805 Research Procedures in Communication Sciences and Disorders **Credit Hours: 3**
- SPA 7330 Advanced Vestibular Evaluation and Treatment **Credit Hours: 3**
- SPA 7331 Advanced Medical Audiology **Credit Hours: 3**
- SPA 7332 Advanced Electrophysiology **Credit Hours: 3**
- SPA 7346 Cochlear Implants **Credit Hours: 3**
- SPA 7931 Seminar in Communication Sciences and Disorders **Credit Hours: 3**

Qualifying Exam

With the supervision of a qualifying exam committee, students must pass a qualifying examination that evaluates the student's specialty knowledge and methodological competence.

Pre-Dissertation Project
A pre-dissertation project is required. This may or may not involve research that is related to the principal research topic of the dissertation. Successful completion of the pre-dissertation project must be approved by the student's academic advisor and major professor. In some cases, this requirement may be satisfied by a previously completed master's thesis or audiology doctoral research project.

Dissertation (12 credit hours)

- SPA 7980 Dissertation **Credit Hours: 2-19**

Other Requirements
Departmental policy specifies that any student earning a C+ or below in two courses will be recommended for dismissal from the Ph.D. program.

Concurrent Degree

Also available as a Concurrent Degrees

Speech-Language Pathology (Post-Bacc), M.S.

This program is offered partially online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 62
Level: Masters
CIP Code: 51.0204
Dept Code: CSD
Major/College Codes: SPP BC
Approved: 1970

Contact Information

College: Behavioral & Community Sciences
Department: Communication Sciences and Disorders (CSD)

Contact Information: http://www.grad.usf.edu/majors

The Department of Communication Sciences and Disorders is devoted to the study of normal and disordered human communication. Courses and clinical practice provide the student with principles, research methods and application of knowledge about the spectrum of verbal and non-verbal communication skills. Diagnosis and remediation of communicative problems dominate the clinical component of this course of study. The Master of Science in Speech Language Pathology is structured to meet the preparation requirements of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence.

Accreditation:

Accredited by the Council of Academic Accreditation of the American Speech-Language-Hearing Association.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- In addition to the USF Admission Application, applicants to the Program are required to complete a CSDCAS application.
- completion of a set of pre-requisite courses, also required for state licensure and national certification in speech-language pathology, these pre-requisite courses include:
  - SPA 3004 - Introduction to Language Development and Disorders
  - SPA 3011 - Introduction to Speech Science
  - SPA 3030 - Introduction to Hearing Sciences
  - SPA 3101 - Anatomy and Physiology of the Speech and Hearing Mechanism

- SPA 3112 - Applied Phonetics in Communication Disorders
- SPA 3310 - Introduction to Disorders of Hearing
- SPA 4104 - Neuroanatomy

- at least a 3.20 average on a 4.00 scale in all work attempted while registered as a upper division student working for a baccalaureate degree,
- GRE with preferred scores of: 52nd percentile (approx. 151) on the verbal portion OR the 52nd percentile (approx. 4) on the writing section AND the 32nd percentile (approx. 148) on the quantitative section, taken within five years preceding application
- three letters of recommendation
- a letter of intent and resume, and
- in accordance with our accreditation board (Council of Academic Programs in CSD) the applicant must possess and demonstrate the following Essential Functions: physical health-motor skills, intellectual skills, communication, sensory abilities, and behavior-social qualities which are necessary to achieve the knowledge and skills standards required for graduation and certification by the American Speech Language and Hearing Association (ASHA) and also enable the student to meet graduate and professional requirements as required by state and national credentialing agencies. . Graduate student clinicians with disabilities are expected to meet the same standards and demonstrate the same essential functions as their non-disabled peers with or without reasonable accommodations. For more information, students with disabilities are encouraged to contact Students with Disabilities Service (SDS) at: http://www.sds.usf.edu/Students.htm

Curriculum Requirements

Total Minimum hours - 62 hours
Core – 29 credit hours
Practicum – 24 credit hours
Thesis/non-thesis – 9 credit hours

All speech-language pathology majors must complete the following:

Core Requirements (29 Credit Hours)

- SPA 5204 Advanced Clinical Phonology **Credit Hours: 3**
- SPA 5403 Language-Learning in the School-Age Years **Credit Hours: 3**
- SPA 5552 Diagnostic Principles and Practices **Credit Hours: 3**
- SPA 6211 Advanced Vocal Disorders **Credit Hours: 3**
- SPA 6225 Advanced Fluency Disorders **Credit Hours: 3**
- SPA 6410 Aphasia and Related Disorders **Credit Hours: 3**
- SPA 6559 Augmentative & Alternative Communication **Credit Hours: 3**
- SPA 6571 Ethical Practice Issues in Communication Sciences and Disorders **Credit Hours: 1-2 (2 credits for this program)**
- SPA 6805 Research Procedures in Communication Sciences and Disorders **Credit Hours: 3**
- SPA 6565 Seminar in Dysphagia **Credit Hours: 3**

Practicum (24 Credit Hours)

Also, students will enroll in sufficient graduate clinical practicum (24 credits) to meet a minimum of 400 clock hours to fulfill the requirements of the American Speech-Language-Hearing Association. Of these hours, 25 hours must be in observation and at least 250 clock hours must be in speech-language pathology.

Thesis Option (9 Credit Hours)

The number of practicum hours is adjusted from 24 hours to 21 hours to allow the thesis student to take one elective. This elective will be selected with the assistance of the thesis advisor.

- SPA 6910 Directed Research **Credit Hours: 1-19** (1 hour min)
- SPA 6971 Thesis: Master's **Credit Hours: 2-19** (8 hours min)

Non-Thesis Option

Each student must complete an additional nine (9) hours of coursework selected with the assistance of an advisor from the electives list.

Electives

* required for students who have not had a course in aural rehabilitation at the undergraduate level

- SPA 6232 Neuromotor Communication Disorders **Credit Hours: 3**
- SPA 6324 Aural Rehabilitation: Children **Credit Hours: 3** *
- SPA 6401 Pediatric Language Disorders **Credit Hours: 3**
- SPA 6404 Language Learning Disabilities **Credit Hours: 3**
- SPA 6417 Communication + Cognition in Traumatic Brain Injury **Credit Hours: 3**
- SPA 6473 Bilingual Assessment and Intervention **Credit Hours: 3**
- SPA 6564 Seminar in Aging, Cognition, and Communication **Credit Hours: 3**
- SPA 6910 Directed Research **Credit Hours: 1-19 (credits vary in this program)**

GPA and Comprehensive Exam Requirements

Also required for graduation are the attainment of a 'B-' or better in each graduate Speech-Language Pathology course, the attainment of clinical competence and a GPA of 3.00 in all coursework and clinical practica, and satisfactory passage of a comprehensive examination.

Online Option

For individuals who have a bachelor's degree in speech-language pathology and are currently working in the public school system as a speech-language pathology assistant, or clinician, we offer a part-time online graduate major, which can be completed in 9 semesters. The admission and degree requirements are the same as those listed for the residential program. All academic coursework is offered online. The three electives for the non-thesis option are selected by the major and are designed to meet the unique needs of the clinician practicing in a school setting. The thesis option is not available for this track. Out of the six required clinical practicum (a total of 24 credits), four are completed on the job during the school year, one is completed on the Tampa campus or at a local externship site during the second summer, and the third summer is devoted to accruing clinical hours at a local externship site.

Department of Criminology

Criminal Justice Administration, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 43.0103
Dept Code: CJP
Major/College Codes: CJA BC
Approved 2006

Contact Information

College: Behavioral & Community Sciences
Department: Criminology (CJP)

Contact Information: http://www.grad.usf.edu/majors

The M.A. in Criminal Justice Administration is a specialized and concentrated program of study designed specifically for current or former practitioners within the criminal justice system. Generally it targets individuals who do not anticipate continuing on to the doctoral studies. It is a concentrated weekend, cohort-based major leading to the M.A. in five consecutive semesters. Up to two classes may be offered via the internet. Classes are held on weekends, meet for one day, and run seven weeks back-to-back. The major is modeled after a typical executive MBA program for working professionals. This is a cohort based model. This major concentrates on issues related to the organization and operation of criminal justice agencies and related organizations.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Two letters of recommendation attesting to the applicant's abilities to succeed at the graduate level
- A statement of purpose addressing the motivations to attain a graduate diploma and the intention to apply the diploma to a specific set of purposes

Curriculum Requirements

Total Minimum hours - 33

Core - 24 hours
Additional Required Courses - 9 hours

Core Requirements (24 Credit Hours)

- CCJ 6406 Theory, Practice, and Research in Law Enforcement **Credit Hours: 3**

- CCJ 6705 Research Methods in Criminology **Credit Hours: 3-4**
- CCJ 6706 Quantitative Analysis in Criminology I **Credit Hours: 4**
- CJE 6025 Policy Organization, Behavior, and Administration **Credit Hours: 3**
- CJE 6029 Advanced Seminar in Law Enforcement **Credit Hours: 3**
- CCJ 6935 Topics in Criminology and Criminal Justice **Credit Hours: 3**

Theoretical Approaches to Criminal Behavior (4 credit hours) (Proposed CCJ 6605)

- CJE 6716 Criminal Justice Graduate Capstone Seminar **Credit Hours: 3**

Additional Required Courses (9 Credit Hours)

Additionally, two courses in public administration at the 6000 level are required.

The department recommends PAD 6041 (3) and PAD 6934 (3) or similar courses in PAD approved by the CJA Program Director in coordination with the Public Administration Program.

- CCJ 6936 Current Issues in Law Enforcement **Credit Hours: 3**

Comprehensive Exam

A student portfolio is used in lieu of a comprehensive exam.

Criminology, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 45.0401
Dept Code: CJP
Major/College Codes: CCJ BC
Approved 1974

This major shares core requirements with the M.S. in Cybercrime.

Contact Information

College: Behavioral & Community Sciences
Department: Criminology (CJP)

Contact Information: http://www.grad.usf.edu/majors

The M.A. in Criminology is a two-year major designed to provide the student with an in depth understanding of the major ideas, issues, theories, and research comprising the field of Criminology and Criminal Justice.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Preferred minimum scores of 153V (61st percentile), 144Q (17th percentile) or higher on the Graduate Record Exam (GRE). All applicants must submit GRE scores taken within the preceding five years.
- A statement of purpose detailing: (a) reasons for seeking a MA degree in criminology, (b) research interests, and (c) future career plans.
- A professional or academic writing sample providing evidence of the candidate's academic capabilities.
- Three letters of reference speaking to the applicant's academic capabilities

Curriculum Requirements

Total Minimum Hours - 33 credit hours

Shared Core Requirements - 11 Credit Hours
Additional required courses - 7 Credit Hours
Electives – Non-thesis option - 15 Credit Hours

Electives – Thesis option - 9 Credit Hours
Thesis (optional) - 6 Credit Hours

Shared Core Requirements (11 Credit Hours)

- CCJ 6118 Introduction to Criminology Theory **Credit Hours: 4**
- CCJ 6705 Research Methods in Criminology **Credit Hours: 3-4 (3 credits for this program)**
- CCJ 6706 Quantitative Analysis in Criminology I **Credit Hours: 4**

Additional Required Courses (7 Credit Hours)

- CCJ 6485 Criminal Justice and Public Policy **Credit Hours: 3**
- CCJ 6707 Quantitative Analysis in Criminology II **Credit Hours: 3**
- CCJ 6937 Pro Seminar in Criminology **Credit Hours: 1**

Non-Thesis Option (15 Credit Hours)

Students in the non-thesis option complete 15 elective hours. Options include but are not limited to:

- CCJ 6624 Seminar in Violence **Credit Hours: 3**
- CCJ 6638 Seminar in Nature and Causes of Crime **Credit Hours: 3**
- CCJ 6654 Seminar in Drugs and Crime **Credit Hours: 3**
- CCJ 6669 Seminar in Social Inequality and Crime **Credit Hours: 3**

A maximum of three hours may be directed Independent Study. Up to six graduate hours may be taken in the area outside the Department with approval from the Graduate Director.

Thesis Option (15 Credit Hours)

Students in the thesis option complete 9 elective hours. Options include but are not limited to:

- CCJ 6624 Seminar in Violence **Credit Hours: 3**
- CCJ 6638 Seminar in Nature and Causes of Crime **Credit Hours: 3**
- CCJ 6654 Seminar in Drugs and Crime **Credit Hours: 3**
- CCJ 6669 Seminar in Social Inequality and Crime **Credit Hours: 3**

A maximum of three hours may be directed Independent Study. Up to six graduate hours may be taken in the area outside the Department with approval from the Graduate Director.

- CCJ 6971 Thesis: Master's **Credit Hours: 2-19**

The thesis will consist of research that makes an original contribution to the scholarly literature and may be of either a quantitative or qualitative nature. 6 credit hours of thesis is required.

Comprehensive Exam

For students pursuing the thesis option, an oral defense of a written thesis is required after the final draft of the thesis has been accepted by the candidate's supervisory committee.

For students pursuing the non-thesis option students must pass a comprehensive exam or complete a project. The comprehensive exam is designed to test the students' knowledge of the three core areas of the Master's program; criminological theory, current issues in criminal justice and research methodology. A project is typically a research proposal, but can be other types of research activities including an internship focused on understanding a criminal justice problem along with a literature review on that problem. Approval for the proposed project must be received from the Major Professor and one other Criminology faculty member.

Criminology, Ph.D

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 55 post-master's
Level: Doctoral
CIP Code: 45.0401
Dept Code: CJP
Major/College Codes: CCJ BC
Approved 1998

Contact Information

College: Behavioral & Community Sciences
Department: Criminology (CJP)

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. is a research degree granted in recognition of high achievement in criminology. This achievement requires accomplishments beyond the completion of coursework that demonstrate the ability to work independently and contribute to criminological knowledge.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A master's degree from a regionally accredited institution and a GPA of at least 3.40 or better (on a 4.00 scale) during graduate study.
- A preferred minimum score of 153 Verbal (61st percentile), 144 Quantitative (17thh percentile) or higher on the Graduate Record Exam (GRE). All applicants must submit GRE scores taken within five (5) years of the desired term of entry.
- Three 3 letters of recommendation speaking to the applicant's academic capabilities
- A statement of purpose detailing reasons for seeking a Ph.D. degree in Criminology, future career plans and research interests.
- A sample of written work providing evidence of the applicant's academic capabilities. If an applicant has completed a master's thesis, it should be submitted.

Curriculum Requirements

Total minimum hours: 55 hours post-master's

Core Requirements - 22 hours

Additional Required Course - 1 hour
Electives - 9 hours

Advanced Research - 6 hours
Dissertation - 18 hours

Core Requirements (21 Credit Hours)

* For students who have taken CCJ 6937, CCJ 6485 and/or CCJ 6707 or the equivalent as M.A. students, those credit hours will be substituted with additional departmental electives.

** An introductory research methods course at the graduate level prior is a pre-requisite to taking this course.

† An introductory quantitative analysis at the graduate level prior is a pre-requisite to taking this course.

- CCJ 6485 Criminal Justice and Public Policy **Credit Hours: 3** *
- CCJ 6707 Quantitative Analysis in Criminology II **Credit Hours: 3** * †
- CCJ 6708 Quantitative Analysis in Criminology III **Credit Hours: 3**
- CCJ 7726 Research Methods in Criminology II **Credit Hours: 3** **
- CCJ 7605 Theories of Criminal Behavior I **Credit Hours: 3**
- CCJ 7606 Theories of Criminal Behavior II **Credit Hours: 3**
- CCJ 7065 Professional Development in Criminology **Credit Hours: 2**
- CCJ 7940 Teaching Practicum in Criminology **Credit Hours: 1**

Additional Required Course (1 Credit Hour)

- CCJ 6937 Pro Seminar in Criminology **Credit Hours: 1** *

Electives (9 Credit Hours)

Six graduate credit hours may be taken outside the Department with approval from the Graduate Director. All courses must be USF courses.

Options include but are not limited to:

- CCJ 6638 Seminar in Nature and Causes of Crime **Credit Hours: 3**
- CCJ 6624 Seminar in Violence **Credit Hours: 3**
- CCJ 6669 Seminar in Social Inequality and Crime **Credit Hours: 3**
- CCJ 6654 Seminar in Drugs and Crime **Credit Hours: 3**

Advanced Research (6 Credit Hours)

** Variable credit hours from 1-6 credit hours can be taken in a given semester.*

In addition to successfully completing these requirements, students will qualify for candidacy as described below and write and defend a dissertation prospectus and dissertation.

- CCJ 7910 Advanced Research **Credit Hours: 1-12**

Qualifying Examination

Students must pass two exams and produce an approved publishable manuscript (see Student Handbook for additional information) as determined by a graduate faculty member. The comprehensive exams assess the student's comprehensive knowledge of (a) theories of criminology, (b) research methods and data analysis and the student's (a) innovative, critical and analytical thinking and (b) writing skills.

Dissertation (18 Credit Hours)

Student's must complete 18 credit hours of dissertation hours minimum.

- CCJ 7980 Doctoral Dissertation **Credit Hours: 2-12**

Cybercrime, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 45.0401
Dept Code: CJP
Major/College Codes: CBRC BC
Approved 2017

This major shares core requirements with the M.A. in Criminology.

Contact Information

College: Behavioral & Community Sciences
Department: Criminology (CJP)

Contact Information: http://www.grad.usf.edu/majors

The Master of Science in Cybercrime is a fully online major designed to provide the student with an in-depth understanding of the major issues in criminology as it relates to cybercrime. Students will master current criminology theory as it relates to the social and behavioral aspects of cybercrime, and learn methodology, tools of inquiry, and investigation into digital forensics and evidence collection.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A statement of purpose detailing reasons for seeking a graduate degree in Cybercrime
- A professional or academic writing sample providing evidence of the candidate's academic capabilities.
- Three letters of reference speaking to the applicant's academic capabilities

Curriculum Requirements

Total Minimum Hours - 30 credit hours
Shared Core Requirements - 11 Credit Hours
Required Courses: 16 Credit Hours
Electives: 3 Credit Hours

Shared Core Requirements (11 Credit Hours)

- CCJ 6118 Introduction to Criminology Theory **Credit Hours: 4**
- CCJ 6705 Research Methods in Criminology **Credit Hours: 3-4 (3 credits for this program)**
- CCJ 6706 Quantitative Analysis in Criminology I **Credit Hours: 4**

Additional Required Courses (15 Credit Hours)

- CJE 6688 Cybercrime and Criminal Justice **Credit Hours: 3**
- CJE 6627 Digital Evidence Recognition and Collection **Credit Hours: 3**
- CJE 6029 Advanced Seminar in Law Enforcement **Credit Hours: 3**

Proposed as:
CCJ6616 Profiling Cybercrime (3 Credit hours)
CCJ6022 Cyber Crime, Law & Public Policy (3 Credit hours)
CJE6626 Digital Forensic Criminal Investigations (3 Credit hours)

Electives (3 Credit Hours)

- CCJ 6624 Seminar in Violence **Credit Hours: 3**

Proposed as:
CCJ6675 Cyber Victimization (3 Credit hours)
CCJ6625 Technology Adoption and Crime (3 Credit hours)

Students who have completed graduate coursework prior to admission to the major may have their transcripts evaluated to determine coursework that could be applicable toward completion of the M.S. in Cybercrime.

Capstone (1 Credit Hour)

- CCJ 6905 Directed Independent Study **Credit Hours: 1-12**

Comprehensive Exam

The student will be required to submit an electronic portfolio (ePortfolio) demonstrating completion of core program competencies in the Cybercrime MS Degree progrm. This competency-based portfolio will substitute for a written comprehensive exam. The ePortfolio will be completed and submitted during CCJ 6050 - Pro-Seminar in Criminology: ePortfolio.

Criminal Justice Administration Graduate Certificate

This program is offered partially online.

Certificate Code: XCA
Approved 200601

The University of South Florida's Department of Criminology offers a Graduate Certificate in Criminal Justice Administration designed to develop and enhance professional practice in the criminal justice community. The Graduate Certificate prepares students for advanced levels of management by enhancing their technical skills, decision-making processes, and analytic capabilities in the contemporary environment of criminal justice practice. The certificate targets students interested in the criminal justice system who have a committed interest in enhancing their professionalism and developing their practitioner and management skills.

The Graduate Certificate focuses on two primary areas. First, the program focuses on contemporary issues in criminal justice management and the challenges facing the criminal justice sector of contemporary government. Second, the program provides enhanced skills in research and their application and utility in problem solving, equipping the student with sophisticated quantitative tools and strategies for using these tools in analyzing and designing solutions to problems.

The Graduate Certificate in Criminal Justice Administration is designed to meet the needs of the working professional and the non-traditional student, and the certificate may be earned in as few as two semesters.

Location/Delivery

This certificate is offered on the Tampa campus and partially online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

In addition to your completed application form, transcripts, resume and letter of interest, you will need to submit the following documents:

- Two letters of recommendation attesting to the applicant's abilities to succeed at the graduate level

Credit Toward Graduate Degree

Courses from the certificate may be applied to the graduate degree.

Time Limit / Average time to Completion

This certificate should be completed within three years.

Pre-Requisites

None

Curriculum Requirements (17 Credit Hours)

Courses may be taken in any order, but the following sequence is recommended:

- CCJ 6936 Current Issues in Law Enforcement **Credit Hours: 3**
- CCJ 6705 Research Methods in Criminology **Credit Hours: 3-4**
- CJE 6029 Advanced Seminar in Law Enforcement **Credit Hours: 3**
- CCJ 6706 Quantitative Analysis in Criminology I **Credit Hours: 4**
- CCJ 6406 Theory, Practice, and Research in Law Enforcement **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Digital Forensics Graduate Certificate

This program is offered fully online.

Certificate Code: XDF
Approved: 201408

Description

The graduate certificate in digital forensics helps you gain the skills you need to investigate computer, cyber, and electronic crimes; to analyze networks that have been attacked or used for illicit purposes; and to properly identify, collect, secure, and present digital evidence.
Topics

- Digital forensics tradecraft
- Techniques and procedure
- Standards of practice
- Legal and ethical principles
- Assuring that digital evidence is accurate, complete, and reliable

Course Location/Delivery

Fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

Although there are no specified course prerequisites, prospective students applying to this program are advised that this is a technology-based training program, focused on collecting security data and digital evidence.

Successful students will have an aptitude for technical training and investigative procedures. Some prior training or background in operating systems concepts, computer architecture, computer hardware and storage media will be helpful.

Curriculum Requirements (15 Credit Hours)

- CJE 6688 Cybercrime and Criminal Justice **Credit Hours: 3**
- CJE 6627 Digital Evidence Recognition and Collection **Credit Hours: 3**

- CJE 6624 Introduction to Digital Evidence **Credit Hours: 3**
- CCJ 6935 Topics in Criminology and Criminal Justice **Credit Hours: 3**

Network Forensic Criminal (3 Credit Hours)

- CJE 6625 Network Forensic Criminal Investigations **Credit Hours: 3**

Time Limit / Average Time to Completion

Five years.

Credit Toward Graduate Degree

Some of the hours from this Certificate may be applicable toward a graduate degree. Contact the department for information.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Mental Health Law and Policy

Department of Rehabilitation and Mental Health Counseling

Addictions and Substance Abuse Counseling Graduate Certificate

This program is offered fully online.

Certificate Code: **XAS**

Description

This certificate is primarily designed for graduate students in rehabilitation counseling, mental health counseling, social work, psychology or other human services disciplines or for human services professionals who desire to learn about addictions and substance abuse counseling. The certificate program is an interdisciplinary effort on behalf of the Department of Rehabilitation and Mental Health Counseling in the College of Behavioral & Community Sciences and the Department of Mental Health Law Policy in the Louis de la Parte Florida Mental Health Institute.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have

- 2 Letters of Recommendation
- Less than 3.0 GPA submit GRE scores w/in 5 yrs

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Fundamentals of Substance Abuse Counseling is a pre-requisite for Professional Skills for Addiction Counselors, Counseling Approaches for Substance Abuses and Practicum (Substance Abuse)

Requirements of this Certificate (15 Credit Hours)

- RCS 5450 Fundamentals of Substance Abuse Counseling **Credit Hours: 3**
- RCS 6459 Professional Skills for Addictions Counselors **Credit Hours: 3**
- RCS 6456 Counseling Approaches for Substance Abusers **Credit Hours: 3**
- RCS 6803 Practicum in Counseling **Credit Hours: 3** (substance Abuse)

Electives

Students will select one elective from the five offered.

- RCS 6930 Seminar in Rehabilitation Counseling **Credit Hours: 1-4** (Obesity & Eating Disorders) **(3 credits for this program)**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s): 1-4** (Introduction to Mind Body Techniques) **(3 credits for this program)**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s) 1-4** Principles and Practices of Personal Change **(3 credits for this program)**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s): 1-4** Spirituality and Counseling **(3 credits for this program)**
- Approved elective

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Marriage & Family Therapy Graduate Certificate

This program is offered fully online.

Curriculum Code: **XMF**

Description

The Graduate Certificate in Marriage and Family Therapy enables professionals in the mental health counseling, rehabilitation counseling, counselor education, social work, psychology, and other human service fields to enhance their knowledge and skills in marriage and family therapy. This is a two-tiered program. The Tier I Certificate is for students enrolled in the Master's Program in Rehabilitation and Mental Health Counseling or other professional counseling programs. The MFT Certificate Program prepares students to meet the curriculum requirements for MFT licensure by the Florida Department of Health Board of Clinical Social Work, Marriage and Family Therapy, and Mental Health Counseling (Chapter 491). This Tier I Certificate is a 15 credit hour program with course content that focuses on systemic approaches to both the theory and practice of Marriage and Family Therapy and includes a supervised practicum course. The supervised practicum course requires 180 hours of face to face time with individuals, couples, and families. Face to face hours from practicum I may be combined with face to face hours from practicum II to complete the required 180 hours. The one stipulation is that you must be receiving supervision from a licensed MFT during practicum I either from your onsite supervisor or practicum instructor. The MFT Certificate Program is administered within the Rehabilitation and Mental Health Counseling Department in the College of Behavioral and Community Sciences. Upon graduation, the Tier I student would be eligible to become registered as both a Mental Health Counselor Intern and as a Marriage and Family Therapy Intern, and therefore, eligible for dual licensure. The Tier II Certificate is a 12 credit hour program for those students who would like to enhance their knowledge and skill base in the area of marriage and family therapy but who are not interested in licensure, currently not in an advanced degree counseling program, or lack the necessary course work that would prepare them to be license eligible. A practicum course is not required in the Tier II program and does not prepare students for licensure. Upon completion of this certificate program, students will have a theoretical understanding of individual, marital, and family systems, and will learn ways to strengthen relationships, prevent problems from arising within the family, and increase the quality of marriage, family life, and other relationships.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

Personal Interview

2 Letters of Recommendation

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

Track 1:

- RCS 6930 Seminar in Rehabilitation Counseling **Credit Hours: 1-4**
- RCS 6476 Human Sexuality Counseling **Credit Hours: 3**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s): 1-4**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s): 1-4**
- RCS 6803 Practicum in Counseling **Credit Hours: 3** (min. 80 hrs w/ add 100 hrs if obtaining MFT License)

Track 2:

- RCS 6930 Seminar in Rehabilitation Counseling **Credit Hours: 1-4**
- RCS 6803 Practicum in Counseling **Credit Hours: 3**

Electives

Track II Only Select 3 crs:

- RCS 6930 Seminar in Rehabilitation Counseling **Credit Hours: 1-4**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s): 1-4**
- RCS 6930 Seminar in Rehabilitation Counseling **Credit(s): 1-4**
- RCS 6476 Human Sexuality Counseling **Credit Hours: 3**

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

School of Aging Studies

Aging Studies, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 72
Level: Doctoral
CIP Code: 30.1101
Dept Code: GEY
Major/College Codes: AGE BC
Approved: 1994

Contact Information

College: Behavioral & Community Sciences
Department: School of Aging Studies (GEY)

Contact Information: http://www.grad.usf.edu/majors

The Interdisciplinary Ph.D. in Aging Studies is the first of its kind in the United States, and to the best of our knowledge, the world. What makes this major unique is the combined emphasis on providing a broad based foundation in the interdisciplinary aspects of aging with a focus on developing in-depth expertise in a research area. The major draws on the expertise of faculty from multiple colleges, departments, and centers at the University of South Florida to provide students with exposure to other disciplines and their different approaches to scientific and scholarly inquiry.

The Ph.D. in Aging Studies is hosted by the School of Aging Studies, which is the organizational focal point for interdisciplinary research, educational, clinical and community service activities in aging for faculty and students. An interdisciplinary committee of faculty governs the major, allowing students to develop research programs that focus on their particular interests and capitalize on the breadth of opportunities throughout the university.

The Ph.D. in Aging Studies is a research-oriented program designed to train future leaders in the field of aging. The major admits students who show exceptional promise to become strong academic, public sector, and corporate researchers. Students are supported with a stipend plus a tuition waiver (if funds are available), which covers tuition but not student fees, and payment of much of the premium for the student health insurance. Students who wish to apply as part-time students must contact Dr. Andel before applying.

Faculty Organization

The interdisciplinary nature of the program is exemplified by the number of core faculty who teach and serve on dissertation committees in the program and the range of academic departments they represent. Other faculty from across the university participate in the program.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GPA of 3.25
- a current (within the last 5 years) GRE; scores at or above the 50th percentile on Verbal, 30th percentile on quantitative and 50th percentile on analytical writing are preferred.

- In addition, students must submit
  - their best example of a single authored writing sample
  - a summary of their career goals and past preparation for a research career
  - three letters of recommendation from individuals familiar with the student's work and/or research

Curriculum Requirements

Total Minimum Hours - 72 credit hours beyond the baccalaureate
Core Courses - 12 hours
Additional Requirements - 22 credit hours
Directed Research/Dissertation - 38 credit hours

Core Requirements (12 Credit Hours)

- GEY 7610 Psychological Issues of Aging: Interdisciplinary Perspective **Credit Hours: 3**
- GEY 7604 Biomedical Aging **Credit Hours: 3**
- GEY 7649 Population Aging **Credit Hours: 3**
- GEY 7623 Social and Health Issues in Aging **Credit Hours: 3**

Each core course is taught from an interdisciplinary perspective with faculty from different fields addressing issues from their disciplinary perspectives.

Additional Requirements (22 credit hours)

Methods Courses - 6 hours minimum

- GEY 6402 Statistical Methods in Aging Research **Credit Hours: 3**
- GEY 6403 Multivariate Statistical Analysis for Aging Research **Credit Hours: 3**

Students must also enroll in a sequence of at least two methods/statistics courses (6 hours total) and are encouraged to obtain additional training in methods relevant to their dissertation as elective courses.

Proseminar and Content Seminar - 16 credits minimum

- GEY 7936 Proseminar in Aging Studies **Credit Hours: 1-10**
- GEY 7602 Ph.D. Seminar in Health and Aging **Credit Hours: 3**
- GEY 7611 Ph.D. Seminar in Mental Health **Credit Hours: 3**
- GEY 7622 Ph.D. Seminar in Policy and the Elderly **Credit Hours: 3**
- GEY 7651 Ph.D. Seminar in Cognition **Credit Hours: 3**

Students are required to enroll in the GEY 7936 Aging Studies Pro-seminar (2 credits) each fall of their first 2 years in the program. They must also enroll for at least four Content Seminars (GEY 7602, GEY 7611, GEY 7622, GEY7651) (3 credits). The Pro-seminars investigate different research topics, allow students to practice presenting their research, and provide students with exposure to distinguished lecturers from throughout the U.S. The content seminars cover different topics relevant to aging each spring semester.

Elective Requirement
Each Ph.D. student, in consultation with his/her major advisor, designs an appropriate curriculum to obtain content and skills that match their research interests.

Project – 1 credit hour (recommended)

- GEY 7911 Directed Research in Aging Studies **Credit Hours: 1-19**

GEY 7911 Directed Research in Aging Studies (1 Credit Hour)

It is recommended that all students complete a First Year Research Project, designed to be presented at a national conference in the fall of their second year. Students develop individualized courses of study, allowing specialization in a wide variety of content areas and research methods. Supervised research experience is available from a number of faculty with diverse research expertise. Students should enroll for GEY 7911 (Directed Research in Aging Studies) for 1 credit hour for a grade of S/U.

Comprehensive/Qualifying Exam

The qualifying examination is usually taken during the end of the second year of course work or the following Fall semester.

Dissertation (38 Credit Hours Minimum)

At least two (2) credits of Dissertation every semester after admission to candidacy; if more than minimum of required course credit is taken, then fewer credits of Directed Research are required.

- GEY 7911 Directed Research in Aging Studies **Credit Hours: 1-19**
- GEY 7980 Dissertation and Doctoral **Credit Hours: 2-12**

Gerontology, M.A.

This program is offered partially online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 30.1101
Dept Code: GEY
Major/College Codes: GEY BC
Approved 1967

Contact Information

College: Behavioral & Community Sciences
Department: School of Aging Studies (GEY)

Contact Information: http://www.grad.usf.edu/majors

Gerontology is the study of the process of human aging in all its aspects: physical, psychological, and social. In the School of Aging Studies, particular emphasis is placed on educating Gerontology students who, in their professional careers, will work to sustain or improve the quality of life of older people. Many of our graduates are employed in agencies providing services for older adults. For information about the interdisciplinary Ph.D., please see the separate listing for Aging Studies Ph.D.

The School offers the M.A. in Gerontology. Students are advised to meet with the Graduate Director to select courses appropriate to their professional goals. Internships are recommended and available for students who need practical experience in the field of aging. Students interested in internships should see the school's internship director.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- The GRE examination is optional for applicants who either have a 3.25 or higher GPA for all work completed as an undergraduate student, a 3.50 or higher in a completed master's degree program, or a completed doctoral degree (including professional degrees such as the JD and MD), all from a regionally accredited institution.
- For students submitting a GRE score, a preferred GRE score of at least 149V (41st percentile), 142Q (16th percentile), 3.5 A.W.
- Statement of Purpose in pursuing a MA in Gerontology
- Current Resume
- 2 letters of references

Curriculum Requirements

Total Minimum Hours - 30

Required courses - 12 credit hours
Electives - 15 credit hours
Capstone - 3 credit hours

Core Courses (12 Credit Hours)

- GEY 5476 Program Evaluation in an Aging Society **Credit Hours: 3**
- GEY 6600 Human Development and Aging **Credit Hours: 3**
- GEY 6613 Physical Change and Aging **Credit Hours: 3**
- GEY 6626 Health, Ethnicity, and Aging **Credit Hours: 3**

Electives (15 Credit Hours Minimum)

The remaining 15 hours of coursework must be selected from other graduate courses in gerontology. Under certain circumstances, students may be able to substitute other graduate classes as part of the elective courses required for the degree with permission from the Graduate Director.

- GEY 5503 - Assisted Living Facility Management **Credit(s): 3**
- GEY 5630 Economics and Aging **Credit Hours: 3**
- GEY 6206 Family Caregiving in Aging and Chronic Illness **Credit Hours: 3**
- GEY 6614 Aging and Mental Disorders **Credit Hours: 3**
- GEY 6616 Mental Health Assessment and Intervention with Older Adults **Credit Hours: 3**
- GEY 6617 Gerontological Counseling Theories and Practice **Credit Hours: 3**
- GEY 6222 Elder Abuse Assessment and Intervention **Credit Hours: 3**
- GEY 6901 Directed Reading **Credit Hours: 1-4 (1-3 credits in this program)** (Directed Readings in Gerontology)

Capstone Requirement (3 Credit Hours)

Following completion of the necessary coursework, students enroll in GEY 6910 Directed Research, and complete a capstone applied research project designed to integrate key knowledge, concepts, and information in the field of gerontology. This course is pass/fail and must be taken and passed by all students in the M.A. major to meet requirements for the degree.

- GEY 6910 Directed Research **Credit Hours: 1-4 (3 credits for this program)**

Comprehensive Exam

Students complete the Capstone requirement in lieu of a comprehensive exam.

Internship

Internships are available for students local to USF who need practical experience in the field of aging.

Clinical Aging Sciences

This program is offered fully online.

Certificate Code: XAG
Approved 201701

Description

The certificate in Clinical Aging Sciences is designed to provide practitioners and allied health professional with advanced knowledge in clinical aging research and practice. This program provides clinically relevant education to persons working with or interested in working with older adults in various settings including long-term care facilities, mental health centers, counseling agencies, hospitals, and other settings concerned with the physical and emotional well-being of older adults. This certificate does not prepare students for clinical licensure, but provides students with courses that enhance their understanding of the biopsychosocial aspect of the aging process.

Course Location/Delivery

The Certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

- GEY 6613 Physical Change and Aging **Credit Hours: 3**

Select three of the following courses:

- GEY 5620 Sociological Aspects of Aging **Credit Hours: 3**
- GEY 6600 Human Development and Aging **Credit Hours: 3**
- GEY 6230 Principles of Health Care Risk Management and Patient Safety **Credit Hours: 3**
- GEY 6614 Aging and Mental Disorders **Credit Hours: 3**
- GEY 6616 Mental Health Assessment and Intervention with Older Adults **Credit Hours: 3**
- GEY 6617 Gerontological Counseling Theories and Practice **Credit Hours: 3**

Time Limit / Average Time to Completion

24 months is the estimated time to complete the program

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Gerontology Graduate Certificate

This program is offered fully online.

Certificate Code: XGE

The Certificate includes particular coursework for baccalaureate students who wish to obtain specialized gerontological knowledge about how social, psychological, bio-physiological, and economic forces interact with the aging process.

Location/Delivery

This certificate is offered at USF Tampa and fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Five years.

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

Select 6 credits from the list below. Courses with ** are offered fully online.

- GEY 5620 Sociological Aspects of Aging **Credit Hours: 3**
- GEY 5630 Economics and Aging **Credit Hours: 3**
- GEY 6600 Human Development and Aging **Credit Hours: 3**
- GEY 6613 Physical Change and Aging **Credit Hours: 3**

Select 9 credit hours of coursework from the list below. Courses with ** are offered fully online.

- GEY 6450 Gerontological Research and Planning **Credit Hours: 3**
- GEY 6325 Social Policy and Planning for Gerontologists **Credit Hours: 3**
- GEY 6500 Seminar in Principles of Administration **Credit Hours: 3**
- GEY 5642 Perspectives on Death and Dying **Credit Hours: 3**
- GEY 6221 Ethical and Legal Issues in Aging **Credit Hours: 3**
- GEY 6614 Aging and Mental Disorders **Credit Hours: 3**

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- GEY 6934 Special Topics in Gerontology **Credit Hours: 3**

Topics in Psychopathology and Aging (3 Credit hours)
Program Services and Evaluation**

- GEY 6616 Mental Health Assessment and Intervention with Older Adults **Credit Hours: 3**
- GEY 6321 Gerontological Case Management **Credit Hours: 3**
- GEY 6617 Gerontological Counseling Theories and Practice **Credit Hours: 3**
- GEY 6618 Gerontological Group and Family Counseling **Credit Hours: 3**
- GEY 6940 Field Placement **Credit Hours: 1-6**
- GEY 6941 Field Placement in Mental Health **Credit Hours: 1-6**
- GEY 6362 Geriatric Interdisciplinary Team Training **Credit Hours: 3**

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- GEY 6626 Health, Ethnicity, and Aging **Credit Hours: 3**
- GEY 6627 Women and Aging **Credit Hours: 3**

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- GEY 6607 Alzheimer's Disease Management **Credit Hours: 3**
- GEY 6230 Principles of Health Care Risk Management and Patient Safety **Credit Hours: 3**
- GEY 6206 Family Caregiving in Aging and Chronic Illness **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Hospice, Palliative Care, and End of Life Studies Graduate Certificate

Certificate Code: XHP

Location/Delivery

Offered at USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Two years

Curriculum Requirements (12 Credit Hours)

- GEY 5642 Perspectives on Death and Dying **Credit Hours: 3**

And select three courses from the following:

- GEY 6206 Family Caregiving in Aging and Chronic Illness **Credit Hours: 3**
- GEY 6362 Geriatric Interdisciplinary Team Training **Credit Hours: 3**
- GEY 6643 End of Life Care for Dementia Patients **Credit Hours: 3**
- NGR 6221 Oncology Nursing Concepts **Credit Hours: 3**
- NGR 6691 Counseling for the Terminally Ill **Credit Hours: 3**
- NGR 6931 Selected Topics in Nursing **Credit Hours: 1-6**

Research Seminar in Palliative and Hospice Care (3 Credit Hours)
Other courses may be approved by the Certificate Director

School of Social Work

Social Work, M.S.W.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: www.grad.usf.edu/majors

Minimum Total Hours:
35 (with B.S.W.)
60 (without B.S.W.)
Level: Masters
CIP Code: 44.0701
Dept Code: SOK
Major/College Codes: SOK BC
Approved 1981

Also offered as as a Concurrent Degree

Contact Information

College: Behavioral & Community Sciences
Department: School of Social Work (SOK)

Contact Information: www.grad.usf.edu/majors

The School of Social Work offers a program leading to a Master of Social Work (M.S.W.) degree. A concurrent degree option is available with Public Health with concentrations in either Maternal and Child Health or Behavioral Health.

The MSW graduate program in social work is a course of study designed to respond to an identified need in the region for skilled clinical social work practitioners. It is built upon a core of information basic to social work practice, followed by advanced scholarly study in preparation for clinical work with individuals, families, and small groups. An intense field practicum gives students the opportunity to apply theory gained in the classroom to the problems of agency clients.

The USF School of Social Work enrolled its first class in 1976. The School has a strong tradition of providing an engaging social work education program to prepare students to serve as practitioners, administrators and scholars around the globe. The School has a strong commitment to promoting social, economic and environmental justice through all of its educational programs.

Our Faculty are actively engaged in teaching, research, service, and social work practice and bring their passion and knowledge of social work to the classroom. Faculty who are teaching on-line have acquired additional skills to provide innovative, engaging on-line courses. Our Faculty are highly accomplished scholars. Several of our Faculty have been selected to serve as Principal Investigators on grants that impact individuals, families and communities from the local to the international level. Our Faculty members collaborate with our students and community partners to provide innovative research opportunities to inform Evidenced-Based Practices to enhance the well-being of those we serve. Our School is also proud of the strong Staff who help support the mission of our School with everything from advising to day-to-day operational support of our students and faculty.

We have nearly 4,000 alums of the School, many of whom are serving as leaders at social service agencies throughout the country. Through our strong connections with Alumni and diverse social work practice settings, the School maintains an excellent Field education for students.

The primary objective of the major is the preparation of the graduate for professional social work practice through the acquisition of specialized knowledge and skills necessary for clinical practice with individuals, families, and groups. The secondary objectives of the M.S.W. are:

1. to prepare students academically for the pursuit of doctoral education in social work or related human service disciplines or professions;
2. to contribute to the needed supply of professionally educated clinical social workers in the Tampa Bay area, the state, the region, and the nation.

Accreditation:

Accredited by the Council of Social Work Education (CSWE).

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- School of Social Work Application
- Three letters of recommendation
- GRE scores are not required. However, applicants can submit GRE scores for consideration. Quantitative 144 (17%) or higher and Verbal 153 (61%) or higher.
- 500-word personal statement and a 500-word essay describing a social problem
- Liberal arts pre-requisites; to be eligible for admission to the MSW Major, students must have taken courses with a liberal arts perspective. Liberal Arts perspective is defined as twelve (12) credits which include three credits of biology with human content and a minimum of three credits of social and behavioral sciences. The remaining credits may be completed through additional social and/or behavioral sciences, humanities and fine arts classes. (One statistics course may also be used in completing this requirement.) Liberal Arts requirements may be waived at the discretion only of the MSW chair in consultation with the Director.
- All applicants must meet the pre-requisites of an undergraduate Liberal Arts background as defined in the Procedures and Criteria for Admission portion of the MSW application.
- It is preferred, but not required that all applicants to the Master's Degree program in Social Work have completed one year of post-undergraduate work in a social service agency (in a service capacity) or its equivalent as determined by the MSW Graduate Admissions Committee. Experiences that might be considered as equivalent to one year's work include supervised field practicum hours, extensive volunteer experience, or other professional work experiences.
- An interview may be required; experience in the field preferred.
- All MSW applicants will have their undergraduate transcripts evaluated in relation to a set of liberal arts course pre-requisites.
- All Admission materials must be received by the Graduate Admissions Office and by the School of Social Work by the specified deadlines of the year for which admission is being sought.

Curriculum Requirements

BSW Students (Advanced Standing)
Students entering the major with a BSW have the opportunity of applying for advanced standing from a CSWE accredited BSW (within 5 years). Students qualify by receiving "B-" or better grades in all the undergraduate social work courses. (Students do not qualify with any grade below "B-" in these courses).

Total Minimum hours: 60 (non-BSW students)
35 (BSW students)

Foundations Courses - 17 Credit Hours (non-BSW)
Core Courses - 5 Credit Hours
Additional required courses - 15 Credit Hours
Field Experience - 13 Credit Hours(non-BSW), 8 Credit Hours(BSW)

Electives - 9 Credit Hours(non-BSW), 6 Credit Hours(BSW)
Capstone Project - 1 Credit Hour

Foundations Courses (17 Credit Hours Non-BSW)

Students entering without a BSW are required to complete the following Foundation Courses:

- SOW 6105 Foundations in Human Behavior **Credit Hours: 3**
- SOW 6186 Foundations of Social Work Macro Practice **Credit Hours: 2**
- SOW 6235 Foundations of Social Welfare Policy **Credit Hours: 3**
- SOW 6305 Foundations of Social Work Micro Practice **Credit Hours: 3**
- SOW 6348 Diversity and Social Justice **Credit Hours: 3**
- SOW 6405 Foundations of Social Work Research and Statistics **Credit Hours: 3**

Core Requirements (5 Credit Hours)

- SOW 6124 Psychopathology **Credit Hours: 3**
- SOW 6126 Health, Illness, and Disability **Credit Hours: 2**

Additional Required Courses (15 Credit Hours)

Social Work Practice (9)

- SOW 6342 Social Work Practice with Individuals **Credit Hours: 3**
- SOW 6362 Social Work Practice with Couples and Families **Credit Hours: 3**
- SOW 6368 Social Work Practice with Groups **Credit Hours: 3**

Policy and Services (3)

- SOW 6236 Social Welfare Policy Development & Analysis **Credit Hours: 3**

Social Work Research/Evaluation (3)

- SOW 6438 Evaluation of Clinical Practice in Diverse Setting **Credit Hours: 3**

Field Experience (13 Credit Hours non-BSW), (8 Credit Hours BSW)

A minimum of 8 hours is required for BSW students. For non-BSW students all 13 hours is required.

For full-time students:

- SOW 6534 Field Instruction I **Credit Hours: 1**
- SOW 6535 Field Instruction II **Credit Hours: 4**
- SOW 6536 Field Instruction III **Credit Hours: 2-4**
- SOW 6539 Field Instruction IV **Credit Hours: 4**

For part-time students:

- SOW 6553 Field Instruction Sequence IA: Part-Time **Credit Hours: 2**
- SOW 6554 Field Instruction Sequence IB: Part-Time **Credit Hours: 2**
- SOW 6555 Field Instruction Sequence IIA: Part-Time **Credit Hours: 2**
- SOW 6556 Field Instruction Sequence IIB: Part-Time **Credit Hours: 2**
- SOW 6557 Field Instruction Sequence IIC: Part-Time **Credit Hours: 2**

- SOW 6558 Field Instruction Sequence IIIA: Part-Time **Credit Hours: 2**
- SOW 6559 Field Instruction Sequence IIIB: Part-Time **Credit Hours: 2**

Electives (9 Credit Hours non-BSW), (6 Credit Hours BSW)

All MSW students with a BSW are required to take a minimum of 6 clinical elective credit hours. Non-BSW students will take an additional elective (3 hours). All clinical electives must be taken in the School of Social Work. Students may take clinical electives during any semester including summer sessions. However, part-time students should check the program course schedule for the recommended semesters for electives.

Comprehensive Exam

In lieu of the Comprehensive exam, students wil complete a Capstone Project involving the content from across the curriculum. It will be completed in the final semester. It is worth 1 credit hour and meets the requirement for the Comprehensive Exam.

Capstone Project (1 Credit Hour)

Other Requirements

The M.S.W. places great emphasis on standards of professional behavior and ethics in the practice of social work. Entrance into the M.S.W. does not guarantee graduation from the major. Students admitted to the M.S.W. must maintain a minimum GPA of 3.00, in all social work courses, with no grade below "B-" counting toward graduation. Failure to maintain the specified GPA or to exhibit responsible professional behavior determined by the School may result in suspension or dismissal from the major. Courses with grades below "B-" must be repeated before progressing to the next sequence. Students must pass the comprehensive paper during the last semester in order to graduate from themajor.

Students may pursue the M.S.W. on either a full- or part-time basis. The M.S.W. consist of 60 semester hours of study and is offered on campus and online. Students should check directly with the School of Social Work for applications and timelines. The full-time option takes four semesters to complete; the part-time option takes eight (8) consecutive semesters. The major offers graduates from a Council on Social Work Education (CSWE) accredited BSW program (within 5 years) the option of applying for advanced standing. The advanced standing program is available on either a full- or part-time basis. The advanced standing program is also offered on campus and online. Students qualify by receiving "B-" or better grades in all the undergraduate social work courses. (Students do not qualify with any grade below "B-" in these courses). Both the full- and part-time options are heavily sequenced and students must stay in sequence.

- SOW 8907 Capstone Project **Credit Hours: 1**

Concurrent Degree

Also available as a Concurrent Degrees

Social Work, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 42 post masters
Level: Doctoral
CIP Code: 44.0701
Dept Code: SOK
Major/College Codes: SOK BC
Approved: 2004

Contact Information

College: Behavioral & Community Sciences
Department: School of Social Work (SOK)

Contact Information: http://www.grad.usf.edu/majors

The School of Social Work offers a full-time interdisciplinary program leading to a Ph.D. in Social Work. The Ph.D. degree program provides a course of study to prepare graduates for academic and research careers, to provide leadership in research and education committed to excellence in social work practice and to provide leadership in the development of program and services for diverse, vulnerable and underserved populations. Unique to this program is the strategic emphasis on topic areas that align with the strengths of the College, USF, and forecasted direction of the profession. These are: (1) Behavioral Health, (2) Global Issues, (3) Health, (4) Leadership and Business, and (5) Societal Change and Innovation. The degree program leads to the preparation of future scholars and educators to advance social justice and vulnerability issues.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Admission is typically limited to individuals who hold a Master in Social Work from programs accredited by the Council on Social Work Education or international equivalents. However, applicants without a Master's degree in social work, but with a Master's degree in a related discipline are welcome to apply and will be considered on a case by case basis. The admissions committee may review the degree and request additional material for consideration to the program.

- A master's degree GPA of at least 3.50 on a 4.00 scale
- Graduate Record Examination (GRE) with preferred scores of at least 30th percentile in the quantitative section and at least 50th percentile in the verbal section.
- Two letters of recommendation addressing applicant's academic and professional capabilities.
- Applicant's statement that describes reasons for seeking admission to the Ph.D. in Social Work program, career goals, and research interests.
- Professional writing sample providing evidence of scholarly abilities, such as journal article, book chapter, technical report, thesis, grant application or other comparable work.
- The admissions committee may request a personal or telephone interview with an applicant to clarify materials submitted.

Curriculum Requirements

Total Minimum Hours: 42 post master's
The Ph.D. degree program requires a minimum of 42 credit hours post MSW/master's degree. In accordance with university policy requiring a minimum of 72 hours post baccalaureate for a Ph.D., a minimum of 30 credit hours from the MSW/master's degree can be applied to this degree's post-baccalaureate's 72 hour minimum. No credit hours for field work/internship will be counted towards the required credit hours for the Ph.D.

Core – 15 credit hours
Courses in Area of Strategic Emphasis – 9 credit hours
Graduate Research Methods – 12 credit hours minimum
Dissertation – 2 credit hours minimum
Additional hours in research or area of emphsis/directed studies or dissertation – 4 credit hours minimum

Core Requirements (15 Credit Hours)

- SOW 7491 Theoretical Perspectives in Social Work Research **Credit Hours: 3**
- SOW 7981 Scientific Communication and Dissemination Practices **Credit Hours: 3**
- SOW 7616 Advanced Clinical Practice with Complex Problems **Credit Hours: 3**
- SOW 7775 Critical Issues in Social Work **Credit Hours: 3**
- SOW 7776 The Social Work Educator in the University **Credit Hours: 3**

Courses in Area of Strategic Emphasis (9 Credit Hours Minimum)

Students will also take a minimum of three (3) (9 credit hours) graduate courses in their area of strategic emphasis offered in the College or University.

Graduate Research Methods (12 Credit Hours Minimum)

Students will complete three (3) credit hours minimum in Directed Studies

- SOW 7917 - Directed Studies in Social Work Research **Credit(s): 3**
- Research Courses **Credit(s): 9** *

** Students will also take a minimum of three (3) (9 credit hours) of graduate research methods course offered in the College or the University.*

Additional Hours (4 Credit Hours Minimum)

Students should expect to take at least four (4) additional credit hours either in research or area of strategic emphasis, or in directed studies or dissertation hours.

Qualifying Exam

Successful completion of **qualifying examinations** at the end of coursework prepares the student for Candidacy. Students must successfully pass the School of Social Work qualifying exam in order to be admitted into Doctoral Candidacy.

Dissertation (2 Credit Hours Minimum)

Successful defense of a dissertation consisting of original Social Work research. Students will take a minimum of 2 dissertation credits hours at the time of their defense.

- SOW 7980 Dissertation Hours **Credit Hours: 2-4 (2 credits for this program)**

ED - Updates for 2019-2020

The USF Graduate Council approved the following on the date noted.

New Degree under existing CIP

Foreign Language Education	M.Ed.	New degree option under existing CIP 13.1306	4/29/19

Major Terminations

Special Education, Motor Disabilities	M.A.	Terminate	4/29/19

Majors

Counselor Education	M.A.	Change curriculum for compliance	4/29/19
Curriculum and Instruction: Educational Psychology Concentration	Ph.D.	Change curriculum - accreditation required new course	1/14/19
Curriculum and Instruction	Ph.D.	Change curriculum for compliance	4/15/19
Curriculum and Instruction: Foreign Language Education	M.Ed.	Terminate Concentration (due to creation of new FLE major)	4/29/19
Curriculum and Instruction: Instructional Technology	M.Ed.	Terminate Concentration (due to creation of new Learning Design major)	4/29/19
Curriculum and Instruction: School Psychology	Ed.S.	Change curriculum to align with Ph.D. and M.A.	4/15/19
Educational Program Development	Ed.D.	Change curriculum for compliance; terminate inactive concentrations	4/29/19
Elementary Education	M.A.	Change curriculum for compliance; terminate 3 concentrations; shared core with MAT	4/1/19
Elementary Education	M.A.T.	Change curriculum for compliance; shared core with MA	3/4/19
Elementary Education	M.A.	State mandated change	4/29/18
Elementary Education	M.A.T.	State mandated change	4/29/18
English Education	M.A.T.	State mandated change	4/29/18
Exceptional Student Education	M.A.	Change curriculum for compliance ; shared core with MAT	3/4/19
Exceptional Student Education	M.A.T.	Change curriculum for compliance; shared core with MA	3/4/19

Exercise Science	M.S.	Non-substantive change	4/15/19
Foreign Language Education	M.A.T.	State mandated change	4/29/19
Math Education	M.A.	Suspend for admissions	4/29/19
Mathematics Education (6-12)	M.A.T.	State mandated change	4/29/19
Middle Grades Mathematics (5-9)	M.A.T.	State mandated change	4/29/19
School Psychology	M.A.	Accreditation required new course	1/14/19
School Psychology	M.A.	Change curriculum for compliance	3/4/19
Science Education	M.A.	Suspend for admissions	4/29/19
Social Science Education	M.A.T.	State mandated change	4/29/19

College of Education

ED - Updates for 2019-2020

ED - Programs

University of South Florida
College of Education
4202 E. Fowler Ave, EDU162
Tampa, FL 33620

Web address: http://www.usf.edu/education
Phone: 813-974-3406
Fax: 813-974-3391

College Dean: Robert C. Knoeppel, Ph.D.
Associate Dean: Ann Cranston-Gingras, Ph.D.

Accreditation:

The College is accredited by the National Council for the Accreditation of Teacher Education (NCATE) for the preparation of P-12 educators. Its initial certification programs are approved by the Florida Department of Education.

Vision/Mission Statement:

The USF College of Education envisions itself as a leader in regional, national and international education. Leadership in Education encompasses:

1. academic excellence,
2. research, scholarship and inquiry that renews the educational process,
3. collaboration that serves communities, institutions and individuals,
4. educator preparation that builds on academic excellence, scholarship, and clinical practice, and
5. collaboration that contributes to a just and productive society.

The College of Education fulfills this vision by: offering challenging learning opportunities in a supportive and diverse environment; creating and supporting research, scholarship, and inquiry in education; preparing the next generation of educators, scholars, and leaders for P-12 and the professoriate through exemplary undergraduate and graduate degree programs; serving the community through collaborative relationships; and, working with schools, agencies, and communities to offer educator preparation programs that prepare professionals who work competently, collaboratively, and ethically to improve educational outcomes for all.

Many concentrations are offered under the umbrella of the "Curriculum and Instruction" Major. Graduate Certificates are also offered in a number of areas. For information about the different majors refer to individual sections of the Graduate Catalog. Students seeking initial certification must be admitted to one of the degree programs offered in the College. Individuals seeking additional information should contact the College of Education Graduate Support Office at 813-974-3406, or http://www.coedu.usf.edu/main/sas/sas_graduate.html. Students who have identified a major should contact directly the advisor for that major. Please be advised that major curriculum and/or course requirements are subject to change per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria. In instances where college or major requirements exceed university minimum requirements, students must meet the highest order of requirements presented. Always check with the advisor in your major of interest to determine whether or not there are programmatic variations. Please note also that COEDU college and major curriculum requirements are stated always as minimum requirements.

College of Education Minimum Requirements

All degree requirements are stated below as college minimums. Please consult the listing for the individual major for additional requirements.

Master's Degree Programs and Requirements

The master's degree programs offered in the College of Education lead to a Master of Arts degree (M.A.), a Master of Arts in Teaching degree (M.A.T.), a Master of Education (M.Ed.) degree, or a Master of Science (M.S.) degree. Students pursuing a Master's degree must have an earned baccalaureate degree from a regionally accredited institution, or the equivalent bachelors and/or graduate degrees from a foreign institution . Most majors offer through their M.A.T. degrees, a plan of study that leads to initial teacher certification for holders of a non-education baccalaureate degree. The M.A. degree is primarily designed to increase competence in a teaching specialization or to provide professional preparation in one of the service areas of education. For most majors, two plans of study are available depending on the student's background and professional goals.

The College of Education standard admission requirements for international transcripts are:

For the masters degree - The undergraduate degree must be equivalent to a 4-year US degree from a regionally accredited university. The transcripts must state the overall GPA or overall marks based on the native scale and the discipline or major the applicant is graduating in. If the degree was delivered in the English language (must be from anglophone country or stated on transcript that the means of delivery was English) then the iELTS/TOEFL score will not be necessary. An unofficial transcript (either scan or copy) is acceptable at the time of application; however, an official transcript by enrollment is required.

Unofficial transcripts (either scan or copy) from both the graduate and undergraduate institutions are acceptable at the time of application; however, official transcripts are required by enrollment.

College of Education Requirements for the Master of Arts (M.A.) Degree

A minimum of 30 graduate semester hours is required for the master's degree, at least 16 hours of which must be at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master's degree program.

The M.A., Plan I

Program of graduate study is for those with a degree or appropriate initial teacher certification in the area of concentration who desire to increase their competence in a subject specialization or to receive additional professional preparation in an educational service area. The Plan I option is not available in all concentration areas. Contact the desired degree program for information.

Plan I Degree Requirements

Plan I students must take a minimum of one of the following Process Core (Foundation) courses. Additional requirements are described under the Major descriptions.

Process Core 3 hours minimum

EDF 6211 - Psychological Foundations of Education
or
EDF 6215 - Learning Principles Applied to Instruction
EDF 6481 - Foundations of Educational Research
EDF 6432 - Foundations of Measurement

EDF 6517 - Historical Foundations of American Education
or
EDF 6606 - Socio-Economic Foundations of American Education

Current Trends in Teaching Specialization – 3 hours
Concentration - 18 hours
Comprehensive Examination – Students must be registered for at least 2 graduate hours in the semester during which this exam is taken.
Thesis (Some majors have a Thesis option available)

Note: Check with the major of interest for curriculum variations.

The M.A., Plan III (not available in all areas)

This is a major of graduate study for the holder of a non-education baccalaureate degree who does not desire to meet initial certification requirements in the State of Florida. This plan is not available in all concentration areas. Please contact the major for information.

Plan III Minimum Curriculum Requirements:

Undergraduate Pre-requisites as necessary

Process Core 12 hours

EDF 6432 - Foundations of Measurement
EDF 6481 - Foundations of Educational Research
EDF 6211 - Psychological Foundations of Education
or
EDF 6215 - Learning Principles Applied to Instruction

EDF 6517 - Historical Foundations of American Education
or
EDF 6606 - Socio-Economic Foundations of American Education

Current Trends Course in Teaching Specialization – 3 hrs.
Concentration– 18 graduate hrs. Minimum
Comprehensive Examination

Note: Check with the major of interest for curriculum variations.

M.A.T. Degree

The M.A.T. degree is designed for holders of a non-education baccalaureate degree who desire to meet initial teacher certification requirements as part of a graduate major. The baccalaureate degree must be appropriate (as deemed by the graduate faculty) for the teaching field in which certification is sought. Hours in the M.A.T. degree vary by discipline. Reference the major section of the Graduate Catalog for specific M.A.T. curriculum requirements.

Note that all M.A.T. degree programs include as an admission requirement the passing of all sections of the General Knowledge Test (GKT). Applicants who can document they lived outside the state or country and did not have access to take the GKT before the application deadline may submit passing Praxis scores or GRE scores to be considered for admission. Whether admitted with passing Praxis scores or acceptable GRE scores, the applicant must submit passing scores on the GKT before the last day of classes of the semester of first enrollment, or admission to the College of Education will be revoked.

M.Ed. Degree

The M.Ed. degree is designed for individuals who have a minimum of two years of relevant educational or professional experience in the concentration selected, as judged and with written academic justification by the graduate faculty. This degree option is offered to students pursuing graduate study in educational leadership or curriculum and instruction with an associated specialization/concentration.

College of Education Requirements for the Master of Education degree (M.Ed.)

Two degree programs are offered.

1. **Educational Leadership** The M.Ed. in Educational Leadership is designed to improve performance in K-12 school leadership. The degree provides coursework that meets Florida Educational Leadership Core Curriculum requirements in public school curriculum and instruction, organizational management and development, human resource management and development, leadership skills, communication skills, technology, educational law, and educational finance. Successful completion of the major fulfills degree and core curriculum requirements for Florida certification in Level I, K-12 Educational Leadership-Administrative Class. The M.Ed. degree in Educational Leadership requires a minimum of 36 graduate semester hours with 60 percent or more of the courses at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master's degree program.
2. **Curriculum and Instruction** The M.Ed. degree in Curriculum and Instruction, with a concentration (specialization) area – This degree is designed for the individual who has a minimum of two years of relevant educational or professional experience (as judged by the graduate faculty) in a specialization area who wishes to pursue advanced study in that area. The primary objective is to prepare instructional leaders through courses in curriculum, methods, supervision, learning principles, human interaction, and areas of concentration/ specialization. The foundation areas (professional studies) receive greater emphasis in the M.Ed. degree programs than the M.A. degree programs. Coursework in the concentration/specialization may include courses in colleges other than the College of Education.
The M.Ed. degree in Curriculum and Instruction requires a minimum of 33 graduate semester hours with 60 percent or more of the courses at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master's degree program.

Master of Education **(M.Ed.) Degree Requirements:**

Program of Study

Foundations and Curriculum Core 9 hours minimum

EDF 6432 - Foundations of Measurement **Credit(s): 3**
or
EDF 6481 - Foundations of Educational Research **Credit(s): 3**
EDG 6627 - Foundations Of Curriculum And Instruction **Credit(s): 3**

Psychological/Social Foundations (Choice from list below) **Credit(s): 3**
EDF 6211 - Psychological Foundations of Education **Credit(s): 3**
EDF 6215 - Learning Principles Applied to Instruction **Credit(s): 4**
EDF 6217 - Behavior Theory and Classroom Learning **Credit(s): 4**
EDF 6354 - Human Development and Personality Theories **Credit(s): 4**
EDF 6165 - Group Processes for Educational Personnel **Credit(s): 1-3**
(available only to students in the College Student Affairs Concentration)
EDF 6517 - Historical Foundations of American Education
EDF 6606 - Socio-Economic Foundations of American Education

Concentration 18 hours minimum

See Curriculum and Instruction Major listing and specific individual concentration areas for specific requirements.

Electives 6 hours

Comprehensive Examination
Total 33 hours minimum

Note: More credit hours may be required for a concentration in the Foundations & Curriculum Core, which may be substituted for electives or concentration hours. Foundations and Curriculum core for the College Student Affairs concentration is 6 hours minimum (EDF 6481 and EDF 6165), additional hours in the concentration required.

See individual major descriptions and contact the major of interest for curriculum variations within the concentration area.

Advanced Graduate Degree Programs

The advanced graduate degree programs lead to the **Education Specialist (Ed.S.)** degree, the **Doctor of Education (Ed.D.)** degree, and the **Doctor of Philosophy (Ph.D.)** degree. To be considered for admission to any advanced graduate degree program, students must have earned degrees from regionally accredited institutions, or **the equivalent bachelors and/or graduate degrees from a foreign institution**, meet the major and/or college-specified minimum GRE and/or GPA requirements and be favorably recommended also by the graduate faculty or a graduate admissions committee. Additionally, students must comply with any other college or major requirements specified for the prospective degree program. **Note: Please check with the major of interest for programmatic variations.** The Ed.S. and Ph.D. degrees in Curriculum and Instruction with a concentration in Interdisciplinary Education are administered by the Interdisciplinary Education Graduate Coordinator.

Education Specialist Degree Program **(Ed.S.)**

This degree is offered in the areas of **Educational Leadership** and in **Curriculum and Instruction** with a concentration area.

College of Education Requirements for the Education Specialist Degree (Ed. S.)

The Ed.S. degree consists of a minimum of 36 graduate hours beyond the master's degree and is flexible in its requirements. The degree is designed to provide professional educators with an opportunity to develop competencies in areas of special needs and interests. Consequently, the degree program has few required courses, and each student's major is individually planned in consultation with a faculty gradute committee. Courses at the 5000 level are inappropriate; and a minimum of 15 hours should be taken at the 7000 level.

Program of Study

Concentration coursework - 27 hours minimum.
Thesis (Project) - 9 hours minimum: Thesis EDG 6971 or Project EDG 6970
Comprehensive Examination (oral and/or written)
Oral defense of the project/thesis

Thesis/Project – Ed.S. Degree. The student is required to plan and successfully complete an individual thesis or project. The purpose is to provide an opportunity for the student to apply knowledge gained in the major to the resolution of significant needs arising from professional practice. A minimum of 9 semester hours of thesis enrollment is required in the Ed.S. degree program. Students are required to enroll for a minimum of 2 semester hours in the EDG 6971 thesis course or EDG 6970 projectc course each semester while working on the Ed.S. thesis/project and for 2 graduate semester thesis hours in the semester during which the student plans to graduate. Students who have not completed the thesis/project after enrolling in the required 9 hours must continue to enroll in a minimum of 2 graduate credit hours each semester, including the semester in which the thesis/project is submitted to the College Associate Dean for Academic Affairs (project) or the University Office of Graduate Studies (Thesis; School Psychology students). Students must have an oral defense of the project/thesis with their project/thesis supervisory committee.

The College of Education standard admission requirements for international transcripts are:

For the doctoral degree- If the applicant has a masters from a regionally accredited U.S. university then while we require that UG transcripts from the accredited international university, the College of Education will not require a course-by-course evaluation of the UG credential. If the applicant completed an undergraduate and graduate degree abroad, both degrees must be equivalent to a 4-year US undergraduate degree and a U.S. masters degree, respectively, and both degrees must be from regionally accredited universities. If the applicant has completed at least four years of English language delivery of their degrees, then the iELTS/TOEFL score will not be necessary. Both transcripts must state the overall GPA or overall marks based on the native scale, and the discipline or major the applicant is graduating in.

Unofficial transcripts (either scan or copy) from both the graduate and undergraduate institutions are acceptable at the time of application; however official transcripts required by enrollment.

Doctor of Education Degree Program (Ed. D.)

The Doctor of Education degree is available in Educational Leadership and in Educational Program Development with concentrations/ specializations in Adult Education, Educational Innovation, Educational Leadership (K-12 and College Leadership), Elementary Education, and Special Education Administration and

Supervision. The focus of this degree program is on the improvement of educational practice. Although research skills are recognized as being the basis of any doctoral program, the Ed.D. is considered more a practitioner's than a research degree. Currently, the degree in Special Education with a concentration in Administration and Supervision is closed to new admissions.

College of Education Minimum Requirements for the Doctor of Education Degree (Ed. D.)

Program of Study

The Ed. D. requires a minimum of 54 hours beyond the master's degree.
Core Course Requirement – 3 hours minimum
Concentration - 15 hours minimum
Electives Supporting Concentration – 15 hours minimum

Statistics/Measurement/ Research Design/Applied Research - 9 hours minimum
Psychological and Social Foundations- 3 hours minimum
Dissertation - 9 hours min.

Dissertation

Beginning with the semester immediately following admission to candidacy, students must be enrolled continuously for a minimum of 2 credit hours of dissertation per semester including summers until degree completion. Exceptions to the continuous enrollment policy may be approved if the major professor writes a letter of petition to the Associate Dean for Academic Affairs, indicating specifically the nature and duration of the exception and the justification. Unless an exception has been approved, failure to enroll as specified may result in dismissal of the student from the major. Failure to enroll as specified for three consecutive semesters results in the student being placed on inactive status, and the student must apply for readmission and be readmitted. To be readmitted, the student must secure permission from the major professor and write a letter of request, co-signed by the major professor, to the Associate Dean for Academic Affairs, outlining in detail a timeline for completing the dissertation. The Associate Dean for Academic Affairs will approve or deny the request. This process will be independent of, and will not replace, any procedures required for readmission by the University Office of Graduate Studies, or the Department.

Residency

There is no residency requirement for doctoral students in the College of Education.

Doctoral Qualifying Examination

Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination, and have completed all required coursework with satisfactory grades prior to admission to candidacy.

Doctor of Philosophy Degree Program **(Ph.D.)**

The Doctor of Philosophy degree is available in Curriculum and Instruction with concentrations in the following areas: Adult Education, Career and Workforce Education, , Counselor Education, Early Childhood Education, Educational Psychology, Elementary Education, English Education, Higher Education (Administration), Instructional Technology, Interdisciplinary Education, Literacy Studies, Mathematics Education, Measurement and Evaluation, Science Education, Secondary Education), Social Science Education, Special Education ,

The Ph.D. degree is also available in School Psychology, and Technology in Education and Second Language Acquisition (TESLA). Contact the College of The Arts for information on the Ph.D. in Music Education.

College of Education Minimum Requirements for the Doctor of Philosophy Degree Program (Ph.D.) in Curriculum and Instruction.

The Curriculum and Instruction major is only offered in conjunction with a concentration area. Please see the area of concentration listed alphabetically under the major entry in the catalog) to determine whether or not the Curriculum and Instruction major is available in the area of interest.

Refer to the Major listing for the Ph.D. in Curriculum and Instruction and to the specific Concentration for information.

Refer to the major sections for Ph.D. requirements for Teaching in Education and Second Language Acquisition (TLD)

Program of Study

Common Core

EDG 7067 - Philosophies of Inquiry **Credit(s): 3**

Research Methods & Tools – Refer to the concentration for minimum hours and specific requirements

Concentration – Refer to the concentration for minimum hours and specific requirements
Subspecialty within Concentration – optional requirement in some concentrations
Cognate – optional requirement in some concentrations
Interdisciplinary Focus – optional requirement in some concentrations

Dissertation

Refer to the concentration for specific minimum hours required

Residency

There is no residency requirement for doctoral students in the College of Education.

Doctoral Qualifying Examination

Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination, and have completed all required coursework with satisfactory grades prior to admission to candidacy.

EDG 7067 - Philosophies of Inquiry **Credit(s): 3**

International Students

All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Curriculum and Instruction, Ed.S.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Specialist
CIP Code: 13.0301
Dept. Code: CNI
Major/College Codes: CUR ED
Approved 1971
Concentrations:

Adult Education (SAE)
Counselor Education (SGC)
Early Childhood Education (SNK)
Elementary Education (SEE)
Higher Education, Administration (SHA)
Higher Education, Community College Teaching (SCT)
Instructional Technology (SIT)
Interdisciplinary Education (SIE)
Mathematics Education (SMA)
Measurement and Evaluation (SME)
Reading-Language Arts Education (SRD)
School Psychology (SSP)
Science Education (SSC)
Special Education (SSE)
Vocational Education (SVO)

Note – not all concentrations are available every semester. Prior to submitting the admission application, check with the Graduate Director to confirm if the concentration of interest is available.

Contact Information

College: Education
Departments:

- Leadership, Counseling, Adult, Career, and Higher Education (L-CACHE)
- Educational and Psychological Studies
- Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The Ed.S. degree is designed to provide professional educators with an opportunity to develop competencies in areas of special needs and interests. Consequently, the major has few required courses, and each student's program of study is individually planned in consultation with a gradute faculty committee.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major.

Students are considered for this degree on a case-by-case basis. Please contact the Graduate Coordinator prior to applying.

Curriculum Requirements

Total Minimum hours 36 hours minimum

Concentration - 18 Credit Hours Minimum
Electives - 9 Credit Hours minimum
Thesis/Project - 2 Credit Hours Minimum
Remaining hours selected with Grad Director - 7 Credit Hours

Note: Students may be required to take additional hours depending on the course of study, and/or academic deficiencies. Courses at the 5000 level are inappropriate; and a minimum of 15 hours should be taken at the 7000 level.

Core Requirements

Concentration Requirements (18 Credit Hours Minimum)

See concentrations below

Adult Education (SAE) Concentration

Prepares practitioners and teachers for the broad field of Adult Education. This includes public and proprietary schools, and non-school based settings such as business and industry, the professional associations, community agencies, and governmental units.

- ADE 7388 Adult Development and Learning **Credit Hours: 3**
- ADE 7947 Advanced Internship: Adult Education **Credit Hours: 2-4**
- ADE 7910 Directed Research in Adult Education **Credit Hours: 1-4**
- ADE 7076 Continuing Education in Higher Education **Credit Hours: 3**
- ADE 7281 - Organization and Management of Adult and Continuing Education and HRD **Credit(s): 3**
- ADE 7169 Instructional Development Using Adult Education **Credit Hours: 3 (4 credits for this program)** (If not used for the Curriculum Course Requirement)
- ADE 7261 - Leadership in Adult and Continuing Education and HRD **Credit(s): 3**
- ADE 7676 Human Resource Development Policy Seminar **Credit Hours: 3**
- ADE 7931 - Issues and Trends: Critical Race Theory **Credit(s): 3**
- ADE 6931 Selected Topics in ADE and HRD **Credit Hours: 1-5 (3 credits for this program)** (Adult Learning and Cognitive Styles)
- ADE 6931 Selected Topics in ADE and HRD **Credit(s): 1-5 (3 credits for this program)** (Learning and Change)
- ADE 6906 Independent Study **Credit Hours: 1-19** (Varies)

- ADE 6931 Selected Topics in ADE and HRD **Credit(s): 1-5 (3 credits for this program)** (Participatory Action Research for Educators)
- ADE 6931 Selected Topics in ADE and HRD **Credit(s): 1-5 (3 credits for this program)** (International Adult Education)
- ADE 6198 Effective Continuing Education for Professionals **Credit Hours: 3**

Counselor Education (SGC) Concentration

Designed to provide professional counselors with an opportunity to develop competencies in areas of special needs and interests. Consequently, each student's program is individually planned in consultation with a faculty advisor.

- MHS 7401 Advanced Counseling: Theories and Practicum **Credit Hours: 4**
- MHS 7610 Supervision: Theories and Practicum **Credit Hours: 4**
- MHS 7930 Advanced Seminar in Counselor Education **Credit Hours: 2 (4 credits for this program)**
- EDG 7931 Selected Topics **Credit Hours: 1-4 (4 credits for this program)** (Adv. Practicum in Counseling)
- SDS 7830 Advanced Internship in Counselor Education **Credit Hours: 2-8 (3 credits minimum for this program)**
- EDG 7931 Selected Topics **Credit(s): 1-4 (3 credits for this program)** (Cognitive Behavioral Res. Seminar)
- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

Early Childhood Education (SNK) Concentration

Elementary Education (SEE) Concentration

Prepares in-school leaders with expertise in instruction and program development in a variety of educational settings.

Higher Education, Administration (SHA) Concentration

Higher Education, Community College Teaching (SCT) Concentration

Instructional Technology (SIT) Concentration

Designed to prepare students for leadership in technology related positions. Courses include an array of topics including instructional design, distance learning, authoring, instructional graphics, and project management.

- EDF 6284 Problems in Instructional Design for Computers **Credit Hours: 3**
- EME 7631 Research in Technology Project Management **Credit Hours: 3**
- EME 6613 Development of Technology-Based Instruction **Credit Hours: 3**
- EME 7938 Computer-Augmented Instructional Paradigms in Education **Credit Hours: 3**
- EME 7910 Directed Research in Instructional Technology **Credit Hours: 1-19 (3 credits for this program)**
- EME 7458 Research in Distance Learning **Credit Hours: 3**

Interdisciplinary Education (SIE) Concentration

Provides a framework to support innovative, boundary-crossing inquiry among students and faculty across campus. Designed to foster research that approaches problems in education from interdisciplinary perspectives, the Concentration allows students who have academic backgrounds and interests that span multiple disciplines to construct an individualized program of study grounded in at least two fields, one of which may be outside the College of Education.

Students who have the ability and desire to integrate study and research between at least two disciplines/fields to address questions in education broadly defined are encouraged to apply to the Interdisciplinary track.

Mathematics Education (SMA) Concentration

Prepares specialists for classroom instruction or leadership/supervisory roles.

Measurement and Evaluation (SME) Concentration

Prepares practitioners and teachers for the broad field of Adult Education. This includes public and proprietary schools, and non-school based settings such as business and industry, the professional associations, community agencies, and governmental units.

This Concentration is individually planned with an advisor to include corsework in systemaic planning, test development, program evaluations, research design, and statistical analysis.

Reading-Language Arts Education (SRD) Concentration

Prepares leaders in the field of literacy. The curriculum is designed to promote expertise in literacy research, theory, and practice. Emphasizes a critical analysis of reading policy and the need for applied, community-based research. The concentration extends students' research and analysis skills so they may conduct program evaluations to guide classroom practice and school-based reform.

Students interested in this concentration should have:

- A 35th percentile GRE score in the verbal and quantitative sections; at least a 3 on analytic writing
- Minimum GPA of 3.50 Masters
- Proof of educational or professional experience
- Proof of initial certification
- Letters of recommendation
- Interview
- Concept Paper or goal statement

School Psychology (SSP) Concentration

For the School Psychology concentration approximately 82 graduate semester hours is required beyond the bachelor's degree, and includes two years of practica experiences and a full year, 1,500 clock hour internship, and a thesis or research project. Completion of the Ed.S. degree requires three 3 years of full-time study, including summer semesters beyond the bachelors degree. A Master of Arts (M.A.) degree is earned by most students during the first year of their Ed.S. degree program. However, the M.A. is not considered a terminal degree and is not sufficient for state certification in school psychology.

Note: Students may be required to take additional hours depending on the course of study and or academic deficiencies.

- SPS 6700 - Psychoed Interventions I **Credit(s): 4**
- SPS 6701 - Psychoed Interventions I **Credit(s): 4**
- SPS 6702 - Psychoed Interventions III **Credit(s): 4**
- SPS 6940 Practicum in Psychoeducational Interventions **Credit Hours: 1-4 (2 credits in this program)** (I)
- SPS 6941 Practicum in Psychoeducational Interventions **Credit Hours: 1-4 (2 credits in this program)** (II)
- SPS 6196 Assessment of Child and Adolescent Personality **Credit Hours: 4**
- EDF 6166 Consulting Skills for Staff Development **Credit Hours: 1-3**
- SPS 7700 Advanced Psychoeducational Interventions **Credit Hours: 2-4**

- EDF 7410 Design of Systematic Studies in Education **Credit Hours: 3**
- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- TSL 6700 ESOL for School Psychologists and School Counselors **Credit Hours: 3**
- SPS 6947 Internship **Credit Hours: 1-9 (12 credits for this program)**

Science Education (SSC) Concentration

Special Education (SSE) Concentration

Vocational Education (SVO) Concentration

Electives (9 Credit Hours)

Graduate level elective courses (9 credit hours) are chosen based upon the student's individual needs and are approved by the Graduate Advisor. For some concentrations electives are selected form a set list related to the Concentration.

Students in the Instructional Technology Concentration must select their electives from teh following list:

- CGS 6210 Computer Hardware Systems for Education **Credit Hours: 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**

PLE: Flash (3 Credit Hours)
PLE: Web Programming 1 (3 Credit Hours)
PLE: Web Programming 2 (3 Credit Hours)

- EME 6208 Interactive Media **Credit Hours: 3**
- EME 6207 Web Design **Credit Hours: 3**
- EME 6215 Instructional Graphics **Credit Hours: 3**
- EME 6209 Digital Video **Credit Hours: 3**
- EME 6055 Current Trends in Instructional Technology **Credit Hours: 3**

Other appropriate graduate course(s) as approved by the student's graduate committee.

Comprehensive Exam

Students must complete an oral or written comprehensive exam.

Thesis/Project (2 Credit Hours Minimum)

The student is required to plan and successfully complete an individual thesis or project. The purpose is to provide an opportunity for the student to apply knowledge gained in the major to the resolution of significant needs arising from professional practice. Students are required to enroll for a minimum of 2 semester hours in the thesis or project course each semester while working on the Ed.S. thesis or project and for 2 semester hours in the semester in which the student plans to graduate. Students who have not completed the project after enrolling in the required 9 hours must continue to enroll in a minimum of two (2) credit hours of Thesis or Project each semester, including the semester in which the thesis or project is submitted to the College Associate Dean for Academic Affairs or the Office of Graduate Studies (School Psychology students). Students must have an oral defense of the project/thesis with their project/thesis supervisory committee.Individual areas of specialization may have additional requirements. For information contact the department offering the major/concentration.

Oral defense of the thesis/project

- EDG 6971 Thesis: Masters/Education Specialist **Credit Hours: 2-19**
- EDG 6975 Project: Master's/Specialist **Credit Hours: 1-9**

Remaining Hours

Remaining hours needed to meet the minimum for the degree are selected in consultation with the Grad Director. Typically students take additional thesis or project hours.

Curriculum and Instruction, M.Ed.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
CIP Code: 13.0301
Dept. Code: CNI
Major/College Codes: CUR ED
Approved: 1974

Concentrations:

College Student Affairs (CSA)
Early Childhood Education (CNK)
Educational Studies (CST)
Measurement & Evaluation (CME)
Secondary Education (CES)
Secondary Education: Biology (CBI)
Secondary Education: Chemistry (CCH)
Secondary Education: English (CEN)
Secondary Education: Mathematics (CMA)
Secondary Education: Physics (CPY)
Secondary Education: Social Science (CSO)
Secondary Education: TESOL (CTL)

Note – not all concentrations are available every semester. Prior to submitting the admission application, check with the Graduate Director to confirm if the concentration of interest is available.

Contact Information

College: Education
Departments:

- Leadership, Counseling, Adult, Career, and Higher Education
- Teaching and Learning
- Educational and Psychological Studies

Contact Information: http://www.grad.usf.edu/majors

The Curriculum and Instruction degree is only offered in conjunction with a concentration area. Please see the area of concentration (listed alphabetically in the catalog) to determine whether or not the Curriculum and Instruction degree is available in your area of interest.

This degree is designed for the professional educator who wishes to pursue advanced study. The primary objective is to prepare instructional leaders through courses in curriculum, methods, supervision, learning principles, human interaction, and areas of specialization. The foundation areas (professional studies) receive greater emphasis in the M.Ed. degree programs than the M.A. degree programs. Coursework in the concentration may include courses in colleges other

than the College of Education. The Curriculum and Instruction major is offered with concentration areas. General major requirements are listed below. For specific specialization requirements, contact the appropriate department.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Curriculum Requirements

College of Education Curriculum Requirements for the Master of Education degree (M.Ed.).

The M.Ed. degree in Curriculum and Instruction normally requires a minimum of 33 graduate level semester hours with 60 percent or more of the courses at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are not approved to be part of the master's degree program.

Total Minimum Hours - 33 hours minimum

Notes:

- *More credit hours may be required for a concentration in the Foundations & Curriculum Core, which may be substituted for electives or concentration hours*
- *Foundations and Curriculum core for the College Student Affairs concentration is 6 hours minimum (EDF 6481 and EDF 6165), additional hours in the concentration required.*

Core Requirements

Program of Study (9 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**

or

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**

- EDG 6627 Foundations of Curriculum and Instruction **Credit Hours: 3**

Psychological/Social Foundations

Choose from list below (See Notes)

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**
- EDF 6215 Learning Principles Applied to Instruction **Credit Hours: 4 (3 credits for this program)**
- EDF 6217 Behavior Theory and Classroom Learning **Credit Hours: 4 (3 credits for this program)**
- EDF 6534 - Human Development and Personality Theory **Credit(s): 3**
- EDF 6165 Group Processes for Educational Personnel **Credit Hours: 1-3 (3 credits for this program)** (Available only to students in College Student Affairs)
- EDF 6517 Historical Foundations of American Education **Credit Hours: 3**
- EDF 6606 Socio-Economic Foundations of American Education **Credit Hours: 4 (3 credits for this program)**

Electives (6 Credit Hours Minimum)

5000 or 6000 level coursework subject to area advisor approval. These courses are intended to complement the specialization. (Note: Secondary Education: Social Science (CSO) requires 15 hours of electives minimum)

Comprehensive Exam

Comprehensive exam required. Refer to specific concentration for requirements

Concentration Requirements (18 Credit Hours Minimum)

Refer to specific concentration for requirements

In addition to completing the required Major Requirements, students select one of the following concentrations. Minimum hours noted are for the concentration requirements only and do not reflect the total major hours that result.

College Student Affairs (CSA)

Offered from the Leadership, Counseling, Adult, Career, and Higher Education

The CSA Concentration at the University of South Florida prepares practitioners to work in Student Affairs positions. The learning outcomes for all graduates include: specialized learning in the field, engaging diverse perspectives, strong communication skills, and understanding the complexity of the higher education system. The major is compliant with requirements of the Council for the Advancement of Standards in Higher Education. The curriculum includes theories of human growth and development, environmental influences, and research applied to student affairs practice. The instructional method of relating theory-to-practice is accomplished by involving students in rigorous classroom activity along with internships in specialized areas of student affairs work.

Total Major requirements with this concentration: 42 hours minimum
In addition to the nine hours or core requirements for the Major, students must complete:

Major Core – 9 hours
Concentration Requirements – 30 hours
Electives – 3 hours
Total:

Concentration Requirements (30 Credit Hours Minimum)

- SDS 6042 Introduction of Student Affairs **Credit Hours: 3**
- SDS 6624 Ecology of Campus Life **Credit Hours: 3**
- SDS 6645 Student Development Theory **Credit Hours: 3**
- SDS 6701 Issues in Diversity **Credit Hours: 2 (3 credits for this program)**
- SDS 6703 The Law and Student Affairs **Credit Hours: 3**
- SDS 6030 - Advising and Helping Skills in Student Affairs **Credit(s): 3**
- SDS 6260 Assessment in Student Affairs **Credit Hours: 3**
- EDF 6938 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Organization and Administration of Student Affairs)
- SDS 6990 - Trends and Issues in Higher Education and Student Affairs **Credit(s): 3**
- EDF 6944 Field Experience **Credit Hours: 1-4 (3 credits for this program)** (Practicum)

Electives (3 Credit Hours Minimum)

Comprehensive Exam

Early Childhood Education (CNK)

Offered from the Department of Teaching and Learning
The M.Ed. Degree in Curriculum and Instruction with a concentration in Early Childhood Education is designed for those students who hold a degree in early childhood education or a related field and wish to improve their skills in teaching young children, and prepare to take leadership roles in the field of early childhood education. When previous academic preparation is not in the field of early childhood education, prospective students will be expected to complete undergraduate courses as determined through conference with a faculty advisor upon admission to the major. These undergraduate courses do not apply to the minimum graduate hours required for the major. This major is not a teacher certification preparation major.

Total Major requirements with this concentration: 33 hours minimum

Concentration Course Requirements (9 Credit Hours Minimum)

- EEC 6415 EC: Diversity in Home and School **Credit Hours: 3**
- EEC 6626 EC: Play and Learning **Credit Hours: 3**
- EEC 6678 Research Seminar: Issues and Trends in Early Childhood Education **Credit Hours: 3**

Electives (15 Credit Hours Minimum)

Select a focus in Reading, Teachers Leadership, Positive Behavior Support, or Interdisciplinary Studies and choose four electives:

In addition, select one other electives taken in COED at the 6000 level (3 hours)

Reading Focus

- RED 4749 - History and Foundations of Reading: Prevention and Intervention of Reading Difficulties **Credit(s): 3**
- RED 6544 Cognition, Comprehension, and Content Area Reading: Remediation of Reading **Credit Hours: 3**
- RED 6545 Issues in Vocabulary and Word Study **Credit Hours: 3**
- RED 6540 Assessment in Developing Literacies **Credit Hours: 3**
- RED 6846 Practicum in Reading **Credit Hours: 3**

Teacher Leadership Focus

- EDE 6076 Teacher Leadership for Student Learning **Credit Hours: 3**
- EDE 6486 Teacher Research for Student Learning **Credit Hours: 3**
- EDE 6556 Coaching for Student Learning **Credit Hours: 3**
- EDE 6366 Professional Development for Student Learning **Credit Hours: 3**

Positive Behavior Support Focus

- MHS 6410 Intensive Individualize Positive Behavior Support **Credit Hours: 3**

- MHS 6900 Special Topics in Planning, Evaluation and Accountability **Credit Hours: 1-3 (3 credits for this program)** (Consultation and Collaboration)
- MHS 6608 Schoolwide Positive Behavior Support **Credit Hours: 3**
- MHS 6605 Addressing Behavior Challenges in Young Children **Credit Hours: 3**

Interdisciplinary Focus

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EEC 6055 Advocacy and Leadership in Early Childhood Education **Credit Hours: 3**
- EEC 6205 EC: Curriculum and Authentic Assessment **Credit Hours: 3**
- EEC 6525 Early Childhood Program Development and Administration **Credit Hours: 3**
- EEC 6265 Early Childhood Programs and Advanced Curriculum **Credit Hours: 3**

Comprehensive Exam

Students must apply to take their comprehensive exam. Students must be enrolled at least two credit hours during the semester of their comprehensive exam.

Educational Studies (CST)

Offered from the Leadership, Counseling, Adult, Career, and Higher Education
The interdisciplinary study of education using social science and humanities perspectives.

Concentration Admission Requirements:

- Undergraduate GPA of at least 3.00
- A record of consistent success in humanities and social science courses taken as an undergraduate or (if the applicant has prior graduate-school experience) at the graduate level.
- GRE required with preferred scores of at least V -60%, Q – 50%, and AW – 50%. Only current scores (within the past 5 years).
- Names of and contact information for two full-time faculty at a regionally-accredited college or university familiar with the applicant's undergraduate or graduate work and who are willing to serve as references, and the completion by the references of a standardized online reference form.
- A 300-word statement describing the applicant's intellectual interests in the major

Total Major requirements with this concentration - 33 hours minimum

Other information – All course grades must be a "B" or above. Concentration course credits must be earned at USF Tampa.

In Addition to the 9 Hours of Major Core Requirements:

Concentration Course Requirements (18 Credit Hours Minimum)

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 6517 Historical Foundations of American Education **Credit Hours: 3 (4 credits for this program)**
- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**

In addition, a minimum of six hours from the following courses:

- EDF 5607 Trends in Education Politics **Credit Hours: 3**
- EDF 6531 History of Childhood **Credit Hours: 3**

- EDF 6606 Socio-Economic Foundations of American Education **Credit Hours: 4**
- EDF 6705 Gender and the Educational Process **Credit Hours: 3**
- EDF 6736 Education, Communication, and Change **Credit Hours: 3**
- EDF 6765 Schools and the Future **Credit Hours: 4**

Electives (6 Credit Hours Minimum)

Selected, either from the list below or upon advisor's approval:

- EDF 5607 Trends in Education Politics **Credit Hours: 3**
- EDF 6531 History of Childhood **Credit Hours: 3**
- EDF 6606 Socio-Economic Foundations of American Education **Credit Hours: 4**
- EDF 6705 Gender and the Educational Process **Credit Hours: 3**
- EDF 6736 Education, Communication, and Change **Credit Hours: 3**
- EDF 6765 Schools and the Future **Credit Hours: 4**
- EDF 6906 Independent Study: Educational Foundations **Credit Hours: 1-6**
- EDF 6938 Selected Topics **Credit Hours: 1-4**

Comprehensive Exam

The Comprehensive exam will be a portfolio of work from courses taken for the degree, including a capstone paper written over a 4-week period in response to a specific prompt

Measurement and Evaluation (CME)

Offered from the Department of Educational and Psychological Studies

This degree program is designed to prepare mid-level testing and evaluation personnel for employment in school districts, government agencies, commercial test development companies, and program research and evaluation enterprises. The major prepares personnel with specialized skills in test construction, data analysis, major evaluation, and research design.

Total Major requirements with this concentration -37 hours minimum

Major Core (9 Credit Hours Minimum)

see Curriculum Requirements above

Students are required to take both EDF 6481 and EDF 6432 from the Major Core

Concentration Requirements (22 Credit Hours Minimum)

Note: Both EDF 6432 and EDF 6481 from the Major Core must be taken, one of which fulfills a Core requirement and the other fulfills a Concentration requirement.

- EDF 6461 Foundations of Applied Evaluation **Credit Hours: 3**
- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- EDF 6491 - Practicum in Measurement, Evaluation and Research **Credit(s): 3**

- EDF 7488 Problems in Educational Data Analysis **Credit Hours: 2**
- EDG 6931 Selected Topics in Education **Credit Hours: 1-4 (3 credits for this program)** (Special Topics: Introduction to Qualitative Methods)

Elective in Instructional Technology selected from the following:

- EME 6613 Development of Technology-Based Instruction **Credit Hours: 3**
- EDF 6284 Problems in Instructional Design for Computers **Credit Hours: 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**
- EME 6207 Web Design **Credit Hours: 3**
- OR a course recommended by the academic advisor

Electives (6 Credit Hours Minimum)

see Curriculum Requirements above

Comprehensive Exam:

Students must perform satisfactorily on a written comprehensive examination taken on completion of coursework or during the last semester of enrollment in the major. Students must be enrolled for a minimum of two graduate hours during the semester in which this examination is taken.

Secondary Education (CES)

Not open for admissions

Offered from the Department of Teaching and Learning
This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are *not* seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs. Accredited by NCATE.

Total Major requirements with this concentration: 33 hours minimum

Concentration Requirements (18 Credit Hours Minimum)

18 hours in the area of emphasis, to include courses in the content and/or teaching of this content

Secondary Education: Biology (CBI)

Offered from the Department of Teaching and Learning
This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are *not* seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs. Accredited by NCATE.

Total Major requirements with this concentration: 33 hours minimum

Concentration Requirements (18 Credit Hours Minimum)

18 hours in the area of emphasis, to include courses in content and/or the teaching of this content one of which must be:

- SCE 6634 Current Trends in Secondary Science Education **Credit Hours: 3**

Secondary Education: Chemistry (CCH)

Offered from the Department of Teaching and Learning
This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are *not* seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs. Accredited by NCATE.

Total Major requirements with this concentration: 33 hours minimum

Concentration Requirements (18 Credit Hours Minimum)

18 hours in the area of emphasis, to include courses in content and/or the teaching of this content one of which must be:

- SCE 6634 Current Trends in Secondary Science Education **Credit Hours: 3**

Secondary Education: English (CEN)

Offered from the Department of Teaching and Learning
This concentration is intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are *not* seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs. Accredited by NCATE.

Total Major requirements with this concentration: 33 hours minimum

Concentration Requirements (18 Credit Hours Minimum)

18 hours in the area of emphasis, to include courses in content and/or the teaching of this content one of which must be:

- LAE 6637 Current Trends in Secondary English Education **Credit Hours: 3**

Secondary Education: Mathematics (CMA)

Offered from the Department of Teaching and Learning
The Concentration in Secondary Education in Mathematics Education is a flexible major intended to improve the skills of the classroom teacher. The major will be planned with the student's advisor. At least 60 percent of the major hours must be at the 6000 level. Accredited by NCATE.

Total Major requirements with this concentration: 33 hours minimum

Concentration Requirements (18 Credit Hours Minimum)

18 hours in the area of emphasis, to include courses in content and/or the teaching of this content one of which must be:

- MAE 6136 Current Trends in Secondary Mathematics Education **Credit Hours: 3**

Secondary Education: Physics (CPY)

Offered from the Department of Teaching and Learning
The Concentration in Secondary Education in Physics is a flexible major intended to improve the skills of the classroom teacher. The major will be planned with the student's advisor. At least 60 percent of the major hours must be at the 6000 level.

Total Major requirements with this concentration: 33 hours minimum

Concentration Requirements (18 Credit Hours Minimum)

18 hours in the area of emphasis, to include courses in content and/or the teaching of this content one of which must be:

- SCE 6634 Current Trends in Secondary Science Education **Credit Hours: 3**

Secondary Education: Social Science (CSO)

Offered from the Department of Teaching and Learning
This Concentration does not include teaching certification. Individuals interested in certification should consult the Master of Arts in Teaching in Social Science Education. This concentration is designed for educators who have at least two years of relevant experience in the field, typically, teachers certified in social science education with a baccalaureate degree from a College of Education. The aim is to provide advanced preparation in the theories and practices of social studies educators. Accredited by NCATE.

Total Major requirements with this concentration: 36 hours minimum

Concentration Requirements (21 Credit Hours Minimum)

- SSE 5946 Practicum in Social Science Education **Credit Hours: 3**
- SSE 6932 Selected Topics in Social Science Education **Credit Hours: 3**
- SSE 6932 Selected Topics in Social Science Education **Credit(s): 3**
- SSE 6636 Trends in Secondary Social Science Education **Credit Hours: 3**

Electives:

- Taken in COEDU and/or CAS at the 5000 or 6000 level **Credit(s): 15**

Comprehensive Exam

The Comprehensive exam is taken while enrolled in SSE 6636 Trends in Secondary Social Science Education. Consult the Major website, http://www.coedu.usf.edu/main/departments/seced/SSE/SSE_HomePage.html, or the major's coordinator for specific requirements.

Secondary Education: TESOL (CTL)

Offered from the Department of Teaching and Learning

This concentration is designed for professionals who have at least two years of relevant experience in the field, typically, teachers certified in social science education with a baccalaureate degree from a College of Education. Within the M.Ed. framework, the degree is an individually planned major based on the student's background and professional goals.

Concentration Admission Requirements

Requirements for all applicants include:

- Minimum GPA of 3.0 upper division undergraduate coursework
- Proof of 2 years of relevant educational or professional experience as judged by major faculty
- Proof of teaching certification

Total Major requirements with this concentration: 33 hours minimum

Concentration Requirements (18 Credit Hours Minimum)

18 hours in the area of emphasis, to include courses in content and/or the teaching of this content

Comprehensive Exam

A comprehensive exam must be taken in the College of Education at the completion

Curriculum and Instruction, Ph.D.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 59* post-masters
**minimum hours vary with each concentration*
Level: Doctoral
CIP Code: 13.0301
Dept. Code: CNI
Major/College Codes: CUR ED
Approved 1970

Concentrations:

Adult Education (DAE)
Career and Workforce Education (DVO)
Counselor Education (DGC)
Early Childhood Education (DNK)
Educational Psychology (EPC)
Elementary Education (DEE)
English Education (DCE)
Higher Education, Administration (DHA)
Instructional Technology (DIT)
Interdisciplinary Education (DIE)
Literacy Studies (DRD)
Mathematics Education (DMA)
Measurement & Evaluation (DME)
Science Education (DSC)
Social Science (DSO)
Special Education (DSE)
Teacher Education (TED)

Note – not all concentrations are available every semester. Prior to submitting the admission application, check with the Graduate Director to confirm if the concentration of interest is available.

This major shares core requirements with the Ed.D. in Educational Program Development program.

Contact Information

College: Education
Departments:

- Leadership, Counseling, Adult, Career, and Higher Education (L-CACHE)

- Teaching and Learning
- Educational and Psychological Studies

Contact Information: http://www.grad.usf.edu/majors

The Curriculum and Instruction major is only offered in conjunction with a concentration area. Please see the area of concentration (listed alphabetically) to determine whether the Curriculum and Instruction degree is available in your area of interest.

Major Research Area
Information available by accessing the concentration areas, listed alphabetically in the catalog.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A master's degree from an accredited university in education, a related professional field, or the equivalent bachelors and/or graduate degrees from a foreign institution
- Current Resume or Vita outlining education, work/teaching experience, publications, presentations, etc.
- Graduate Record Examination (GRE) scores for Verbal, Quantitative, and Writing.
- Three Academic References from individuals who can testify to your academic abilities and potential for success in a doctoral program.
- A personal statement and interview with the program faculty, writing samples, and work references upon request.

Curriculum Requirements

Total Minimum Hours: 59 credit hours

Shared Core Requirements– 6 Credit Hours
Concentrations – 49 Credit Hours Minimum
Dissertation - 4 Credit Hours Minimum

Remaining Hours - selected with Grad Director, as needed, to reach the total minimum hours required. Typically it is more dissertation hours.

Note - students who enter without a master's in Adult Education must take ADE 6080.

Please be advised that major and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Shared Core Requirements (6 Credit Hours)

Required for all students in this major.

- EDG 7067 Philosophies of Inquiry **Credit Hours: 3**
- EDF 7410 Design of Systematic Studies in Education **Credit Hours: 3**

Concentration Requirements

Students select one of the following concentrations.

Note - some concentrations include:

Subspecialty within Concentration *(Optional requirements in some Concentrations)*
Cognate *(Optional requirement in some Concentrations)*
Interdisciplinary Focus *(Optional requirement in some Concentrations)*

Note: Effective Fall 2011, all concentrations must take EDG 7067, and may be used as a substitute for one of the courses in Psychological & Social Foundations for those concentrations requiring foundations courses.

Adult Education (DAE)

Prepares leaders, researchers, university faculty, and related personnel to serve in the broad field of adult education.

Note - Not Accepting Applications

Research methods and Tools - 15 hours minimum

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- PHC 6725 Focus Group Research Strategies **Credit Hours: 3**
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Or other approved graduate couse by major professor and/or major committee

Concentration Requirements - 18 Credit Hours Minimum

Required Adult Education Concentration Courses - 10 hours minimum

- ADE 7388 Adult Development and Learning **Credit Hours: 3**
- ADE 7930 Seminar in Adult Education **Credit Hours: 4**
- ADE 7937 Seminar in Adult Education **Credit Hours: 1-4**

Electives within specialization - 15 hours minimum
Selections of course options should be made in consultation with the doctoral committee.

Interdisciplinary Focus - 3 hours minimum
One or more courses/experiences that foster interdisciplinary collaboration selected depending on the individual student interest, in consultation with the doctoral committee.

- EDF 7145 Cognitive Issues in Instruction **Credit Hours: 4**
- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- EDF 7359 Resilience in Human Development **Credit Hours: 4**
- EDH 7225 Curriculum Development in Higher Education **Credit Hours: 3**
- EDF 6705 Gender and the Educational Process **Credit Hours: 3**
- EDF 7357 Applications of Developmental Theories **Credit Hours: 4**

Career and Workforce Education (DVO)

Prepares leaders, researchers, university faculty and related personnel to serve in the broad field of Career and Workforce Education.

Research Methods and Tools - 25 Credit Hours

Research Methods - 19 hours

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

A specialized research methods course chosen with Program Coordinator (3-4 Credit Hours)

Tools and Applications - 6 hours minimum

- ECT 7791 Research Seminar in Vocational, Technical, and Adult Education **Credit Hours: 3**

Career and Workforce Education I (3 Credit Hours)
Career and Workforce Education II (3 Credit Hours)

Concentration Requirements - 30 hours minimum

Required CWE Courses - 18 hours

- ECT 6766 Emerging Workplace Competencies **Credit Hours: 3**
- ECW 7066 Foundations and Philosophy of Vocational, Technical and Adult Education **Credit Hours: 3**
- ECW 7195 Comparative Study of Career Workforce Education Systems **Credit Hours: 3**
- ECW 7105 Vocational and Adult Education Program Planning and Implementation **Credit Hours: 3**
- ECW 7167 Career Development in Career and Workforce Education Change **Credit Hours: 3**
- ECW 7168 Instructional Development for Vocational, Technical, and Adult Education **Credit Hours: 3**

Cognate - 12 hours
Courses to be determined depending on individual interests.

Counselor Education (DGC)

This concentration is a research and theory intensive experience designed to provide a balance of intellectual and experiential learning resulting in professional educators who have multiple competencies as researchers, theorists, and problem-solvers in human growth and development. The doctoral major emphasizes research and theory as opposed to clinical skill development and is designed primarily for students who wish to pursue careers in academic institutions. Major Research Areas include: Career development, clinical supervision, mental health counseling, and multicultural counseling.

Research methods -11 hours minimum

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

Select at least one from the list below:

- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4**
- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**
- EDF 7493 Systems Approaches for Program Planning, Evaluation and Development **Credit Hours: 4**

Foundations of Education - 3 hours minimum

Select one of the following courses:

- EDG 7667 Analysis of Curriculum and Instruction **Credit Hours: 3**
- EDG 7692 Issues in Curriculum and Instruction **Credit Hours: 3**
- EDF 7586 Classics in Educational Research **Credit Hours: 4**
- EDH 7225 Curriculum Development in Higher Education **Credit Hours: 3**

Foundations of Education: Philosophical/Social Foundations - 3 hours minimum

Select one of the following courses:

- EDF 6705 Gender and the Educational Process **Credit Hours: 3**
- EDF 7682 Education in Metropolitan Areas **Credit Hours: 3**

Foundations of Education: Psychological Foundations - 4 hours minimum

- EDF 7145 Cognitive Issues in Instruction **Credit Hours: 4**
- EDF 7138 Adolescent Development **Credit Hours: 4**

Concentration Requirements - 30 hours minimum

Specialization - 18 hours minimum

- MHS 6311 Online Services in Counseling and Helping Professions **Credit Hours: 3**
- MHS 7401 Advanced Counseling: Theories and Practicum **Credit Hours: 4**
- MHS 7610 Supervision: Theories and Practicum **Credit Hours: 4**
- MHS 7740 Survey Course in Planning, Evaluation and Accountability **Credit Hours: 3**
- MHS 7930 Advanced Seminar in Counselor Education **Credit Hours: 2**
- SDS 7830 Advanced Internship in Counselor Education **Credit Hours: 2-8**
- EDG 7931 Selected Topics **Credit Hours: 1-4**

Multicultural and Social Jusitce (4 Credit Hours)
Cognitive Behavioral (3 Credit Hours)
Practicum in Supervisors of Counseling (3 credit Hours)
Proposal Preparation (3 Credit Hours)
Advanced Practicum in Counseling (4 Credit Hours)

Cognate - 12 hours

- EDF 7462 Metaevaluation **Credit Hours: 4**
- EDF 7485 Theory and Practice of Program Evaluation **Credit Hours: 3**
- EDF 7940 Practicum in Educational Planning, Evaluation, and Development **Credit Hours: 1-8**

Early Childhood Education (DNK)

This concentration promotes scholarly and multidisciplinary inquiry that further empowers advanced graduate students through the development of knowledge, skills, and dispositions to assume roles as leaders, advocates, and scholars in the development and implementation of high quality and innovative early childhood practices. The major provides a sound theoretical background that is integrally linked to the practice of Early Childhood Education in a diverse, global community with an emphasis on child advocacy and social justice.

Research Methods and Tools - 16 hours minimum

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Specialized Research Method Course determined in conjunction with major committee based on the student's research agenda (3-4 credit hours)

Concentration Requirements - 39 hours minimum

Required Concentration Courses - 18 hours minimum:

- EEC 7056 Leadership and Advocacy: Issues Affecting Young Children **Credit Hours: 3**
- EEC 7057 Critical Perspectives in Early Childhood Education **Credit Hours: 3**
- EEC 7306 Teaching and Learning in Early Childhood **Credit Hours: 3**
- EEC 7416 Sociocultural Approaches to Working with Children and Families **Credit Hours: 3**
- EEC 7317 ICT in the Early Years **Credit Hours: 3**
- EEC 7627 Arts & Aesthetics in Early Childhood Education **Credit Hours: 3**

CELS Professional Development Courses - 12 hours minimum

- EDG 7938 Advanced Graduate Seminar: Introduction to Research **Credit Hours: 3**
- EDG 7939 Advanced Graduate Seminar: Research in Progress **Credit Hours: 3**
- EDH 7325 Supervised Teaching in Childhood Ed & Literacy Studies I **Credit Hours: 3**
- EDH 7326 Supervised Teaching in Childhood Ed & Literacy Studies II **Credit Hours: 3**

Cognate - 9 hours minimum
The cognate can be described as a secondary concentration or sub-specialization area. Coursework must be taken at the graduate level, and is developed in consultation with the major professor and the doctoral committee. The coursework in the cognate is developed in support of the student's research objectives

Educational Psychology (EPC)

This concentration will prepare graduates to be conscientious researchers who apply the scientific method specifically to real-world educational problems. Primary concentration goals are: (1) to engage students in cutting-edge collaborative research; (2) to provide a solid foundation that enables students to integrate theory, research, and practice and fosters a commitment to excellence in research and scholarship; and (3) to help students acquire a deep understanding of human development and learning for the preparation of future educators and educational professionals in all contexts.

Concentration Requirements - 28 hours minimum
(At least 12 hours must be 7000 or 6000 level courses requiring advanced graduate standing)

- EDF 7357 Applications of Developmental Theories **Credit Hours: 4**
- EDF 7145 Cognitive Issues in Instruction **Credit Hours: 4**
- EDF 7265 Psychology of Oral and Written Language Development **Credit Hours: 4**
- EDF 7359 Resilience in Human Development **Credit Hours: 4**

- EDF 7947 Research Practicum **Credit Hours: 1**
- EDF 7930 Professional Seminar **Credit Hours: 1**
- EDF 7946 Supervised Experience in College Teaching **Credit Hours: 1**

Cognate Area - 12 hours

Measurement/Statistics/Research Design - 7 hours minimum

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

Select at least **one** of the following courses:

- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**
- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4**
- EDF 7493 Systems Approaches for Program Planning, Evaluation and Development **Credit Hours: 4**
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Foundations - 3 hours
Any graduate level course taught by Philosophical/Social/Historical Foundations - 3 credit hours

Elementary Education (DEE)

Prepares scholars to understand elementary practice through research and innovation that unites community engagement and rigorous intellectual inquiry.

The concentration features opportunities to:

- Participate in engaged scholarship through collaborative work focused on current educational problems with partner schools and community centers.
- Develop integrated and interdisciplinary perspectives on elementary educational practice with a commitment to diversity and exploring global perspectives.
- Explore issues of equity both locally and globally
- Work both independently and in collaboration with faculty to pursue rigorous research agendas, publish in scholarly journals, and present widely at state, national and international conferences.
- Engage in learning experiences that ensure the candidate possesses an innovative response to key issues in the field.

Research Methods and Tools - 16 hours minimum

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**

Or equivalent course in Statistics/Measurement/Research Design

- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**

Or introductory equivalent selected in conjunction with major committee

- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Or equivalent qualitative course selected with approval from major committee
Specialized Research Methods Graduate level Course determined in conjunction with major committee based on the student's research agenda and prior presentation (3-4 Credits)

Concentration Requirements - 42 hours minimum
Required Courses:

- EDE 7206 Critical Analysis of Curriculum in Elementary Schools **Credit Hours: 3**
- EDE 7481 Teacher Education Seminar **Credit Hours: 3**
- EDG 7046 Trends and Issues in Educational Policy: Literacy and Teacher **Credit Hours: 3**

Select four courses from the following:

- EEC 7317 ICT in the Early Years **Credit Hours: 3**
- EEC 7627 Arts & Aesthetics in Early Childhood Education **Credit Hours: 3**
- EEC 7416 Sociocultural Approaches to Working with Children and Families **Credit Hours: 3**
- EEC 7056 Leadership and Advocacy: Issues Affecting Young Children **Credit Hours: 3**

- EDG 7931 Selected Topics **Credit Hours: 1-4**

Working in Schools (3 Credit Hours)

- EDE 7327 Differentiated Supervision & Teacher Professional Development **Credit Hours: 3**

CELS Professional Development Courses - 12 hours minimum

- EDG 7938 Advanced Graduate Seminar: Introduction to Research **Credit Hours: 3**
- EDG 7939 Advanced Graduate Seminar: Research in Progress **Credit Hours: 3**
- EDH 7325 Supervised Teaching in Childhood Ed & Literacy Studies I **Credit Hours: 3**
- EDH 7326 Supervised Teaching in Childhood Ed & Literacy Studies II **Credit Hours: 3**

Cognate - 9 hours minimum

The cognate can be described as a secondary concentration or sub-specialization area. Coursework must be taken at the graduate level, and is developed in consultation with the major professor and the doctoral committee. The coursework in the cognate is normally developed in support of the student's research objectives.

English Education (DCE)

Secondary Education Core - 9 hours minimum

- ESE 7343 Teaching and Learning in the Content Area **Credit Hours: 3**
- ESE 7346 Collegiate Teaching in Secondary Education **Credit Hours: 3**
- EDG 7937 Graduate Seminar **Credit Hours: 1-4**

Advanced Seminar in Secondary Education (3-6 Credits)

- LAE 6906 Independent Study in English Education **Credit Hours: 1-6**

(Optional and may be substituted for one of above with approval of doctoral committee)

- LAE 7910 Directed Research in English Education **Credit Hours: 1-19** *(12 Credit Hours)**

**3 hours repeated with LAE 7735 each semester. This course engages students in establishing a current active research/scholarly agenda that leads toward independent scholarship and successful, timely completion of the doctoral degree.*

Statistics/Measurement/Research Design - 12 hours minimum

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Additional courses to be determined by the graduate faculty based on the orientation of the student's research agenda and prior preparation.

Cognate -3 hours minimum

LAE students may complete a cognate or a set of electives. These courses must be consistent with the student's program of study and selected with the approval of a graduate committee. Courses in the Cognate must be taken at the graduate level.

Concentration Requirements - 24 hours minimum

The following four seminars are required:

- LAE 7735 Advanced Seminar in English Education **Credit Hours: 3-15**

Language and Literacy (3 Credit Hours)
Teacher Education (3 Credit Hours)
Writing (3 Credit Hours)
Research (3 Credit Hours)

Additional courses in this area will be determined by the student's research interests.

Higher Education, Administration (DHA)

The Higher Education Administration concentration is a research degree that prepares individuals interested in teaching, research, and policy positions in both community colleges and universities.

Measurement/Statistics/Research Design - 12 hours minimum
Research, evaluation or measurement to be determined with the student's committee's approval with the goal to build a robust and varied academic research background. Student should not take research courses without committee advisement.

Higher Education Core - 15 hours

- EDH 7057 Introduction to Research Studies in Higher Education **Credit Hours: 3** *
- EDH 6938 Seminar in College Teaching **Credit Hours: 3**
- EDH 7225 Curriculum Development in Higher Education **Credit Hours: 3**
- EDH 7935 Higher Education Capstone Seminar **Credit Hours: 3**

*Must be taken early after admitted to the major

Select one of the following courses:

- EDH 6051 Higher Education in America **Credit Hours: 3**
- EDH 6081 Junior College in American Higher Education **Credit Hours: 3**

Specialization Courses - 21 hours minimum
Specialization courses to be chosen and approved with the student's major committee, from the following:

- ADE 6385 The Adult Learner **Credit Hours: 3**
- EDH 7405 Policy and Legal Dimensions in Higher Education **Credit Hours: 3**
- EDH 6906 Independent Study **Credit Hours: 1-19**
- EDH 6947 Internship in Higher Education **Credit Hours: 1-6**
- EDH 7505 Higher Education Finance **Credit Hours: 3**
- EDF 7530 History of Higher Education in the United States **Credit Hours: 3**
- EDH 7632 Leadership in Higher Education **Credit Hours: 3**
- EDH 7633 Governing Colleges and Universities **Credit Hours: 3**
- EDH 7635 Organization and Administration of Higher Education **Credit Hours: 3**
- EDH 7636 Organizational Theory and Practices in Higher Education **Credit Hours: 3**
- EDH 7910 Directed Research **Credit Hours: 1-19**
- EDF 6938 Selected Topics **Credit Hours: 1-4**

Cognitive Issues in Higher Education (3 Credit Hours)
Critical Issus in Higher Education (3-9 Credit Hours)

- SDS 7640 Student Affairs Administration **Credit Hours: 4**

Instructional Technology (DIT)

This Concentration is designed to prepare students to become skilled researchers who can design and conduct original research in the field of instructional technology. Our graduates assume academic and leadership positions in higher education, corporations, the military, and other venues, where research and best practices are integrated to advance new knowledge and to improve learning and performance.

Interdisciplinary Professional Core - 7 hours minimum
The following course is required:

- EDF 7145 Cognitive Issues in Instruction **Credit Hours: 4**

However, with major professor approval, a substittuion can be made to another ed psych course.

Choice of ONE of the following adult education or foundation courses - 3 hours

- ADE 6070 International Adult Education **Credit Hours: 3**
- ADE 6385 The Adult Learner **Credit Hours: 3**
- EDF 6217 Behavior Theory and Classroom Learning **Credit Hours: 4**
- EDF 6736 Education, Communication, and Change **Credit Hours: 3**
- EDF 6765 Schools and the Future **Credit Hours: 4**
- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- EDF 7357 Applications of Developmental Theories **Credit Hours: 4**
- EDF 7530 History of Higher Education in the United States **Credit Hours: 3**
- EDF 7586 Classics in Educational Research **Credit Hours: 4**
- EDG 7931 Selected Topics **Credit Hours: 1-4**

Globalization and Higher Education (3 Credit Hours)

- EDH 7225 Curriculum Development in Higher Education **Credit Hours: 3**

Students may substitute an alternative 6000/7000 level course with approval of their major professor.

Professional Development - 3 hours

- ESE 7346 Collegiate Teaching in Secondary Education **Credit Hours: 3**

One to three credits of directed research (EME 7910) may be substituted for doctoral studenets with documented substantiated teaching experience with adult learners, as determined by the student's major professo.

Research Methods - 12 hours minimum

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**

Or

- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Specialization Courses - 9 hours minimum

- EME 6613 Development of Technology-Based Instruction **Credit Hours: 3**
- EME 7938 Computer-Augmented Instructional Paradigms in Education **Credit Hours: 3**
- EME 7939 Research in Technology-Based Education **Credit Hours: 3**

Electives - 12 hours minimum

Choice of FOUR electives from among appropriate IT course offerings below (Required):

- EDF 6284 Problems in Instructional Design for Computers **Credit Hours: 3**
- EME 6016 Digital Citizenship and Online Safety **Credit Hours: 3**
- EME 6055 Current Trends in Instructional Technology **Credit Hours: 3**
- EME 6157 Game Design & Development for Learning **Credit Hours: 3**
- EME 6207 Web Design **Credit Hours: 3**
- EME 6209 Digital Video **Credit Hours: 3**
- EME 6215 Instructional Graphics **Credit Hours: 3**
- EME 6346 Data Visualization in Education **Credit Hours: 3**
- EME 6347 Digital Media and Learning **Credit Hours: 3**
- EME 6348 Predictive Learning Analytics **Credit Hours: 3**
- EME 6356 Introduction to Big Data and Learning Analytics **Credit Hours: 3**
- EME 6419 Motivational Design for Learning Technology **Credit Hours: 3**
- EME 6614 Games Analytics for Learning **Credit Hours: 3**

- EME 6817 Data in Assessment and Accreditation **Credit Hours: 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**
- EME 7458 Research in Distance Learning **Credit Hours: 3**
- EME 7615 Instructional Game Design for eBooks **Credit Hours: 3**
- EME 7631 Research in Technology Project Management **Credit Hours: 3**
- EME 7910 Directed Research in Instructional Technology **Credit Hours: 1-19**

Cognate - 9 hours minimum
Courses selected are consistent with the student's program of study and selected with the approval of a graduate faculty committee and should be coursework other than in the concentration area. Courses in the cognate area must be taken at the graduate level.

Interdisciplinary Education (DIE)

Provides a framework to support innovative, boundary-crossing inquiry among students and faculty across campus. Designed to foster research that approaches problems in education from interdisciplinary perspectives, the major allows students who have academic backgrounds and interests that span multiple disciplines to construct an individualized program of study grounded in at least two fields, one of which may be outside the College of Education. Students who have the ability and desire to integrate study and research between at least two disciplines/fields to address questions in education broadly defined are encouraged to apply to the Interdisciplinary track.

Foundations of Education – 9 credit hours minimum
Courses selected from among areas of curriculum, social/historical foundations, and educational psychology, or equivalent, with approval of doctoral committee.

Research Methods and Tools – minimum of 15 credits
Minimum of 15 credits, or 2 courses addressing Quantitative Methods and 2 courses addressing Qualitative Methods. Examples of appropriate courses identified in list on concentration website, or equivalent, with the approval of the doctoral committee. Note that the student's doctoral committee may require more than the minimum number of courses/experiences.

Concentration Requirements - 36 hours

Courses must be distributed across two/three disciplines, with the approval of the doctoral committee. (24 Credit hours must be at the 7000-level)

Literacy Studies (DRD)

Prepares research scholars with expertise in literacy processes, literacy instruction, and literacy teacher education.

The major features in-depth exploration of literacy theories and research, the broad study of systematic inquiry skills, apprenticeship learning of various research methodologies, the development of personalized strands of research, and a mentored residency experience in literacy studies.

The Concentration features:

- Literacy research based on the highest standards of discovery, creativity, and intellectual attainment.
- Teaching as a process of interactivity and community involvement in which literacies are viewed as mediated competencies within a participatory culture.
- Service to the Community to enrich the lives of students and teachers by promoting the importance of advocacy and autonomy through the development of literacies in the lives of children, adolescents, and adults.
- Global Perspectives broadened through partnerships in diverse communities that embrace multiple perspectives and globalized literacy practices.

- Technology as a tool for playing, performing, simulating, appropriating, multitasking, distributing cognition, collecting intelligence, judging, networking, navigating, and visualizing. In other words, technology as new media literacies. www.newmedialiteracies.org
- Student Success as a shared responsibility and mutual goal of the doctoral student, faculty, and major.

This Concentration is available for students starting in fall semesters only.

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

One of the following:

- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**
- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4**

An equivalent course in statistics/measurement/research design

One of the following:

- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**

Introductory equivalent selected in consultation with major committee (3-4 credits)

One of the following:

- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Introductory equivalent selected in consultation with major committee (3-4 Credit hours)
Specialized Research Methods Course selected with major committee (3 Credit Hours)

Concentration Requirements -42 hours minimum

Literacy Studies Courses (21 hours minimum; students select 7 courses)

- EDG 7046 Trends and Issues in Educational Policy: Literacy and Teacher **Credit Hours: 3**
- LAE 7718 Linguistic Foundations in Literacy **Credit Hours: 3**
- LAE 7745 Literary Theory and Research in Children's Literature **Credit Hours: 3**
- LAE 7794 Survey of Research on Writing Development and Instruction **Credit Hours: 3**
- LAE 7868 Symbolic Processes of Multimedia Literacies **Credit Hours: 3**
- RED 7745 Research in Reading Instruction **Credit Hours: 3**
- RED 7798 Research in Transdisciplinary Texts and Teaching **Credit Hours: 3**

CELS Professional Development Courses - 12 hours minimum

- EDG 7938 Advanced Graduate Seminar: Introduction to Research **Credit Hours: 3**
- EDG 7939 Advanced Graduate Seminar: Research in Progress **Credit Hours: 3**
- EDH 7325 Supervised Teaching in Childhood Ed & Literacy Studies I **Credit Hours: 3**
- EDH 7326 Supervised Teaching in Childhood Ed & Literacy Studies II **Credit Hours: 3**

Cognate - 9 hours minimum

Recognizing the social, cultural, and developmental factors that affect literacy teaching and learning, we encourage doctoral students to explore fields of study that broaden their knowledge of other disciplines and that offer a different lens through which students may understand and explore literacy studies. We ask students to identify a minimum of three courses to form a cognate. Coursework must be taken at the graduate level, and the cognate is developed in consultation with the major professor and the doctoral committee. The coursework in the cognate is developed in support of the student's research objectives.

Mathematics Education (DMA)

Secondary Education Core - 9 hours minimum

- ESE 7343 Teaching and Learning in the Content Area **Credit Hours: 3**
- EDF 6938 Selected Topics **Credit Hours: 1-4**

Advanced Seminar in Secondary Education (3 Credit Hours) (required)

- PHC 7944 Advanced Applied Practice Experiences **Credit Hours: 1**

Statistics/Measurements/Research Design - 12 hours minimum

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

Note - EDF 6407 is a pre-req to enroll in this course

- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**

Additional research methodology course to be determined by the graduate faculty based on the orientation of the student's research agenda and prior preparation.

Concentration Requirements - 24 hours minimum

- MAE 7138 Assessment in Mathematics Education **Credit Hours: 3**
- MAE 7146 Curriculum History/Research Mathematics Education **Credit Hours: 3** *
- MAE 7655 Technology Issues in Mathematics Education **Credit Hours: 3**
- MAE 7794 Preparing Teachers of Mathematics, K-12 **Credit Hours: 3**
- MAE 7796 Research Issues in Mathematics Education **Credit Hours: 3**

MAE 7xxx Curriculum Design and Research (3 Credit Hours)*
MAE 7xxx Learning Theories in Math Ed (3 Credit Hours)

- MAE 7945 Practicum in Mathematics Education **Credit Hours: 3**

OR

- MAE 7910 Directed Research in Mathematics Education **Credit Hours: 1-19**

Cognate or Electives - 9 hours minimum

MAE students are required to complete a cognate or a set of electives. Courses consistent with the student's program of study selected with the approval of a major committee. Courses in the Electives or Cognate must be taken at the graduate level.

Measurement and Evaluation (DME)

The intent of the concentration is to develop personnel to work in colleges and universities, research centers, school districts, government agencies, commercial test publishing, and major evaluation enterprises. Skills in inquiry and methodology are developed within a programmatic context that encourages growth of knowledge about education, considers important principles of research, and provides an applied setting in which these elements can be fused into professional applications.

Concentration Requirements

Research Methods and Tools: Statistics, Measurement, Evaluation and Research - 25 hours

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- EDF 7437 Advanced Educational Measurement I **Credit Hours: 3**
- EDF 7438 Advanced Educational Measurement II **Credit Hours: 4**
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4**
- EDF 7485 Theory and Practice of Program Evaluation **Credit Hours: 3**
- EDF 7940 Practicum in Educational Planning, Evaluation, and Development **Credit Hours: 1-8**

Concentration Courses in Statistics, Measurement, Evaluation, and Research Methods - 12 hours

Note: Students, in consultation with their major professor and committee, will select one area and a minimum of 12 hours Courses listed are examples of courses

Statistics

- EDF 7412 Application of Structural Equation Modeling in Education **Credit Hours: 3**

- EDF 7474 Applied Multilevel Modeling in Education **Credit Hours: 3**
- EDF 7498 Analysis for Single-Case Experiments **Credit Hours: 3**
- PHC 7059 Advanced Survival Data Analysis **Credit Hours: 3**

Measurement

- EDF 7439 Foundations of Item Response Theory **Credit Hours: 3**
- EDF 7469 Introduction to Computer-Based Testing **Credit Hours: 3**
- EDG 7931 Selected Topics **Credit Hours: 1-4**

Rausch Model (3 Credit Hours)
Factor Analysis (3 Credit Hours) (Proposed SOP 6669)

Evaluation

- EDF 7491 Consulting and Project Management Skills for Evaluators **Credit Hours: 3**
- EDF 7462 Metaevaluation **Credit Hours: 4**
- EDF 7493 Systems Approaches for Program Planning, Evaluation and Development **Credit Hours: 4**
- PHC 6545 Evaluation in Mental Health **Credit Hours: 3**

Research Methods

EDG 7931 Survey Methods (3 Credit Hours)
EDF 7477 Qualitative Research in Education II (3 Credit Hours)

- PHC 6725 Focus Group Research Strategies **Credit Hours: 3**
- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**

Educational Focus - 9 hours minimum

Note: Students, in consultation with their major professor and committee, will take a minimum of 9 hours in Education that are outside the Department of Measurement and Research at the graduate level that will support the student's research objectives. Courses may come from one or more department (i.e., LCACHE, EPS, or T&L).
For example a students with an interest in methodological issues relative to literacy may take the following 3 courses:

- RED 7745 Research in Reading Instruction **Credit Hours: 3**
- LAE 7868 Symbolic Processes of Multimedia Literacies **Credit Hours: 3**
- LAE 7794 Survey of Research on Writing Development and Instruction **Credit Hours: 3**

Science Education (DSC)

The Curriculum and Instruction degree is offered with a concentration area in Science Education. Candidates' programs of study are planned with the approval of a faculty committee based upon previous experience and future goals.

Secondary Education Core - 9 hours minimum

- ESE 7343 Teaching and Learning in the Content Area **Credit Hours: 3**
- EDF 6938 Selected Topics **Credit Hours: 1-4**

Advanced Seminar in Secondary Education (3-6 Credits)

- ESE 7346 Collegiate Teaching in Secondary Education **Credit Hours: 3**

In extenuating circumstances, major may substitute an independent study course if needed by a student. However no more than 3 credit hours in this category can be independent study hours.

Statistics/Measurement/Research Design - 10 hours minimum

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

Selection of one Qualitative Course, with approval from major committee (3-4 Credit Hours)
Selection of additional 7000 level quantitative, qualitative and/or methodological course approved by major committee (3-4 Credit Hours)

Concentration Requirements - 24 hours minimum

- SCE 7895 Philosophy and Nature of Science **Credit Hours: 3**
- SCE 7076 Historical, Social, and Epistemological Foundations of Science Education **Credit Hours: 3**
- SCE 7345 Theories and Practices of Science Teaching and Learning **Credit Hours: 3**
- SCE 7636 Advanced Trends in Science Education **Credit Hours: 3**
- SCE 7697 Socioscientific Issues in Science Education **Credit Hours: 3**
- SCE 7740 Doctoral Research in Science Education **Credit Hours: 3**
- SCE 7910 Directed Research in Science Education **Credit Hours: 1-19**

Graduate Coures from related major areas may be used in this area with permission of individual's doctoral major committee.

Cognate - 9 hours minimum

SCE students may complete a cognate or a set of science education electives.

- SCE 6634 Current Trends in Secondary Science Education **Credit Hours: 3**

Community Building in Science Education (3 Credit Hours) (Proposed SCE 7931)

- SCE 6645 Mathematics and Science Education Policy, Change, and School Improvement **Credit Hours: 3**

Courses consistent with the student's program of study selected with approval of the individual's doctoral major committee. Courses in the Cognate must be taken at the graduate level.

Social Science (DSO)

Secondary Education Core - 6 hours minimum

- ESE 7343 Teaching and Learning in the Content Area **Credit Hours: 3**
- EDF 6938 Selected Topics **Credit Hours: 1-4**

Advanced Seminar in Secondary Education (3-6 Credits)

- ESE 7346 Collegiate Teaching in Secondary Education **Credit Hours: 3**
- SSE 7910 Directed Research in Social Sciences Education **Credit Hours: 1-9**

Note: Under special circumstances, major may substitute an independent study course if needed by a student. However, no more than 3 credit hours in this category can be independent study hours.

Statistics/Measurement/Research Design - 10 hours minimum

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

Note - EDF 6407 is a pre-req to enroll in this course
Selection of one Qualitative Course with approval from major committee. (3-4 Credit Hours)
Selection of additional 7000 level quantitative, qualitative and/or methodological course
approved by major committee. (3-4 Credit Hours)
Or courses to be determined by the graduate faculty based on the orientation of the student's research agenda and prior preparation.

Concentration Requirements - 24 hours minimum

- SSE 7700 Social Science Curriculum and Instruction Issues **Credit Hours: 4**

The requirements are as follows or as recommended by the doctoral coordinator, graduate faculty, or doctoral committee, and approved by the college and/or Office of Graduate Studies.

- SSE 7710 Research in Social Science Education **Credit Hours: 4**
- SSE 7720 Social Science Education Technological Innovations **Credit Hours: 4**
- SSE 7730 Philosophy of Social Science Education **Credit Hours: 4**
- SSE 7945 Applied Research in Social Science Education **Credit Hours: 2** *

*(2 hours repeated with SSE 7730 , SSE 7720 , SSE 7700 and SSE 7710 This course engages SSE students in establishing an active research/scholarly agenda that leads toward independent scholarship and successful, timely completion of the doctoral degree.)

Cognate - 9 hours minimum

SSE students are required to complete a cognate or a set of electives. Courses consistent with the student's program of study are selected with the approval of the student's major committee. Although it is expected that all SSE students will satisfy the "teaching in higher education" requirement through direct experience teaching courses in the major, they may opt to take the proposed "college teaching" course under consideration by the department as an elective or part of their Cognate.

Special Education (DSE)

Focuses on urban special education and university-school partnerships in preparing researchers, teacher educators, and school leaders. Graduates jor will have an informed perspective on ethical issues in the interactions of race, ethnicity, social class, gender, and disability; and the impact of these issues on special education policies, research, teacher education and services.

Graduate will demonstrate knowledge and skills in the design, implementation and maintenance of university-school partnerships; an interdisciplinary grounding in and respect for multiple genres and methods of inquiry; the ability to conceptualize, plan and conduct research; and the ability to value the conceptual and analytical skills of a scholar. The Department emphasizes interdisciplinary research and development. Faculty members in several departments have joint appointments in special education.

Statistics/Measurement/Research Design - 12 hours minimum

In addition to the specialization requirements, all students must complete at least 12 hours of coursework in Measurement/Statistics/Research Design, including:

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**

Two qualitative reserach methods courses (6 hours minimum) (4 Credit Hours)

- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Concentration Requirements - 25 hours minimum

- EEX 7744 Curriculum and Instructional Issues in Urban Special Education **Credit Hours: 3**
- EEX 7815 Research Seminar **Credit Hours: 1-9**
- EEX 7429 Special Education Teacher Education **Credit Hours: 3**
- EEX 7428 Teacher Education in Special Education: Conceptual **Credit Hours: 3**
- EDA 7238 Special Education Law and Policy Issues **Credit Hours: 3**
- EEX 7425 Special Education Leadership Studies **Credit Hours: 1-2**
- EEX 7745 Historical, Ethical, and Disciplinary Foundations of Special Education **Credit Hours: 3**
- EEX 7746 Ethics in Teacher Education and Teacher Development **Credit Hours: 3**

Cognate - 9 hours minimum

Courses selected are consistent with the student's program of study and selected with the approval of a major committee and should be coursework other than in the concentration area. Courses in the cognate area must be taken at the graduate level.

Teacher Education (TED)

Prepares students to become scholars and practitioners in the field of teacher education. The Concentration engages students in course work, research, and professional experience in school and community settings. Graduates will have the knowledge and skills needed to excel in the scholarships of teaching, service and research.

The Concentration features opportunities to:

- Participate in engaged scholarship through collaborative work focused on current educational problems with partner schools and community centers.
- Develop integrated and interdisciplinary perspectives on teacher education practice with a commitment to diversity and exploring global perspectives.
- Explore issues of equity both locally and globally.
- Work both independently and in collaboration with faculty to pursue rigorous research agendas, publish in scholarly journals, and present widely at state, national and international conferences.
- Engage in learning experiences that ensure the candidate possesses an innovative response to key issues in teacher education and their Area of Emphasis (e.g., subject area or level).
- Participate in teacher education programs as teaching assistants.
- Engage in scholarship of teaching and learning.

- EDE 7481 Teacher Education Seminar **Credit Hours: 3** *(Students will enroll at least three times)*

At least three other courses approved by the student's major committee such as:

- EDG 7066 Critical Pedagogy in Teacher Education **Credit Hours: 3**
- ESE 7220 Curriculum Frameworks in Teacher Education **Credit Hours: 3**
- ESE 7346 Collegiate Teaching in Secondary Education **Credit Hours: 3**
- EDF 7946 Supervised Experience in College Teaching **Credit Hours: 1**
- PHA 7626 Advanced Health-System Pharmacy Practice Experience **Credit Hours: 6**
- EDE 7327 Differentiated Supervision & Teacher Professional Development **Credit Hours: 3**
- EDG 7035 Design and Evaluation of Teacher Education Programs **Credit Hours: 3**

Or other courses approved by doctoral committee

Teacher Education Area of Emphasis - 9 hours minimum
A minimum of three courses in teaching and learning in a subject area (e.g., English, Social Studies, Science, Math, Foreign Language); at a level (e.g., Early Childhood, Elementary Education, Middle School, High School); and/or in a specialized area (e.g., Special Education) approved by the student's major committee.

Research Practicum in the Area of Emphasis - 6 hours minimum
Students will be expected to engage in research activities under the direction of a Area of Emphasis faculty member that will lead to the development of the students' knowledge and skills needed to write literature reviews, and design and conduct research studies.

Residency

Students must be registered for nine (9) hours of coursework, two semesters in a twelve-month period. The expectation is that students will work no more than half time employment during the residency period.

Qualifying Examination

Students must demonstrate satisfactory performance on the Doctoral Qualifying Examination before admission to candidacy. (See current College of Education Graduate Handbook, and consult with doctoral graduate major advisor). Additional information is below:

Math Education Concentration
The Qualifying Exam is composed of three distinct sections that represent expected areas of student competency (Synthesis of Math Education Research, Utilization of Professional Expertise, and Evaluation and Design of Research Studies). A student's cognate area is viewed as connected to his or her math experiences, rather than a separate and unrelated area. As such, the cognate will be embedded into the QE as appropriate.

Measurement and Evaluation Concentration
The student will be required to take the doctoral comprehensive qualifying examination on completion of formal coursework as outlined on the approved program of study (or in the semester in which all formal coursework will be completed). The student in consultation with his/her major professor and/or doctoral committee will select one of the two options for the qualifying examinations: a) a 12-hour written examination administered over a 3-day period that will integrate the work in the student's area of concentration, or b) the development of a comprehensive scholarly paper that requires the student to demonstrate a depth of understanding and appropriate application of principles in the areas of measurement, evaluation, research design, statistical analyses, and educational foundations.

Dissertation (4 Credit Hours Minimum)

Refer to the concentration area for specific dissertation requirements.

Students must be admitted to candidacy before they are permitted to enroll in dissertation hours. Students may be required to take additional hours depending on the course of study and or academic deficiencies.

Students complete dissertation hours in the area of their concentration. Below are the minimums. Students may be requried to take additional hours:

- ADE 7980 Dissertation **Credit Hours: 2-30** *(2-18 Credit Hours)*
- ECT 7980 Dissertation **Credit Hours: 2-30** *(12 Credit Hours)*
- EDE 7980 Dissertation **Credit Hours: 2-30** *(4 Credit Hours)*
- EDF 7980 Dissertation **Credit Hours: 2-30** *(12-18 Credit Hours)*
- EDG 7980 Dissertation **Credit Hours: 2-19** *(6-12 Credit Hours)*
- EDH 7980 Dissertation **Credit Hours: 2-30** *(12 Credit Hours)*
- EEC 7980 Dissertation **Credit Hours: 2-30** *(4 Credit Hours)*
- EEX 7980 Dissertation **Credit Hours: 2-30** *(12 Credit Hours)*
- EME 7980 Dissertation **Credit Hours: 2-30** *(6 Credit Hours)*
- LAE 7980 Dissertation **Credit Hours: 2-30** *(4 Credit Hours)*
- MAE 7980 Dissertation **Credit Hours: 2-30** *(4 Credit Hours)*
- MHS 7980 Dissertation **Credit Hours: 2-30** *(24 Credit Hours)*
- RED 7980 Dissertation: Doctoral **Credit Hours: 2-30** *(4 Credit Hours)*
- SCE 7980 Dissertation **Credit Hours: 2-30** *(4 Credit Hours)*
- SSE 7980 Dissertation in Social Science Education **Credit Hours: 2-24** *(4 Credit Hours)*

Other Information

Please be advised that programs of study are designed by the graduate faculty in concert with each individual student and the major and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Educational Program Development, Ed.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 54 post-master's
Level: Doctoral
CIP Code: 13.0301
Dept. Code: CNI
Major/College Codes: EPD ED
Approved 1991

Concentrations:

Educational Innovation (EIN)
Elementary Education (EEE)

Note – not all concentrations are available every semester. Prior to submitting the admission application, check with the Graduate Director to confirm if the concentration of interest is available.

This major shares core requirements with the Ph.D. in Curriculum and Instruction.

Contact Information

College: Education
Departments:

- Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors
Refer to individual concentrations for Contact Information.

The Doctor of Education degree is available in Educational Program Development with concentrations Educational Innovation and Elementary Education. The focus of this degree program is on the improvement of educational practice. Although research skills are recognized as being the basis of any doctoral program, the Ed.D. is considered more a practitioner's than a research degree.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Three letters of recommendation to be submitted directly to the program. These must be from professional sources, and, if possible, should include at least one reference from a USF faculty member.
- Favorable recommendations from program faculty.
- A master's degree from an accredited university in education, a related professional field, or a specialization for which the student plans to develop educational programming or the equivalent bachelors and/or graduate degrees from a foreign institution

- An optional personal interview with the program faculty if the applicant has no previous relationship with the faculty.
- Evidence of two years of successful professional experience in education or an education-related setting.
- A personal statement indicating reasons for applying for the program, pertinent personal and professional qualities and dispositions, and training, experience, and credentials relevant to the pursuit of the doctorate.

Curriculum Requirements

Total Minimum Hours: 54 credit hours post-master's

Shared Core Requirements – 3 hours
Statistics/Measurement/Research Design/Applied Research– 9 hours minimum
Psychological and Social Foundations– 3 hours minimum
Concentration – 15 hours minimum
Electives – 15 hours minimum
Dissertation – 9 hours minimum

Shared Core Requirements (3 Credit Hours)

- EDG 7069 Sustainable Innovation in Education **Credit Hours: 3**

Statistics/Measurement/Research Design/Applied Research (9 Credit Hours Minimum)

Selection of three quantitative, qualitative, applied, or action research courses chosen in consultation with advisor.

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- EDF 7410 Design of Systematic Studies in Education **Credit Hours: 3**
- EDF 7438 Advanced Educational Measurement II **Credit Hours: 4**
- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4**
- EDF 7493 Systems Approaches for Program Planning, Evaluation and Development **Credit Hours: 4**
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Psychological and Social Foundations Requirement (3 Credit Hours)

Course focused on equity, diversity and social justice chosen in consultation with advisor.

- EDF 7145 Cognitive Issues in Instruction **Credit Hours: 4**
- EDF 7655 - Organization Development in Educational Institutions **Credit(s): 4**
- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- EDF 7934 Seminar in Social Foundations of Education **Credit Hours: 4**
- EDF 6938 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (History of Higher Education in the United States)

Concentration Requirements (15 Credit Hours Minimuim)

Students select from the following concentrations:

Educational Innovation (EIN)

The aim of the Concentration is to foster the development of effective and judicious innovators with the capacity to plan, develop, evaluate, and revise educational improvement efforts in their institutional settings.

Students complete 15 credit hours from the following, or other graduate course as approved by the Graduate Director.

- EDG 7695 Problems of Practice in Education **Credit Hours: 3**
- EDG 7936 Graduate Seminar: Leader-Scholar Community **Credit Hours: 3 (6 credits for this program)**
- EDG 7941 Practicum in Educational Innovation **Credit Hours: 1-4 (6 credits for this program)**

Elementary Education (EEE)

Not currently available.

Electives (15 Credit Hours Minimum)

At least four additional 6000 or 7000 level courses selected in consultation with advisor.

Recommended courses:

- ESE 7343 Teaching and Learning in the Content Area **Credit Hours: 3**
- EDG 7207 Transforming the Curriculum **Credit Hours: 3**

Doctoral Qualifying Exam

Students complete one of three options near the completion of coursework. The options are:

- Literature Review
- Portfolio
- Analytical Paper/Essay

Dissertation (9 Credit Hours Minimum)

Students must be admitted to doctoral candidacy before they are permitted to enroll in dissertation hours.

- EDG 7980 Dissertation **Credit Hours: 2-19 (9 credits for this program)**

Department of Educational and Psychological Studies

Exercise Science, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 31.0505
Dept. Code: EXC
Major/College Codes: EDP / ED
Approved 2011

Concentrations available in:

Strength and Conditioning (EST)
Health and Wellness (EHW)

Contact Information

College: Education
Department: Educational and Psychological Studies

Contact Information: http://www.grad.usf.edu/majors

The M.S. in Exercise Science provides and in-depth study of applied human physiology and how it relates to athletic performance and health and wellness. The purpose of the program is to prepare fitness professionals that are equipped to meet the needs of adults in their pursuit of improved health and performance. Exercise science professionals work with adults in leadership positions in areas such as strength & conditioning, worksite health promotion, commercial and community fitness/wellness, hospital/clinical rehabilitation, personal fitness training, and sports performance. In addition, graduates of this program will have the educational background to pursue doctoral education and other advanced degree programs. The major offers three optionsExercise Science, Exercise Science with a concentration in Strength & Conditioning, and Exercise Science with a concentration in Health & Wellness.

Major Research Areas

Environmental and Occupational Health/Heat Stress
Legal Liability, Risk Management, and Fitness Safety
Physical Activity Behavior and Adherence
Psychobiology of Exercise
Sports Nutrition and Performance Enhancement
Strength & Conditioning

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Resume

- 2 letters of recommendation
- Letter of intent (please include career goals, any type of experience related to the field and/or research experience).

To be successful in this major, the following pre-requisite courses are recommended: Anatomy & Physiology I, Anatomy & Physiology II, Nutrition, and Exercise Physiology.

Admissions decisions are based on the following: GPA, relevant coursework, experience in the field, letter of intent, research experience, and letters of recommendation. Applicants should be aware that admission into any graduate major is granted on a competitive basis.

Curriculum Requirements

Total Minimum Hours - 33 hours minimum

Core – 7 hours
General Track or Concentration – 12 hours
Non-thesis – 14 hours electives
Thesis – 11 hours electives, 3 hours thesis

Core Requirements (7 Credit Hours Minimum)

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- PET 6534 Research Methods in Exercise Science **Credit Hours: 3**

General Track or Concentration Requirements (12 Credit Hours Minimum)

Students either select one of the following concentrations, or they complete the general track with 12 hours of graduate coursework selected in consultation with their academic advisor.

Strength and Conditioning (EST) Concentration

- PET 6098 Topics in Strength and Conditioning **Credit Hours: 3**
- APK 6116 Neuromuscular Aspects of Exercise Physiology **Credit Hours: 3**
- PET 6367 Sports Nutrition and Exercise Metabolism **Credit Hours: 3**
- PET 6389 Fitness Assessment and Prescription **Credit Hours: 3**

Health and Wellness (EHW) Concentration

- PET 6003 Theories & Models of Health & Physical Activity **Credit Hours: 3**
- APK 6109 Cardiorespiratory Aspects of Exercise Physiology **Credit Hours: 3**
- PET 6388 Physical Activity, Health, and Disease **Credit Hours: 3**
- PET 6389 Fitness Assessment and Prescription **Credit Hours: 3**

Electives (11 Credit Hours Minimum)

14 hours minimum (non-thesis students) or 11 hours minimum (thesis students)
Electives can be selected from the following, or other graduate course as approved by the faculty advisor and graduate program coordinator.

- APK 6109 Cardiorespiratory Aspects of Exercise Physiology **Credit Hours: 3**
- APK 6116 Neuromuscular Aspects of Exercise Physiology **Credit Hours: 3**
- APK 6406 Psychology of Exercise **Credit Hours: 3**
- PET 6081 - Lifespan Fitness **Credit(s): 3**
- PET 6216 Sport Psychology **Credit Hours: 3**
- PET 6003 Theories & Models of Health & Physical Activity **Credit Hours: 3**
- PET 6098 Topics in Strength and Conditioning **Credit Hours: 3**
- PET 6256 Sport in Society: Contemporary Issues **Credit Hours: 3**
- PET 6367 Sports Nutrition and Exercise Metabolism **Credit Hours: 3**
- PET 6388 Physical Activity, Health, and Disease **Credit Hours: 3**
- PET 6494 Legal Aspects of Physical Activity **Credit Hours: 3**

APK 6902 Controversies in Exercise and Nutritional Science (3 Credit Hours) (PROPOSED)
APK 6511 Science of Physique Enhancement (3 Credit Hours) (Proposed)
APK 6431 Stress Management and Mental Performance (3 Credit Hours) (proposed)

- PET 6906 Independent Study: Professional Physical Education **Credit Hours: 1-6**
- PET 6910 - Research Project **Credit(s): 1-4**
- PET 6947 Internship in Exercise Science **Credit Hours: 1-6**
- PET 6971 Thesis: Physical Education **Credit Hours: 1-5**

Comprehensive Exam

A comprehensive exam is required. For students in the thesis option, the thesis serves in lieu of the comprehensive exam.

Thesis (3 Credit Hours Minimum)

Thesis is not required but considered as elective hours for those who select to do a thesis. Students interested in registering for thesis credit must have the approval of a faculty member that agrees to serve as the thesis chairperson.

- PET 6971 Thesis: Physical Education **Credit Hours: 1-5**

Non-Thesis

Students in the non-thesis option take an additional 3 hours of electives

Learning Design and Technology, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 13.0501
Dept. Code: EAP
Major/College Codes: LDT/ED
Effective: 201808

Concentrations

E-learning Design and Development (LDTE)
Cybersecurity Education (LDTC)
Big Data and Learning Analytics (LDTD)
Game-Based Learning and Analytics (LDTG)

Contact Information

College: Education
Department: Educational and Psychological Studies

Contact Information: http://www.grad.usf.edu/majors

The field of learning technology is growing rapidly in higher education, industry, and k-12 settings. Nearly all major companies, government agencies, school districts, and universities and colleges, are actively recruiting their own learning technology experts. The M.S. in Learning Design and Technology has a foundation in E-learning with focus opportunities. The major is designed to provide a comprehensive curriculum and intensive training to prepare students for the job market of today and emerging fields of tomorrow in K-12 schools, higher education, industry, and military or other governmental agencies where the design, development, implementation, and evaluation of online learning, game-based learning, cybersecurity education, and learning analytics take place.

Major Research Areas
E-learning design and development; Cybersecurity education; Big data and learning analytics; and Game-based learning and analytics.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- Two Letters of Recommendation
- Resume or vita documenting their work and educational experiences to date
- A one-page Goals Statement describing the applicant's motivation for entering the M.Ed. program, what s/he hopes to achieve upon completion of the program, and the number of courses s/he plans to take each semester while in the program.

The College of Education and the University Graduate Admissions office may impose additional requirements. Please be sure to review the admission information and requirements for BOTH the College of Education and the Graduate Admissions office.

Curriculum Requirements

Total Minimum Credit Hours - 33 hours

Core – 21 hours
Concentration or Electives – 9 hours
Capstone – 3 hours

Students either choose one of the concentrations below or complete 9 hours of electives chosen in consultation with the Graduate Director.

Core (21 Credit Hours)

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- EME 6055 Current Trends in Instructional Technology **Credit Hours: 3**
- EDF 6284 Problems in Instructional Design for Computers **Credit Hours: 3**
- EME 6457 Distance Learning **Credit Hours: 3**
- EME 6347 Digital Media and Learning **Credit Hours: 3**
- EME 6207 Web Design **Credit Hours: 3**
- EME 6356 Introduction to Big Data and Learning Analytics **Credit Hours: 3**

Concentration Requirements (9 Credit Hours)

E-learning Design and Development (LDTE)

- EME 6419 Motivational Design for Learning Technology **Credit Hours: 3**
- EME 6235 Technology Project Management **Credit Hours: 3**

Choose one:

- EME 6208 Interactive Media **Credit Hours: 3**
- EME 6215 Instructional Graphics **Credit Hours: 3**
- EME 6209 Digital Video **Credit Hours: 3**

Cybersecurity Education (LDTC)

- EME 6016 Digital Citizenship and Online Safety **Credit Hours: 3**
- EDG 6436 Cybersecurity in the Schools **Credit Hours: 3**

Choose one:

- RED 6449 Literacy and Technology **Credit Hours: 3**
- EME 6053 Internet in Education **Credit Hours: 3**

- EME 5317 Technology Leadership in Education **Credit Hours: 3**

Big Data and Learning Analytics (LDTD)

- EME 6348 Predictive Learning Analytics **Credit Hours: 3** (Using big data for understanding student success)
- EME 6346 Data Visualization in Education **Credit Hours: 3** (Using data in reporting)

Choose one:

- EME 6817 Data in Assessment and Accreditation **Credit Hours: 3**
- EME 6614 Games Analytics for Learning **Credit Hours: 3**

Game-Based Learning and Analytics (LDTG)

- EME 6157 Game Design & Development for Learning **Credit Hours: 3**
- EME 6614 Games Analytics for Learning **Credit Hours: 3**

Choose one:

- EME 6215 Instructional Graphics **Credit Hours: 3**
- EME 6209 Digital Video **Credit Hours: 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**

Electives (9 Credit Hours)

Students who choose electives in lieu of a concentration select 9 hours of graduate coursework in consultation with the Graduate Director.

Capstone (3 Credit Hours)

choose one

- EME 6613 Development of Technology-Based Instruction **Credit Hours: 3**
- EME 6936 Applications of Computers as Educational Tools **Credit Hours: 3** (Internship)

Comprehensive Exam

The portfolio that is part of the Capstone is used in lieu of a comprehensive exam.

During the final semester of the program, each Master's candidate is required to submit an electronic portfolio (E-Portfolio) that highlights his/her Instructional Design/Technology (IDT) abilities, skills, and performance they acquired from the program course work. Through the collection of digital projects/products (aka. course artifacts), Masters' candidates present not only a record of their studies but also their competencies in IDT to potential employers or institutions for doctoral studies. The E-Portfolio may be developed with any Website development services (USF Webspace or other free hosting services such as google site, Weebly, Wix etc.) where reviewers can access without login credentials. The E-Portfolio takes the place of a comprehensive exam and must address five areas of national standards developed by the Association for Educational Communications & Technology (AECT) in 2012.

Thesis/Non-Thesis

This is a non-thesis program.

School Psychology, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 35
Level: Masters*
Program Status: Active
CIP Code: 42.2805
Dept. Code: EDF
Major/College Codes: ASP EJ
Approved 1972
**Only available when combined with the Ed. S. or Ph.D.*

Contact Information

College: Education
Department: Educational and Psychological Studies

Contact Information: http://www.grad.usf.edu/majors

The M.A. degree in School Psychology is offered only when combined with the Ed.S. and/or Ph.D. degrees. The M.A. in School Psychology is not a terminal degree and cannot be used for certification or licensure as a school psychologist.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Admission occurs once each year for the Fall class. The School Psychology program is a limited access program. This means that only a limited number of students are able to be accepted each year.

Prerequisite Coursework for Admission

- An undergraduate (or graduate) course in Statistics
- An undergraduate (or graduate) course in Tests and Measurements (including issues such as reliability, validity, standard error of measurement, etc.)
- An undergraduate (or graduate) course in Research Methods or Experimental Design with a lab component.

Required Admissions Materials
A complete application includes the following:

- Submit official GRE scores (Note: Verbal, Quantitative, and Analytical Writing scores are required).
- Provide a statement of professional goals. In a 2-3 page statement, explain your immediate, intermediate, and long term goals as well as your research interests. Professional goals and research interests must be compatible with the School Psychology Program.
- Submit three letters of recommendation from professionals who are familiar with your scholarship and work history.

- Demonstrate the ability to write professionally by submitting a scholarly paper completed as part of your prior course work.
- If invited for an interview, a) present self professionally in an oral interview with two or more faculty members and graduate students, and b) provide a writing sample related to a relevant topic to the field of school psychology during the interview process.

Curriculum Requirements

Total Minimum Hours: 35 Credit Hours

Core - 14 Credit Hours
Specialization - 21 Credit Hours

Note: Students may be required to take additional hours depending on the course of study and or academic deficiencies.

Core Requirements (14 Credit Hours)

- EDF 6938 Selected Topics **Credit Hours: 1-4** Lifespan Development (3 Credit Hours) (Proposed)
- EDF 6215 Learning Principles Applied to Instruction **Credit Hours: 4**
- EDF 6217 Behavior Theory and Classroom Learning **Credit Hours: 4**
- SPS 6101 Child and Adolescent Behavior Disorders **Credit Hours: 4**

Specialization Requirements (21 Credit Hours)

Note: Students may be required to take additional hours depending on the course of study and academic deficiencies.

- SPS 6936 Graduate Seminar in School Psychology **Credit Hours: 1-3 (3 credits for this program)**
- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- SPS 6197 Psychoeducational Diagnosis and Prescription I **Credit Hours: 4**
- SPS 6198 Psychoeducational Diagnosis and Prescription II **Credit Hours: 4**
- EDF 6288 Instructional Design I **Credit Hours: 3**
- EDF 6213 Biological Bases for Learning Behavior **Credit Hours: 3**

Practicum

Students must complete a school-based practicum consisting of eight (8) hours per week for a minimum of 32 weeks (2 semesters) for a total of 256 contact hours.

Comprehensive Exam

Prior to clearance for the MA degree, candidates must satisfactorily complete a portfolio of performance-based accomplishments that is evaluated by the School Psychology faculty.

School Psychology, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 84 (post-masters)
Level: Doctoral
Program Status: Active
CIP Code: 42.2805
Dept. Code: EDF
Major/College Codes: DSG ED
Approved 2001

Contact Information

College: Education
Department: Educational and Psychological Studies

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. degree program in School Psychology at the University of South Florida is offered through the College of Education's Educational and Psychological Studies. The Program has been designed specifically for training in school psychology and has been developed to meet all relevant national accreditation standards. The Ph.D. program is fully accredited by the American Psychological Association and fully approved by the National Association of School Psychologists and the Florida Department of Education. Students who complete the School Psychology Training Program at USF automatically meet the academic and field training requirements for certification as a Nationally Certified School Psychologist (N.C.S.P.)

The Ph.D. program in School Psychology is committed to training professionals who have expertise in the depth and diversity of both psychology and education. This training is accomplished within a scientist-practitioner model that emphasizes comprehensive school psychological services using a social and cognitive behavioral learning theory orientation that recognizes the impact of children's individual differences and the importance of multicultural awareness and skills. Graduates of the Ph.D. program move to positions of employment as university faculty and researchers, as psychologists in school, hospital, and agency settings, and as program leaders in applied settings. The program also offers professional development opportunities for practitioners in the field.

Accreditation
Accredited by NCATE, and the American Psychological Association, and Approved by the National Association of School Psychologists.

Major Research Areas
Pediatric School Psychology, Organizational Development and Consultation, Academic Assessment and Intervention, Problem-Solving and Response to Intervention, School-Based Mental Health Services, Positive Psychology, Behavior Disorders, Home-School Collaboration, Gender-Related Issues in Education and Adolescent Development, and ADHD.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Admission occurs once each year for the Fall class. The School Psychology program is a limited access program. This means that only a limited number of students are able to be accepted each year

For all admission, all programs require earned degrees from regionally accredited institutions. International students are also required to submit passing TOEFL scores

Prerequisite Coursework for Admission

- An undergraduate (or graduate) course in Statistics
- An undergraduate (or graduate) course in Tests and Measurements (including issues such as reliability, validity, standard error of measurement, etc.)
- An undergraduate (or graduate) course in Research Methods or Experimental Design with a lab component.

Required Admissions Materials

- All admissions materials should be submitted directly to our program. A complete application includes the following:
- A completed Application to Graduate Studies. All applications must be submitted online and can be located on our program website: http://www.usf.edu/education/schoolpsych/
- The application fee - payable by credit card.
- Submit official GRE scores (Note: Verbal, Quantitative, and Analytical Writing scores are required; scores should not be more than 5 years old).
- Provide official transcripts from all colleges and universities where you have completed coursework. Applicants must have an undergraduate GPA of 3.5 or higher in upper division level undergraduate coursework.
- Provide a statement of professional goals. In a 2-3 page statement, explain your immediate, intermediate, and long term goals as well as your research interests. Professional goals and research interests must be compatible with the School Psychology Program.
- Submit three letters of recommendation from professionals who are familiar with your scholarship and work history.
- Demonstrate the ability to write professionally by submitting a scholarly paper completed as part of your prior course work.
- If invited for an interview, a) present self professionally in an oral interview with two or more faculty members and graduate students, and b) provide a writing sample related to a relevant topic to the field of school psychology during the interview process.

Curriculum Requirements

The Doctor of Philosophy (Ph.D.) degree consists of approximately 84 semester hours beyond the Masters degree in School Psychology and includes advanced leadership coursework and practica experiences, concentration and area of emphasis courses in school psychology, a 2,000 clock hour internship, and the dissertation. A Master of Arts (M.A.) degree is earned by most students during the first year of their Ph.D. program. However, the M.A. is not considered a terminal degree and is not sufficient for state certification in school psychology.

Note: Students may be required to take additional hours depending on the course of study and or academic deficiencies.

Core Requirements

Research Competencies

**or similar course as recommended by doctoral committee and approved by the College and/or Office of Graduate Studies.*

- EDF 7410 Design of Systematic Studies in Education **Credit Hours: 3**
- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- EDF 7484 Statistical Analysis for Educational Research III **Credit Hours: 4** *
- SPS 7980 Dissertation **Credit Hours: 2-30 (9 credits for this program)**

Psychological Foundations

- SPS 6101 Child and Adolescent Behavior Disorders **Credit Hours: 4 (3 credits for this program)**
- EDF 6938 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Social Psychology)
- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- EDF 6213 Biological Bases for Learning Behavior **Credit Hours: 3**

Consultation/Intervention/Problem-Solving

- SPS 6700 - Intervention I **Credit(s): 4**
- SPS 6701 - Intervention II **Credit(s): 4**
- SPS 6702 - Intervention III **Credit(s): 4**
- SPS 7205 Advanced Consultation Processes in School Psychology **Credit Hours: 2-4 (3 credits for this program)**
- SPS 7700 Advanced Psychoeducational Interventions **Credit Hours: 2-4 (3 credits for this program)**

Professional Practice

- SPS 7936 Advanced Seminar in School Psychology **Credit Hours: 1-3 (2 credits in this program)**
- SPS 6940 Practicum in Psychoeducational Interventions **Credit Hours: 1-4 (2 credits in this program)**
- SPS 6941 Practicum in Psychoeducational Interventions **Credit Hours: 1-4 (2 credits in this program)**
- EDG 7931 Selected Topics **Credit Hours: 1-4 (2 credits in this program)**
- SPS 7090 Supervision Processes in School Psychology **Credit Hours: 4**
- SPS 6947 Internship **Credit Hours: 1-9 (16 credits for this program)**

Area of Emphasis

All doctoral students in School Psychology must specialize in at least one Area of Emphasis. An area of emphasis is defined by course work, practice, research, and internship experiences taken by the student. Possible Areas of Emphasis include: Pediatric School Psychology, Organizational Development and Consultation, Academic Assessment and Intervention, Problem-Solving and Response to Intervention, School-Based Mental Health Services, Positive Psychology, Behavior Disorders, Home-School Collaboration, Gender-Related Issues in Education and Adolescent Development, and ADHD.

Qualifying Examination

The purpose of the qualifying examination is to evaluate the student's ability to apply and synthesize the skills and knowledge acquired during graduate study. Students must successfully complete the qualifying examination and complete all required coursework before admission to doctoral candidacy.

Tests or Examinations

All students must complete the General Knowledge Exam prior to internship. It is recommended that students take both the General Knowledge Examination and the Professional Education Examination (required for degree completion) at the same time. Both of these requirements should be completed as a part of the Ed.S. Degree. All students are required to take and pass the National Association of School Psychology Certification Exam during the internship year, prior to graduation.

Residency Requirement

University academic residency is defined as registration for at least 9 semester hours, two semesters in a 12-month period.

Cybersecurity Awareness and Education Graduate Certificate

This program is offered fully online.

Certificate Code: XAW
Approved: 201701

Description

Broadly recognized as a critical service supporting the modern workforce and educational institutions, cybersecurity is no longer the domain of a single individual or department. Emerging from a renewed focus on fostering cultures of cyber security within schools, and families, there is an ever increasing need for trained cybersecurity educators and awareness specialists who focus on the unique needs of educational settings. The Cybersecurity Awareness & Education graduate certificate provides students with an advanced introduction to cybersecurity awareness and training, preparing them for roles as leaders and educators throughout K – 12 schools and higher education.

Course Location/Delivery

The Certificate is offered fully online and at the Tampa campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Open to any undergraduate degree, but preference for degrees in Education, Computer Science or related programs.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

- EME 6016 Digital Citizenship and Online Safety **Credit Hours: 3**
- RED 6449 Literacy and Technology **Credit Hours: 3**
- EDG 6436 Cybersecurity in the Schools **Credit Hours: 3**

And one of the following:

- EME 6053 Internet in Education **Credit Hours: 3**
- EME 5317 Technology Leadership in Education **Credit Hours: 3**

Time Limit / Average Time to Completion

5 years

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Diversity in Education Graduate Certificate

This program is offered fully online.

Curriculum Code: **XDV**

Description

The Certificate addresses diverse issues in education by social class, race/ethnicity/culture, gender, sexuality and exceptionality. Additionally, the courses define policy and practice problems associated with education and health/welfare in an increasingly pluralistic society.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

A total of 12 credit hours are required There are (7) eight hours of requird coursework:

- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- EDF 6705 Gender and the Educational Process **Credit Hours: 3**

Electives

Select two courses, at least five (5) hours, from the following list,

- EEC 6415 EC: Diversity in Home and School **Credit Hours: 3**
- FLE 6167 Cross-Cultural Issues in Teaching ESOL **Credit Hours: 3**
- MHS 6420 Multicultural Counseling with Diverse Populations **Credit Hours: 3**
- SDS 6701 Issues in Diversity **Credit Hours: 2 ***
- RED 6656 Literature for a Diverse Society **Credit Hours: 3**
- ECW 6696 Equity and Access in the New Economy **Credit Hours: 3**
- ADE 7677 Emerging Trends in Adult Education: Critical Race Theory **Credit Hours: 3**
- EDF 6863 Contemporary Issues and Trends in International Education **Credit Hours: 3**

- EDF 6697 Learning and Linguistic Diversity in a Transnational Context **Credit Hours: 3**
- *these courses have pre-requisites and may not be available to all students

Courses may be substituted with approval of the Certificate Director

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

elearning Design and Development Graduate Certificate

This program is offered fully online.

Curriculum Code: **XED**

Description

The elearning Design and Development Graduate Certificate is for professionals who wish to develop and apply current multimedia skills to effectively present and learn how to incorporate multimedia into interactive, educational, online applications. Certificate course credit may apply toward degree programs. Courses are available evenings or, in some cases, on-line through the Internet.

Course Location/Delivery

Partial, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- EME 6936 Applications of Computers as Educational Tools **Credit Hours: 3**
- EME 6936 Applications of Computers as Educational Tools **Credit(s): 3**
- EME 6936 Applications of Computers as Educational Tools **Credit(s): 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**

Electives

none

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Evaluation Graduate Certificate

Certificate Code: XVE
Approved 201008

Description

The Graduate Certificate in Evaluation provides an opportunity for graduate students and other professionals to gain a working understanding of contemporary evaluation theory and practice; tools and techniques used in evaluation; standards of quality for professional evaluation practice; evaluation ethics; appropriate evaluation uses; and impact of evaluation on decision making. The certificate is designed to prepare professionals for staff positions in evaluation, in schools or non-school organizations. Participants will be immersed in diverse real-world learning experiences from the beginning of the certificate that meet their specific interest and needs.

Course Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (13 Credit Hours)

- EDF 6461 Foundations of Applied Evaluation **Credit Hours: 3**
- EDF 6941 Practicum in Measurement, Evaluation, and Research **Credit Hours: 1-4**
- EDF 7462 Metaevaluation **Credit Hours: 4**

And one of the following:

- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**
- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
- EDF 6432 Foundations of Measurement **Credit Hours: 3**

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Florida Digital/Virtual Educator Graduate Certificate

This program is offered fully online.

Curriculum Code:

Description

The Florida Digital/Virtual Educator graduate certificate program is designed for teachers, media specialists, technology specialists, administrators and other educational professionals who recognize the importance of integrating technology into K-12 curriculum in both classroom and online learning environments. Learn how to transform learning environments and support student learning in ways that could not be done without technology. All courses are available online through the Internet. Certificate course credit may apply toward the M.Ed. degree program. The Florida Virtual School has endorsed this certificate, and the FLVS will give students who earn this certificate preferential hiring for virtual teaching positions.

Course Location/Delivery

Online, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- EME 5403 Computers in Education **Credit Hours: 3**

or

- EME 6425 Technology for School Management **Credit Hours: 3**

- EME 6936 Applications of Computers as Educational Tools **Credit Hours: 3**

or

- EME 7458 Research in Distance Learning **Credit Hours: 3**

- EME 6936 Applications of Computers as Educational Tools **Credit(s): 3** (Internet in Education)
- One of elective course selected from the list below.

Electives

- EME 6936 Applications of Computers as Educational Tools **Credit Hours: 3** (Current Trends in Ed Tech)
- EME 6936 Applications of Computers as Educational Tools **Credit(s): 3** (Interactive Media)

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Instructional Technology: Web Design Graduate Certificate

This program is offered fully online.

Curriculum Code: **XWD**

Description

The Web Design graduate certificate is designed for professionals working in private industry or education who wish to enhance their ability to plan, design, create, and publish effective interactive, multimedia, educational web applications. Certificate course credit may apply toward the M.Ed. degree program. All courses are available online through the Internet. The Florida Virtual School has endorsed this certificate, and the FLVS will give students who earn this certificate preferential hiring for instructional designer positions.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- EME 6207 Web Design **Credit Hours: 3**
- EME 6215 Instructional Graphics **Credit Hours: 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**

Electives

Choose one of the following

- EME 6208 Interactive Media **Credit Hours: 3**
- EDF 6284 Problems in Instructional Design for Computers **Credit Hours: 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Qualitative Research Graduate Certificate

Certificate Code: XQR
Approved 201701

Description

The Qualitative Research Graduate Certificate provides an opportunity for graduate students and other professionals to gain a broad and in depth knowledge of qualitative reach, with an emphasis on the designs and methods used in studies of educational programs, processes, initiatives, settings and policies. Qualitative research is increasingly conducted and influential in educational research across disciplines, including adult, technology, science, public health, higher, Pre-K–12, and mental health education; and in other science, social science, and health disciplinary areas with educative aims.

Course Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None

Curriculum Requirements (13 Credit Hours)

- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**

Nine (9) Credit Hours of additional coursework are required. Students may choose from the following list, or substitute a graduate course approved by the Graduate Certificate Director.

- EDF 7426 Action Research in Schools **Credit Hours: 3**
- EDG 7368 Visual Research Methods in Education **Credit Hours: 3**

Any graduate course in qualitative research (3 Credit Hours)

Time Limit / Average Time to Completion

The Certificate can be completed in two years.

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Department of Leadership, Counseling, Adult, Career, and Higher Education

Adult Education, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 13.1201
Dept. Code: LEA
Major/College Codes: AAE ED
Approved 1962

Concentrations:

Human Resource Development (HRD)

Contact Information

College: Education
Department: Leadership, Counseling, Adult, Career, and Higher Education (L-CACHE)

Contact Information: http://www.grad.usf.edu/majors

The Adult Education major provides professional development opportunities to individuals concerned with the learning of adults. It includes courses and experiences for persons employed in or intending to enter the field of adult education. This degree is intended to help individuals work with adult learners in a wide variety of school and non-school settings. It is intended for holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida. This Adult Education major is a Plan III, non-certification option.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Admission to the M.A. in Adult Education is based on a holistic evaluation of the applicants' demonstrated potential to complete successfully all of the course and research requirements specific to the major. Applications are considered on a continuous basis throughout the year. Success in the major requires excellent presentation and high quality writing skills, scholarship, and a commitment to systematic inquiry. The admissions committee will consider each applicant in light of his or her qualifications and likelihood of success. The faculty takes into account all of the information, and balances previous grade point averages, test scores, previous success in graduate course work, recommendations, and professional goals.

Admission Process
For consideration for admission, students must submit the following:

- A clear and detailed statement of professional and personal goals describing the reasons that earning the degree is important to those goals;
- Two letters of recommendation, preferably at least one from a current or former professor who will attest to the applicant's likelihood of success in a graduate major;

- A grade point average while classified as an upper division student in a baccalaureate degree at a regionally accredited university of 3.00 on a 4.00 scale; or a Master's degree in a related field from a regionally accredited institution with an overall GPA of at least 3.50 on a 4.00 scale; or if the upper division undergraduate GPA is less than 3.00, the applicant must also have GRE Scores;
- have proof of educational or professional experience;
- obtain favorable recommendations for admission at the department and college levels; and
- satisfy any additional academic requirements or prerequisites identified by the major.

In exceptional cases, students not meeting the above criteria may be considered for admisson by successfully completing at least 6 graduate semester hours of coursework taught by an adult education major faculty member. Students may additionally submit documentation of their potential for success with inclusion of the following:

- Successful professional experiences related to the academic major and professional goals of the applicant;
- Demonstrated commitment to personal and professional growth and development and to the completion of the coursework and project demands of the major; and
- Excellent communication skills.

International Students:

In addition to the university requirements, applicants to the College of Education must provide the following:

- the equivalent bachelors and/or graduate degrees from a foreign institution
- A social security number in majors requiring practica or internships; and
- Other information as required by the major of interest, (e.g. GRE scores, etc.)

Curriculum Requirements

A minimum of 36 graduate semester hours is required for the master's degree, at least 16 hours of which must be at the 6000 level. Courses at the 7000 level are advanced graduate level courses and thus are inappropriate for the master's degree program. This major is available as a Plan III non-certification option.

Total Minimum Hours (non-thesis option) **36 hours**

Please be advised that major and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards and accreditation criteria.

Core Requirements (6 Credit Hours)

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**

or

- EDF 6432 Foundations of Measurement **Credit Hours: 3**

- and one approved Psychological or Social Foundations course **Credit(s): 3**

General Adult Education Requirements (11 Credit Hours)

- ADE 6080 Adult Education in the United States **Credit Hours: 4**
- ADE 6385 The Adult Learner **Credit Hours: 3**
- ADE 6966 Final Master's Seminar **Credit Hours: 4** (prior approval needed)

Concentration Requirements (18 Credit Hours)

Human Resource Development (HRD)

Offered from the Department of Educational Measurement and Research.

Description
The Adult Education major provides professional development opportunities to individuals concerned with the learning of adults. It includes courses and experiences for persons employed in or intending to enter adult education as a field of study. This degree is intended to help individuals work with adult learners in a wide variety of school and non-school settings. It is intended for holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida. This Adult Education degree is a Plan III, non-certification option. A concentration in Human Resource Development (HRD) is available to currently enrolled students in the Master of Arts Adult Education degree. The HRD concentration specializes in Business and Industry learning and organizational development.

Concentration Requirements (13 Credit Hours Minimum)

In addition to the Major requirements, students must complete the following concentration requirements:

Remaining hours to be selected from among:

- ADE 6160 Program Management in Adult Education **Credit Hours: 3**
- ADE 6197 Adult Basic Education **Credit Hours: 4**
- ADE 6280 - Administration in Local Adult Education Programs **Credit(s): 4**
- ADE 6287 Supervision of Local Adult Education Programs **Credit Hours: 4**
- ADE 6370 Human Resource Development **Credit Hours: 3**
- ADE 6946 Practicum in Adult Education **Credit Hours: 2-6**
- ADE 6161 Curriculum Construction in Adult Education **Credit Hours: 4**
- ADE 6360 Methods of Teaching Adult Education **Credit Hours: 3**
- ADE 6906 Independent Study **Credit Hours: 1-19 (2-19 credits for this program)**
- ADE 6198 Effective Continuing Education for Professionals **Credit Hours: 3**

Requirements Outside the Concentration (12 Credit Hours)

At least one graduate level course (3 credits minimum) must be taken outside the Leadership, Counseling, Adult, Career, and Higher Education (L-CACHE) department. Other courses may be selected as part of the remaining hours needed for degree completion based upon the student's selection and major advisor's approval, and may be selected from coursework throughout the university.

Comprehensive Examination

Written Exam Required

Career and Technical Education, M.A.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 13.1320
Dept. Code: LEA
Major/College Codes: ACT ED
Approved 2010

Contact Information

College: Education
Department: Leadership, Counseling, Adult, Career, and Higher Education (L-CACHE)

Contact Information: http://www.grad.usf.edu/majors

Contact department for information.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Faculty in the CTE major use a process for consideration of admission that encompasses the following items:

- Relevant experience in the field of Career & Technical Education (or closely related field):
- Certification in a Career and Technical Education major area or closely related area (a statement of current certification status in letter of application is sufficient documentation). Certification is not required for admission to Plan III;
- In exceptional cases, a student with an upper-level undergraduate GPA of 2.50-2.99 may be considered for admission (based on age of the degree, discipline, institution and other considerations). In each of those cases, the student must earn a 3.5 GPA in the first two courses in the major to be permitted to continue
- A letter of application containing a statement of professional goals
- A current resume or vita.

Special Instructions for International Students:
In addition to the University requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships; and
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Curriculum Requirements

(Plan I, 30 hours minimum; Plan III, 30 hours minimum)

Core Requirements:

Plan I: Psychological or Social Foundations course – 3 hrs. min. from the College's approved course listing or ADE 6385

Plan III: Psychological or Social Foundations courses – 6 hrs. min. from the college's approved course listing or ADE 6385. (Selection may also include MHS 6340 Career Development)
Research – Improving CTE Programs, ECT 6767 or EDF 6481 Foundations of Educational Research – 3 hours

Concentration Requirements:

18 SH in Career & Technical Education (15 SH for those holding National Board Certification) Proof of National Board Certification must be provided.

Students must select concentration coursework from the courses below.

- ECT 5386 Preparation and Development for Teaching **Credit Hours: 4**
- ECT 6661 Trends and Issues in Career and Technical Education **Credit Hours: 3**
- EVT 6665 - School & Community Relations (formerly 6664)
- ECT 6197 Enhancing Career and Technical Education Curriculum **Credit Hours: 3**
- ECW 6264 - Administration of Vocational Programs
- ECW 6696 Equity and Access in the New Economy **Credit Hours: 3**
- ECW 6265 - Supervision of Vocational Programs
- ECT 6948 Practicum: Industrial-Technical Education **Credit Hours: 3-6**
- ADE 6360 Methods of Teaching Adult Education **Credit Hours: 3**

Electives:

Graduate level electives may be substituted for selected concentration courses with the advisor's approval.

Field Experience: (3 Credit Hours Minimum)

Another course may be considered for substitution if the student has recent experience in their occupational field. The substitution requires approvals at the major and the college levels.

- ECT 6766 Emerging Workplace Competencies **Credit Hours: 3**

Comprehensive Examination:

Students will maintain a comprehensive portfolio and submit it at the end their major.

Thesis:

there is no thesis option in this major.

Counselor Education, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 52
Level: Masters
CIP Code: 13.1101
Dept. Code: EDF
Major/College Codes: AGC ED
Approved 1965

Concentrations:

Career Counseling (CRC)
Clinical Mental Health Counseling (CMH)
School Counseling (SCL)

Contact Information

College: Education
Department: Educational and Psychological Studies

Contact Information: http://www.grad.usf.edu/majors

The Counselor Education major provides students with the general counseling skills needed to become professional counselors. Graduates are trained to assess problems, counsel clients, select appropriate intervention strategies and consult with other professionals and administrators. Three concentraareas are available: School Counseling (Plan II), Clinical Mental Health, and Career Counseling. For students who prefer to work in community based counseling positions rather than in elementary or secondary schools, there are two Plan III options: (a) Mental Health Counseling and (b) Career Counseling.

Accreditation:
Accredited by the Council for the Accredication of Educator Programs (CAEP).
Major Research Areas:
Multicultural counseling and development, career development, play therapy, cognitive-behavioral interventions, community mental health, and counselor education and supervision.

Admissions Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Requirements also include:

- Graduate Record Examination (GRE) Score is required with a preferred score of at least the 50th percentile Verbal and the 50th percentile Quantitative (writing not required) Or A Miller's Analogy Test (MAT) score of at least 50

- Students who have GRE subtest scores of less than the 50th percentile or MAT scores of less than 50 must have GPAs above 3.20 in order to be considered for admission.
- CLAST/GKT required for applicants interested in the School Counseling Concentration
- Proof of educational or professional experience
- Three Letters of recommendation
- Personal Statement
- Interview
- Resume

International Students

In addition to university requirements, applicants to the College of Education must provide the following:

- A social security number in majors requiring practica or internships;
- Other information as required by the major of interest, (e.g. GRE scores, etc.)

Curriculum Requirements

Total Minimum Hours - 47 hours minimum

Core – 7 Credit Hours
Additional required courses – 24 Credit Hours
Concentration – 16 Credit Hours minimum

Core Requirements (7 Credit Hours Minimum)

- EDF 6354 Human Development and Personality Theories **Credit Hours: 4**
- EDF 6481 Foundations of Educational Research **Credit Hours: 3**

Additional Required Courses: (24 Credit Hours Minimum)

- MHS 6006 Trends and Principles of the Counseling Profession **Credit Hours: 3** *(3 Credit Hours)*
- MHS 6420 Multicultural Counseling with Diverse Populations **Credit Hours: 3**
- MHS 6200 Assessment and Appraisal Procedures **Credit Hours: 3** *(3 Credit Hours)*
- MHS 6340 Career Development **Credit Hours: 3** *(3 Credit Hours)*
- MHS 6400 Counseling Theories and Practices **Credit Hours: 3** *(3 Credit Hours)*
- MHS 6311 Online Services in Counseling and Helping Professions **Credit Hours: 3**
- MHS 6509 Group Counseling Theories and Practices **Credit Hours: 3** *(3 Credit Hours)*
- MHS 6700 Legal and Ethical Issues in the Counseling Profession **Credit Hours: 3**

Concentration Requirements

Students select from the following concentrations:

Career Counseling Concentration (16 Credit Hours Minimum)

- MHS 6800 Practicum in Counseling Adolescents and Adults **Credit Hours: 4**
- MHS 6601 Consultation for the Counseling Profession **Credit Hours: 3**
- MHS 6341 Career Program Design and Evaluation **Credit Hours: 3**
- MHS 6887 Internship in Career and College Counseling **Credit Hours: 3-6 (6 credits for this program)**

School Counseling Concentration (Plan II) (41 Credit Hours Minimum)

- EDF 6217 Behavior Theory and Classroom Learning **Credit Hours: 4**
- MHS 6470 Human Sexuality Issues for Counselors **Credit Hours: 3** *(3 Credit Hours)*
- MHS 6450 Counseling Substance Abuse in School and Community **Credit Hours: 3** *(3 Credit Hours)*

- MHS 6800 Practicum in Counseling Adolescents and Adults **Credit Hours: 4**

or

- SDS 6801 Practicum in Counseling Children **Credit Hours: 4**

- MHS 6418 School Counselor Accountability and Curriculum **Credit Hours: 3**
- MHS 6601 Consultation for the Counseling Profession **Credit Hours: 3**
- EDG 6931 Selected Topics in Education **Credit Hours: 1-4** (Reading and Research Methods)
- EDF 6217 Behavior Theory and Classroom Learning **Credit(s): 4 (3 credits for this program)**

Human Sexuality Issues (3 Credit Hours) (MHS 6417)

- SDS 6820 Internship in School Counseling **Credit Hours: 3-6**
- RED 6786 - Research & Methods in Reading **Credit(s): 3**
- TSL 6700 ESOL for School Psychologists and School Counselors **Credit Hours: 3**

Clinical Mental Health Counseling Concentration (25 Credit Hours Minimum)

- MHS 6800 Practicum in Counseling Adolescents and Adults **Credit Hours: 4**
- MHS 6620 Counseling in Community Setting **Credit Hours: 3**
- MHS 6070 Study of Mental Disorders for Counselors **Credit Hours: 4 (3 credits for this program)**
- MHS 6450 Counseling Substance Abuse in School and Community **Credit Hours: 3 (3 credits for this program)**
- MHS 6470 Human Sexuality Issues for Counselors **Credit Hours: 3 (3 credits for this program)**
- MHS 6885 Internship in Community Agency Counseling **Credit Hours: 3-6 (9 credits for this program)**

Other Information

Please be advised that major and/or course requirements are subject to change, per state legislative mandates, Florida Department of Education program approval standards, and accreditation criteria. Graduate Certificates are also available in several areas.

Comprehensive Exam

Students must successfully pass a comprehensive examination prior to graduation.

Students in Plan II must also present official passing scores on the following examinations prior to graduation:

- Florida Professional Education Exam
- Florida Subject Area Examination in Guidance and Counseling

Educational Leadership, Ed.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Specialist
CIP Code: 13.0401
Dept. Code: LEA
Major/College Codes: SAS ED
Approved 1981

Contact Information

College: Education
Department: Leadership, Counseling, Adult, Career, and Higher Education (L-CACHE)

Contact Information: http://www.grad.usf.edu/majors

The Education Specialist (Ed.S.) in Educational Leadership degree program is designed for experienced administrators seeking to develop their capacity to lead "turnaround" or lower performing schools. Coursework in this program is specifically designed in consultation with leadership development personnel and District-level Administrators in partnering school districts.

Students in this degree program develop their ability to make student-centered decisions through integration of rigorous analysis of theory, research, and exemplary practices. An appreciative inquiry orientation and applied capstone project enables candidates to work in teams. These teams develop an improvement report and intervention plan based on analysis of literature related to: school improvement and turnaround strategies: informed and responsible use of school data, including climate and culture inventories; ethical, political, cultural and critical perspectives on school sustainable school leadership; asset-based approaches to school improvement; and knowledge of effective program models or cases.

For individuals interested in the Florida Educational Leadership Certification, please see the M.Ed. degree program. For those interested in a research-focused degree, please see the Ph.D. degree program. Courses taken in the Ed.S. degree program may be able to be transferred into the Ed.D. in Educational Program Development - Educational Innovation if students apply for and are accepted before ending their Ed.S. program of study. Please consult the program coordinator for further information.

Accreditation
Accredited by National Council for the Accreditation of Teacher Education (NCATE).

Admission Information

Applicants should contact the Program Advisor prior to applying to Graduate Admissions. Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Admission to the Education Specialist program occurs **one time per year for the spring semester.** Admission is based on a comprehensive evaluation of each applicant's demonstrated academic potential to successfully complete all of the degree requirements. The process for admission to the degree program is often coordinated with partnering school districts. Interested applicants should contact the Program Coordinator for further information.

Preferred applicants should have:

- An earned master's degree from an accredited institution of higher education.
- An earned grade point average of 3.50 in the master's degree and an earned undergraduate grade point average of 3.00 in the last half of the undergraduate degree program.

Applicants will also submit:

- A statement of purpose for pursuing the Ed.S. degree program).
- Three letters of recommendation from people knowledgeable about the applicant's academic and professional competence.
- Current vita/resume.
- As applicable to a particular cohort, other relevant information may be required as developed in coordination with partnering school districts.

Contact the Program Coordinator for further information.

Curriculum Requirements

Total Minimum Hours – 30 hours

Area A: Required 7000 Level Courses (15 Credit Hours)

- EDA 7206 Appreciative Inquiry and Organizing in Public Education **Credit Hours: 3**
- EDA 7069 Ethics and Educational Leadership **Credit Hours: 3**
- EDA 7692 - Issues in Curriculum and Instruction **Credit(s): 3**
- EDA 7215 Educational Politics and the Engagement of Communities **Credit Hours: 3**
- EDA 7197 Current Readings and Discourse in Educational Leadership **Credit Hours: 3**

Area B: Required 6000 level courses (9 Credit Hours)

- EDA 6106 Administrative Analysis and Change **Credit Hours: 3**
- EDA 6213 Culturally Relevant Leadership **Credit Hours: 3**

Select one of the following:

- EDA 6931 Case Studies in School Administration **Credit Hours: 3**
- EDA 6271 Data-based Decision Making Strategies for Educational Leaders **Credit Hours: 3**

Area C: Capstone Project (6 Credit Hours)

- EDG 6975 Project: Master's/Specialist **Credit Hours: 1-9 (3 credits for this program)**
- EDG 6975 Project: Master's/Specialist **Credit(s): 1-9 (3 credits for this program)**

Comprehensive Exam

Students will be required to develop and defend a capstone research project proposal.

Capstone Project

Students will complete a capstone project, in which they identify and analyze educational problems and opportunities in their school system environment and apply concepts developed in the program in order to provide solutions to problems of practice.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Educational Leadership, M.Ed.

This program is offered partially online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 13.0401
Dept. Code: LEA
Major/College Codes: CAS ED
Approved 1974

Contact Information

College: Education
Department: Leadership, Counseling, Adult, Career, and Higher Education (L-CACHE)

Contact Information: http://www.grad.usf.edu/majors

The Master of Education (M.Ed.) in Educational Leadership degree consists of a minimum of thirty credits of coursework beyond the Bachelor's degree. Students in the program engage research in order to develop socially just decision-making strategies, engage and inform stakeholders, sustain motivation for change, and build academic improvement opportunities for all children. Through collaborative inquiry, culturally relevant pedagogy, leadership opportunities, and public deliberation, students address historical and perennial issues confounding public education. Accordingly, the M.Ed. in Educational Leadership prepares schools leaders to perform their designated tasks in an effective, equitable and ethical manner aligned to the Florida Principal Leadership Standards (FPLS) for K-12 schools. Successful completion of coursework and degree requirements fulfills core curriculum requirements for State of Florida Level I Educational Leadership certification.

Accreditation
Accredited by National Council for the Accreditation of Teacher Education/Council for the Accreditation of Educator Preparation (NCATE/CAEP); and the Florida Department of Education.

Admission Information

Admission to the M.Ed. in Educational Leadership Program occurs each fall and spring semester. Admission is based on a holistic evaluation of each applicant's demonstrated academic potential to complete all degree requirements successfully. Success in the M.Ed. program requires a commitment to utilizing rigorous inquiry, developing strong analytical and writing skills, and demonstrating a commitment to purposeful inclusive practices that lead to learning for all students. The program faculty will consider each applicant within the context defined by her or his personal and professional qualifications.

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- For those seeking State of Florida Level I Educational Leadership certification, a valid Florida Professional Educator's Certificate
- Two years of teaching experience

- A letter of intent (brief statement outlining experience and goals for the degree).
- Three letters of professional recommendation from persons knowledgeable about the applicant's academic and professional competence.
- roof of English for Speakers of Other Languages (ESOL) training (e.g. ESOL endorsement; completion of ESOL certification exam plus 120 hours of ESOL district in-service training; or, completion TSL 5085; ESOL 1 or equivalent.) Note: Contact the department if you do not meet the above criteria. Non-degree seeking coursework or the Graduate Record Examination scores may be required if an applicant's GPA is below 3.00.

International Students

All applicants whose native language is other than English or who have earned a degree from an institution outside the United States must meet the University requirements relative to international graduate admission, (e.g. TOEFL scores, etc.). In addition to these university requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Curriculum Requirements

Total Minimum Hours 30 hours

Educational Leadership Core Knowledge Requirements (15 Credit Hours)

- EDA 6192 Educational Leadership **Credit Hours: 3**
- EDA 6061 Principles of Educational Administration **Credit Hours: 3**
- EDA 6213 Culturally Relevant Leadership **Credit Hours: 3**
- EDG 6627 Foundations of Curriculum and Instruction **Credit Hours: 3**
- EDA 6232 School Law **Credit Hours: 3**

Educational Leadership Praxis and Field Experience Requirements (15 Credit Hours)

- EDA 6106 Administrative Analysis and Change **Credit Hours: 3**
- EDA 6945 Administration Practicum **Credit Hours: 3-8 (3 credits for this program)** (I)
- EDA 6285 - School Curriculum Improvement **Credit(s): 3**
- EDA 6945 Administration Practicum **Credit(s): 3-8 (3 credits for this program)** (II)
- EDA 6194 Educational Leadership II: Building Capacity **Credit Hours: 3**

Comprehensive Exam

A comprehensive electronic portfolio is submitted for evaluation in lieu of a comprehensive examination.

Graduation Requirement

The Florida Educational Leadership Exam (FELE) must be passed prior to graduation. Official FELE score report submission required.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Educational Leadership, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours 57 post-masters
Level: Doctoral
CIP Code: 13.0401
Dept. Code: LEA
Major/College Codes: EAS PhD
Approved 1981

Contact Information

College: Education
Department: Educational and Psychological Studies

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. in Educational Leadership degree program is designed for those individuals who intend to build an academic career focused on conducting research and analysis in the multidisciplinary field of educational leadership and policy studies, or who wish to build an administrative career focused on innovative and inquiry-based leadership. Accordingly, this program will prepare individuals for careers in K-12 education systems, research universities and teaching colleges, as well as private, non-profit, state, federal, or international educational agencies.

Individual students will work alongside distinguished faculty with expertise in multiple fields including: ethical leadership, curriculum and pedagogy, politics of education, education law, organizational theory, equitable education reform, school accountability and choice policies, and anti-oppressive education. The program is designed to provide students exposure to research and academic discourses in organizational leadership, curriculum leadership, and policy leadership in education. In addition, students will gain knowledge around research methodologies and a specialized cognate area of study.

Students in this degree program will design an individualized program of study that reflects their specific research interests. This will prepare students to conduct and apply high quality research to practice, write and present scholarly papers at professional conferences, and submit research articles for publication in education journals.

Initial advising, from inquiry about the program through the first year of coursework, is provided by the Doctoral Program Coordinator. By the completion of the second year of study, students will select a major professor who will assist them with planning their remaing course of study. By the end of the third year, students will assemble an advisory committee consisting of the major professor and at least three other members. This committee guides the student through the dissertation process, including the qualifying examination, dissertation proposal, and dissertation defense.

NOTE: The Ph.D. degree program is not an initial certification or licensure program. Students seeking Florida Level 1 Educational Leadership Certification need to refer to the M.Ed. degree program or consult with the Ph.D. Program Coordinator to complete a modified program with additional coursework from the Education Leadership Praxis and Field Experiences Requirements (15 credits) in the M.Ed. Program in Educational Leadership, in addition to the Ph.D. requirements.

For further information, please see http://www.usf.edu/education/areas-of-study/educational-leadership-policy/

Accreditation:
Accredited by the National Council for the Accreditation of Teacher Education (NCATE).

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Admission to the Doctor of Philosophy (Ph.D.) program in Educational Leadership occurs one time each year in the fall semester. Admission is based on a comprehensive evaluation of each applicant's demonstrated academic potential to successfully complete all of the degree requirements. Success in the Ph.D. degree program requires students to deeply engage in an area of inquiry, apply excellence in research methods, and develop exceptional writing skills. The program faculty will consider each applicant entirely within the context defined by her or his personal and professional qualifications. Applicants meeting the set of initial criteria will be asked to participate in an interview conducted by faculty and complete a timed writing sample that will be scheduled to occur before or after the interview.

Applicants should have:

- An earned master's from an accredited institution of higher education
- An earned grade point average of 3.50 in the master's degree and an earned undergraduate grade point average of 3.00) in the last half of the bachelor's degree
- An official Graduate Record Exam (GRE) received within the last five years. A combined score greater than 300 with no Quantitative or Verbal sub-test score below 150 is preferred (48th percentile Verbal; 38th percentile Quantitative).

Applicants should submit:

- A letter of intent outlining experiences and goals (3 page maximum);
- A current resume;
- Three letters of professional reference, each enclosed in a sealed envelope and signed across the flap by the recommender or emailed by recommender to Lisa Adkins (lisaadkins@usf.edu). Please ask references to include your name and "letter of reference" in subject line when emailing the letter.

International Students

In addition to the University requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest, (e.g., Graduate Record Exam scores).

Curriculum Requirements

Total Minimum Hours: 57 hours

Core Knowledge– 12 hours
Major Knowledge – 15 hours
Minor Knowledge – 9 hours
Research Methods – 15 hours
Dissertation - 6 hours minimum

Core Knowledge Requirements (12 Credit Hours)

- EDG 7067 - Philosophies of Inquiry **Credit(s): 3**
- EDA 7191 - Leadership in Education: Theory & Inquiry **Credit(s): 3**
- EDA 7280 Curriculum Theory **Credit Hours: 3**
- EDA 7287 Educational Politics and Policy: Theory and Issues **Credit Hours: 3**

Major Knowledge Requirements (15 Credit Hours)

Note: Students cannot use more than 2 Special Topics Seminars to fulfill Major Knowledge Requirements.

- EDA 6195 Policy Development **Credit Hours: 3**
- EDA 7215 Educational Politics and the Engagement of Communities **Credit Hours: 3**
- EDA 7281 Policy Analysis and Implementation Strategies for Educational **Credit Hours: 3**
- EDG 7931 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Special Topics in Policy Leadership)
- EDG 7207 Transforming the Curriculum **Credit Hours: 3**
- EDG 7667 Analysis of Curriculum and Instruction **Credit Hours: 3**
- EDA 7692 - Issues in Curriculum and Instruction **Credit(s): 3**
- EDG 7931 Selected Topics **Credit(s): 1-4 (3 credits for this program)** (Special Topics Seminar in Curriculum Leadership)
- EDA 7069 Ethics and Educational Leadership **Credit Hours: 3**
- EDA 7193 Organizational Leadership and Systems Theory **Credit Hours: 3**
- EDA 7206 Appreciative Inquiry and Organizing in Public Education **Credit Hours: 3**
- EDA 7233 Legal Dimensions of School Administration **Credit Hours: 3**
- EDG 7931 Selected Topics **Credit(s): 1-4 (3 credits for this program)** (Special Topics Seminar in Educational Leadership)
- EDG 7936 Graduate Seminar: Leader-Scholar Community **Credit Hours: 3**

Minor Knowledge Requirements (9 Credit Hours)

Note: In consultation with the program coordinator or major professor, students will select a minimum of three (3) 7000-level or 6000-level courses to be taken outside of the Educational Leadership Program area. Students are expected to support the development of their research interest through the courses taken to fulfill the Minor Knowledge Requirements.

- Elective 1 **Credit(s): 3**
- Elective 2 **Credit(s): 3**
- Elective 3 **Credit(s): 3**

Research Methods Requirements (15 Credit Hours)

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4 (3-4 credits for this program)** (or equivalent)
- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4 (3-4 credits for this program)** (or equivalent)
- Elective 1 **Credit(s): 3-4**
- Elective 2 **Credit(s): 3-4**
- Elective 3 **Credit(s): 3-4**

Dissertation (6 Credit Hours)

- EDG 7980 Dissertation **Credit Hours: 2-19 (6 credits for this program)** (Doctoral)

Required Examinations

A qualifying examination is required prior to admission to candidacy. Upon approval of major professor, the qualifying examination can be scheduled after a candidate has completed a minimum of 48 credit hours of all required coursework.

Residency

There is no on-campus residency requirement for the Ph.D.

College Teaching Graduate Certificate

This program is offered fully online.

Certificate Code: **XCT**

Description

The 12-credit hour Certificate in College Teaching is designed to assist prospective and current college and university faculty to acquire skills and knowledge important for effective teaching in higher education. Participants will gain understanding of the nature of the institutions in which they teach; acquire effective teaching methods and strategies; learn about the faculty role in curriculum development; and study other topics valuable for success as a faculty member.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have:

M.S. or B.S. with substantial teaching experience at the college level.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

The program consists of a total of 12 credit hours. There are 9 hours of required core courses:

- EDH 6081 Junior College in American Higher Education **Credit Hours: 3**

or

- EDH 6051 Higher Education in America **Credit Hours: 3**

- EDH 6938 Seminar in College Teaching **Credit Hours: 3**
- EDH 7225 Curriculum Development in Higher Education **Credit Hours: 3**

Electives

Select one:

- EDF 6883 Issues in Multicultural Education **Credit Hours: 4**
- EME 6936 Applications of Computers as Educational Tools **Credit Hours: 3** (Distance Learning)
- EME 6936 Applications of Computers as Educational Tools **Credit(s): 3** (Internet in Education)
- EME 6936 Applications of Computers as Educational Tools **Credit(s): 3** (Enhancing Instruction)
- ADE 6385 The Adult Learner **Credit Hours: 3**

Time Limit

3 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Leadership in Developing Human Resources Graduate Certificate

Certificate Code: XHR
Approved 200501

Description

Certificate for developing leadership skills in human resources.

Course Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

- ADE 6385 The Adult Learner **Credit Hours: 3**
- ADE 6160 Program Management in Adult Education **Credit Hours: 3**

And select 9 credit hours from:

- ADE 6370 Human Resource Development **Credit Hours: 3**
- ADE 6360 Methods of Teaching Adult Education **Credit Hours: 3**
- ADE 6161 Curriculum Construction in Adult Education **Credit Hours: 4**
- PHC 6161 Health Finance Applications **Credit Hours: 3**
- ADE 6198 Effective Continuing Education for Professionals **Credit Hours: 3**
- EME 6055 Current Trends in Instructional Technology **Credit Hours: 3**
- ADE 6946 Practicum in Adult Education **Credit Hours: 2-6**
- EDH 6051 Higher Education in America **Credit Hours: 3**
- EDH 7225 Curriculum Development in Higher Education **Credit Hours: 3**

Time Limit / Average Time to Completion

Five Years

Credit Toward Graduate Degree

Credit hours from this Certificate may be eligible to apply toward a graduate degree. Check with the department for information.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Post Master's Leadership in Higher Education Graduate Certificate

This program is offered fully online.

Curriculum Code: **XLH**

Description

This Graduate Certificate provides leadership strategies, skills and knowledge for those who are employed in the Community College/ Higher Education or seek employment in this environment. The Certificate is designed to meet the needs of individuals interested in senior level leadership positions. Those who have graduate degrees in other fields of study will find this leadership certificate of special value. The program also provides opportunities to improve practice for those who currently serve in leadership positions. Issues such as the "emerging undergraduate college" from the current community college structure will be presented. Current faculty who wish to seek faculty leadership roles within the community college/higher education institution will also benefit from this program of studies.

Course Location/Delivery

Partial

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (9 Credit Hours)

9 Credit hours

- EDH 6081 Junior College in American Higher Education **Credit Hours: 3**

or

- EDG 6051 - Higher Education in America and

- EDH 7632 Leadership in Higher Education **Credit Hours: 3**
- EDH 7636 Organizational Theory and Practices in Higher Education **Credit Hours: 3**

Electives

Select one elective course from the following list

- EDH 7505 Higher Education Finance **Credit Hours: 3**

or

- EDH 7633 Governing Colleges and Universities **Credit Hours: 3**

or

- EDH 7931 - Special Topics in Higher Education

Time Limit

3 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

School Counseling (Post Master's) Graduate Certificate

This program is offered partially online.

Certificate Code XSO
Approved 200901

The Graduate Certificate in School Counseling is designed to meet the curriculum needs of:

1. Mental health or career counselors who wish to pursue a Florida Certification as a School Counselor.
2. Counselors with a Masters or higher who seek to broaden their knowledge about school counseling issues.
3. Professional counselors who have relocated to Florida and may lack some of the courses required by the State of Florida for school counselor certification.

The coursework covers a broad range of school counseling issues. The curriculum is based on the standard of the Florida Department of Education. The Graduate Certificate provides the academic experiences and courses required by the state for certification as a school counselor. Upon completion of the certificate, students are eligible to apply for school counselor certification (a post-masters requirement). If admitted to the program, it is strongly suggested that you have the FLDOE do a transcript review. It is the student's responsibility to see if they need courses in addition to the certificate program for certification.

Please Note: Florida Department of Education requires an ESOL and a Reading course that are offered as electives in the USF College of Education for this certificate but may be available through school districts.

Location/Delivery

This certificate is offered at the Tampa campus and partially online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. Master's degree in Counseling or Counselor Education with a minimum 3.00 GPA.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Certificate should be completed within 3 years

Pre-Requisites

Prerequisite courses (list of specific courses or a certain number of credits in a discipline):

The following courses must be at the graduate level and be at least 3 semester hours each:

- Appraisal (equivalent to MHS 6200
- Career Development (equivalent to MHS 6340)
- Human Development (equivalent to EDF 6354)
- Counseling Theories (equivalent to MHS 6400
- Group Counseling (equivalent to MHS 6509)
- Legal and Ethical (equivalent to MHS 6700)
- Multicultural/Special Populations Counseling (equivalent to MHS 6420)
- Counseling practicum (equivalent to MHS 6800)

Curriculum Requirements (16 Credit Hours Minimum)

- MHS 6418 School Counselor Accountability and Curriculum **Credit Hours: 3**
- EDF 6217 Behavior Theory and Classroom Learning **Credit Hours: 4**
- MHS 6601 Consultation for the Counseling Profession **Credit Hours: 3**
- SDS 6820 Internship in School Counseling **Credit Hours: 3-6**

Electives - 6 credit hours

- EDG 6931 Selected Topics in Education **Credit Hours: 1-4**

ESOL For School Counselors (3 Credit Hours)

- RED 6748 Teacher Research Methods in Reading **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Teaching and Learning

Autism Spectrum Disorder and Intellectual Disabilities, M.A.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 13.1013
Dept. Code: EDS
Major/College Codes: ASD/ED
Approved 2011

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The purpose of this online major is to prepare teachers to be highly qualified and provide access to the general curriculum in least restrictive school environments to students with Autism Spectrum Disorder (ASD) and Intellectual Disabilities (InD).

Accreditation:
The Master of Arts in ASD and InD meets the accreditation standards required by the College of Education, University of South Florida. The curriculum in the major is aligned with the conceptual framework of the College of Education and meets the specific standards of the National Council for the Accreditation of Teacher Education (NCATE).

Major Research Areas
The major benefits the university, local community and the state can be summarized in two ways. In a **quantitative** way, the major meets the need of preparing effective teachers to work with the growing number of students in general and special education who are identified as having ASD and/or InD labels. This is demonstrated through the critical shortage of data at a national and state level and also in the surveys of local school districts to USF. In a **qualitative** way, the major meets the need to prepare effective teachers to work with this group of students that represents a paradigmatic shift in where and how these students learn. Students with ASD and/or InD labels need meaningful access to general education curriculum and their typically developing peers and this major meets this need.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- An earned baccalaureate degree in education or a related field that has a relationship with autism and/or intellectual disabilities from a regionally accredited college of university or the equivalent bachelors and/or graduate degrees from a international institution.
- Scholastic evidence to successfully perform in the academic major, as indicated by one of the following:
  - An earned graduate degree from a regionally accredited college or university, or
  - An undergraduate GPA of 3.00 or higher in all work attempted while registered as an upper division student working for a baccalaureate degree, or
  - A preferred GRE Verbal score of 154 (65th percentile) or higher and Quantitative score of 143 (14th percentile) or higher, and an Analytical Writing score of 3.5 or higher, or
  - Completion of 9 hours of specified graduate course work in special education with a GPA of 3.00 or higher, and the endorsement of a Special Education faculty member.
- A letter of application that addresses why the candidate desires to pursue a master's degree in ASD and InD.
- At least two (2) letters of recommendation from persons who have seen the candidate teach and/or work with children and youth who have labels of ASD and/or InD.

Graduation Requirements: Portfolio System

The Master's Portfolio System is a means through which each master's level student demonstrates his/her competency in the "best practices" of special education. Commensurate with the belief that the merging of research and practice is desirable and beneficial; the Department of Teaching and Learning has identified eight areas in which students are required to demonstrate their competency:

- Professional and personal self-awareness
- Assessment of exception students
- Behavior management
- Classroom instruction
- Collaboration
- Knowledge of the professional literature
- Research in critical areas such as child development, learning and teaching
- Professional development

The department has also developed a list of suggested artifacts through which students can document their competency in each area.

Students should meet with their advisor to discuss and plan their individualized portfolio. A copy of the Master's Portfolio System complete with policies and procedures, as well as suggested artifacts, is available with the Graduate Coordinator.

Each student will be required to present his/her individualized portfolio to the Portfolio Review Committee in the Department of Teaching and Learning upon completion of their major. This presentation will be the master's comprehensive exam. A comprehensive exam is required of all master's level students in the College of Education.

Curriculum Requirements

Total Minimum Hours - 33 hours

Required Courses:

Process Core Requirement (9 Credit Hours)

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- EEX 6732 Consultation and Collaboration in Special Education **Credit Hours: 3**
- EEX 5752 Working with Families: A Pluralistic Perspective **Credit Hours: 3**

Content Specialization (24 Credit Hours Minimum)

(Note: Field Experience (15-25 hours) is to be included as part of the Content Specialization coursework.)

- EBD 6246 Educating Students with Autism **Credit Hours: 3**
- EEX 6619 Positive Behavior Support Low Incid. Intellectual Disab. & ASD **Credit Hours: 3**
- EEX 6767 Assistive Technology for Students with Low Incidence **Credit Hours: 3**
- EEX 6234 Identification and Assessment of Individuals with Low Incidence Intellectual Disabilities and ASD **Credit Hours: 3**
- EEX 6065 Collaborative Transition and Career Planning for Students with Low Incidence Disabilities **Credit Hours: 3**
- EEX 6476 Curriculum and Instruction for Students with Low Incidence Disabilities **Credit Hours: 3**
- EEX 6939 Advanced Seminar: Paradigms, Practices, and Policies in Special Education **Credit Hours: 3**
- EEX 6943 Practicum in Exceptional Student Education **Credit Hours: 1-4 (3 credits for this program)**

Additional Requirements for Plan III

(individuals who do not hold a degree in education)

Co/Prerequisites

(0-14 hours depending on previous coursework):

- EEX 6025 Trends and Issues in Special Education **Credit Hours: 3**
- EDF 6432 Foundations of Measurement **Credit Hours: 3**

One of the following:

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**
- EDF 6215 Learning Principles Applied to Instruction **Credit Hours: 4**

One of the following:

- EDF 6606 Socio-Economic Foundations of American Education **Credit Hours: 4**
- EDF 6517 Historical Foundations of American Education **Credit Hours: 3 (4 credits for this program)**

Thesis

This is a non-thesis major

Comprehensive Exam

A portfolio project is required to fulfill the comprehensive examination requirement and is completed in the final semester of matriculation in the major

Elementary Education, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 13.1202
Dept. Code: EDR
Major/College Codes: AEE ED
Approved 1964

Concentrations:

Elementary Curriculum (MEL)

Also available as a M.A.T. degree in Elementary Education for students seeking initial teacher certification.
This major shares core requirements with the M.AT. in Elementary Education.

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The Plan 1 Option is designed for those with a bachelor's degree and certification in the discipline who desire to increase their competence in elementary education curriculum. This option is not designed for those seeking initial certification.

The Plan III non-certification option is not available in this degree program.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

For admission, first-time or transferring graduate applicants must:

- Have an earned, valid, professional teaching certificate OR
- Be eligible for professional certification through the completion of a Bachelor's Degree (state-approved program) in Elementary Education.
- A statement of purpose indicating reasons for applying for the program, pertinent personal and professional dispositions or experiences and/or credentials relevant to teaching.
- Two letters of recommendation (professional/academic reference letters and contact information from individuals who can attest to academic accomplishments.)

For international applicants:

International students entering this degree program must obtain a social security number for purposes of practicum, internship and certification testing.

Curriculum Requirements

A minimum of 33 graduate hours including 6 hours of process core, 6 hours of program core, and 21 hours of emphasis area courses. National Board Certified Teachers will be permitted to substitute 3 hours from NBC studies for one elective course with receipt of transcript from National Board Program. Please contact program coordinator for more information.

Minimum Hours: 33 hours

Shared Core Requirements - 6 Credit Hours

Elementary Concentration (required) - 6 Credit Hours

Electives - 21 Credit hours

Shared Core Requirements (6 Credit Hours)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**

Elementary Curriculum (MEL) Concentration (6 Credit Hours)

- EDE 6486 Teacher Research for Student Learning **Credit Hours: 3**
- EDE 6365 Culturally Responsive Pedagogy for Elementary Student Learning **Credit Hours: 3**

Electives (21 Credit Hours)

Elective courses may be chosen from a variety of Departments. Possibilities are 6000 level courses in math, science, social studies, ESOL, early childhood, and technology (all located in the Teaching and Learning Department).

Comprehensive Examination: Transition Point Projects

Students must successfully complete a Transition Point Project after each block of courses, culminating in a practitioner research project.

Program and/or course requirements are subject to change, per state legislative mandates, and Florida State Department of Education program approval standards. Please contact Program for more information.

Elementary Education, M.A.T.

This program is offered partially online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

**applications accepted on an on-going basis*

Minimum Total Hours: 56
Level: Masters
CIP Code: 13.1202
Dept. Code: EDR
Major/College Codes: TEE ED
Approved 2001

This major shares core requirements with the M.A. in Elementary Education.

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

This major is designed for students who have a non-elementary bachelor's degree and who wish to become elementary teachers for grades K-6. Students earn an ESOL endorsement at the same time as a Master's degree in Elementary Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Have one of the following
  - Have a master's or educational specialist's degree, or equivalent, from a regionally accredited college or university or the equivalent bachelors and/or graduate degrees from a foreign institution
  - A personal statement indicating reasons for applying to the program, pertinent personal and professional dispositions, and experiences and/or credentials relevant to teaching.

For admission to a Master of Arts in Teaching Program, the student must demonstrate mastery of general knowledge by one of the following:

* Passing the General Knowledge Test, a portion of the Florida Teacher Certification Exam (link to http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce)
Or
* Effective for tests administered on or after July 1, 2015, achievement of passing scores, as identified in Rule 6A-4.0021(12), F.A.C., on test sections of the

GRE® revised General Test GRE Analytical Writing combined score of 4 out of 6 acceptable for GK Essay GRE Quantitative Reasoning scaled score of 147 acceptable for GK Mathematics GRE Verbal Reasoning scaled score of 151 acceptable for both GK English Language Skills and GK Reading.

During the 2014 Legislative Session, the passage of House Bill 433 amended s. 1012.56, FS, to eliminate the obsolete option of achieving a passing score on the CLAST earned prior to July 1, 2002, to satisfy the general knowledge requirement.

For international applicants:
International students entering this degree program must obtain a social security number for purposes of practicum, internship and certification testing.

Curriculum Requirements

Total Minimum Hours: 56 Credit Hours

Shared Core Requirements - 6 Credit Hours
Additional Required Courses – 9 Credit Hours
Practicum - 14 Credit Hours
Specialization – 27 Credit Hours

Students are expected to meet State of Florida testing requirements and Florida State Department of Education program approval standards, and accreditation criteria.

Please be advised that curriculum and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Shared Core Requirements: (6 Credit Hours)

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**
- EDF 6432 Foundations of Measurement **Credit Hours: 3**

Additional Required Courses (9 Credit Hours)

- LAE 6427 Children's Literature: Teaching Literature Appreciation **Credit Hours: 3**
- RED 6316 Emergent Literacy: Skills, Strategies, and Assessment **Credit Hours: 3**
- EDE 6326 Instructional Planning for Diverse Learners **Credit Hours: 3**

Practicum Requirements: (14 Credit Hours)

Practicum and Internship

All students are required to complete a two-day a week practicum during their program nad a final full-time internship in their last semester. Placements are made for students in local school districts.

- EDE 6946 Practicum Field Experience **Credit Hours: 3**
- EDG 6947 MAT Final Internship **Credit Hours: 1-9**
- EDE 6458 Reflecting on Instructional Decision Making **Credit Hours: 1-3** (I and II) (1-3 Credit Hours)
- RED 6846 Practicum in Reading **Credit Hours: 3**

Specialization: (27 Credit Hours)

- TSL 5085 ESOL I - Theory and Practice of Teaching English Language Learners **Credit Hours: 3**
- TSL 5086 ESOL II-Secondary Language & Literacy Acquisition in Children & Adolescents **Credit Hours: 3**
- TSL 5242 ESOL III-Language Principles, Acquisition & Assessment for English Language Learners **Credit Hours: 3**
- MAE 6117 Teaching Elementary Math **Credit Hours: 3**
- SCE 6135 - Teaching Elementary (K-5) School Science **Credit(s): 3**
- SSE 6617 Trends in K-6 Social Science Education **Credit Hours: 3**
- RED 6317 Intermediate Literacy: Assessment, Skills, and Strategies **Credit Hours: 3**
- LAE 6314 - Teaching Composition in the Elementary Classroom: Research into Practice **Credit(s): 3**
- EDE 6506 Managing and Differentiating the Instructional Environment in Elementary Schools **Credit Hours: 3**

Comprehensive Examination

Students are required to pass a comprehensive exam to be taken during their final internship semester or in the semester immediately prior to internship.

Tests or Examinations

Students must pass all sections of the Florida Teacher Certification Exam and have an original copy of the results sent to the department prior to internship.

English Education, M.A.T.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 41
Level: Masters
CIP Code: 13.1305
Dept. Code: EDI
Major/College Codes: TEN ED
Approved 2002

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

A program of study designed to prepare students for initial certification in English education.

The M.A.T. in English Education is designed to include initial certification to teach English, grades 6-12 with ESOL Endorsement while working towards a masters degree. It is planed for graduates of B.A. Liberal Arts English programs or for graduates of other programs who have completed the following within their programs of study: grammar/language development, adolescent literature, American literature, British literature, female/minority literature, expostory writing, and creative writing. All students must make an appointment with an advisor to ensure that all certification requirements either within the degree itself or in addition to it have been met, and to develop a Graduate Planned Program.

Accreditation: Includes the State of Florida Accomplished Practices as well as NCATE/NCTE accreditation standards, and program approval by the Department of Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below. For admission to a Master of Arts in Teaching Program, the student must demonstrate mastery of general knowledge by one of the following:

* Passing the General Knowledge Test, a portion of the Florida Teacher Certification Exam (link to http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce)
Or
* Effective for tests administered on or after July 1, 2015, achievement of passing scores, as identified in Rule 6A-4.0021(12), F.A.C., on test sections of the GRE® revised General Test GRE Analytical Writing combined score of 4 out of 6 acceptable for GK Essay GRE Quantitative Reasoning scaled score of 147 (27th percentile) acceptable for GK Mathematics GRE Verbal Reasoning scaled score of 151 (52nd percentile) acceptable for both GK English Language Skills and GK Reading.

International Students
International students entering this degree program must obtain a social security number for purposes of practicum, internship and certification testing.

Curriculum Requirements

Total Minimum Hours: 41 Credit Hours

Core - 21 Credit Hours
Trends - 3 Credit Hours
Concentration - 11 Credit Hours
Practicum, Internship - 6 Credit Hours

Please be advised that curriculum and/or course requirements are subject to change per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Core Requirements (21 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- ESE 5342 Teaching the Adolescent Learner **Credit Hours: 3**
- ESE 5344 Classroom Management for a Diverse School and Society **Credit Hours: 3**

Including ESOL Endorsement:

- TSL 5085 ESOL I - Theory and Practice of Teaching English Language Learners **Credit Hours: 3**
- TSL 5086 ESOL II-Secondary Language & Literacy Acquisition in Children & Adolescents **Credit Hours: 3**
- TSL 5242 ESOL III-Language Principles, Acquisition & Assessment for English Language Learners **Credit Hours: 3**
- RED 6365 Disciplinary Literacies and Reading **Credit Hours: 3**

Current Trends in Teaching Concentration (3 Credit Hours)

- LAE 6637 Current Trends in Secondary English Education **Credit Hours: 3**

Concentration Requirements (11 Credit Hours Minimum)

- LAE 5862 Classroom Communication in English Education **Credit Hours: 3**
- LAE 6325 Methods of Teaching Middle School Language Arts **Credit Hours: 4**
- LAE 6339 Methods of Teaching Secondary English Language Arts **Credit Hours: 4**

Practicum, Internship, Field Work, etc. (6 Credit Hours)

- LAE 6947 Internship in Secondary Education for English **Credit Hours: 6** (PR: CI and passing scores on FTCE)

Comprehensive Examination:

All candidates must take and successfully pass a Master's Comprehensive Examination in English Education the last spring semester of their major.

State of Florida Tests

Completion of State of Florida Tests is also a requirement.

Exceptional Student Education, M.A.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 13.1001
Dept. Code: EDS
Major/College Codes: AVE ED
Approved 1985

This major shares core requirements with the M.A.T. in Exceptional Student Education.

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The Master's degree programs in the Department of Teaching and Learning prepare special education teacher leaders for work in public and private schools and in state, federal, or community settings. Specific areas of education and training include behavior disorders, intellectual disabilities, specific learning disabilities, and varying exceptionalities (exceptional student education). The major is designed to ensure that all graduates are prepared to be reflective practitioners, able to evaluate and continuously learn from their own teaching; collaborative professionals who affirm diversity; knowledgeable of theory and research; and skilled in the best practices of special education. Graduates of this major will have advanced clinical and pedagogical skills in working with children with disabilities and their families. The major is structured so that students can maintain full-time employment while pursuing their degrees through on-line course delivery. After admission to a major, the candidate and the department advisor together chart a program of study incorporating both core requirements and courses of specific interest to the student. All majors stress field application.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A letter of application that addresses why the candidate desires to pursue an M.A. degree in education.
- At least one (1) letter of recommendation from a person who has observed the candidate teach and/or work with children and youth.

Curriculum Requirements

Plan I
The M.A. degree program in Exceptional Student Education is a 36-hour major, designed for students with an undergraduate degree in education. This major is

delivered fully online. Students usually take one or two courses a semester and complete their program of study within two to four years. Students are required to take courses two of the three semesters each calendar year and they must complete their program of study within 57 years of their admission date.

Total Minimum hours: 36 Credit Hours

Core – 6 Credit Hours
Specialization - 21 Credit Hours
Varying Exceptionalities – 3 Credit Hours
Electives – 6 Credit Hours

Core Requirements (6 Credit Hours)

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- EEX 6943 Practicum in Exceptional Student Education **Credit Hours: 1-4**

Specialization Requirements (21 Credit Hours)

- EEX 6612 Management and Motivation of Exceptional and At-Risk Students **Credit Hours: 3**
- EEX 6222 Advanced Psychoeducational Assessment of Exceptional Students **Credit Hours: 3**
- EEX 6245 Transitional Programming for the Adolescent and Young Adult Exceptional Student **Credit Hours: 3**
- EEX 6732 Consultation and Collaboration in Special Education **Credit Hours: 3**
- EEX 5752 Working with Families: A Pluralistic Perspective **Credit Hours: 3**
- EEX 6248 Instructional Approaches for Exceptional Populations **Credit Hours: 3**
- EEX 6939 Advanced Seminar: Paradigms, Practices, and Policies in Special Education **Credit Hours: 3**

Varying Exceptionalities (3 Credit Hours)

Choose one:

- EBD 6215 Advanced Theories and Practices in Emotional Handicaps **Credit Hours: 3**
- ELD 6015 Advanced Theories and Practices in Specific Learning Disabilities **Credit Hours: 3**
- EMR 6052 Advanced Theories and Practices in Mental Retardation **Credit Hours: 3**

Electives (6 Credit Hours)

Comprehensive Examination

A project is required to fulfill the comprehensive examination requirement and is completed in EEX 6943 .

Plan III

This option is available for students who do not hold an undergraduate degree in education.

Exceptional Student Education, M.A.T.

This program is offered partially online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 13.1001
Dept. Code: EDS
Major/College Codes: TVE ED
Approved 2002

This major shares core requirements with the M.A. in Exceptional Student Education.

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The Master of Arts in Teaching (M.A.T.) is a graduate degree program in special education for individuals teaching with temporary certification and/or individuals who hold an undergraduate degree in an area other than special education. The Master of Arts in Teaching degree program leads to certification in Exceptional Student Education (ESE) and endorsement in Reading and ESOL. Students can be admitted to the major during any semester throughout the year; however, the special education core course sequence begins in the fall. Students in the M.A.T. degree program benefit from an integrated curriculum taught in six-hour blocks; mentors who are master teachers within the district that provide one-on-one mentoring for each major participant; and accelerated delivery of course content which allows for completion of the degree in one summer and four academic semesters. All students are required to conduct action research in their classrooms, investigating how they can more effectively use research-based interventions. This requires that students link theory and practice and encourages an inquiry approach to teaching.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A letter of application that addresses why the candidate desires to pursue a master's degree in education.
- At least one (1) letter of recommendation from a person who has observed the candidate teach and/or work with children and youth.
- Interview with the M.A.T. program faculty.

For admission to a Master of Arts in Teaching Program, the student must also demonstrate mastery of general knowledge by one of the following:

* Passing the General Knowledge Test, a portion of the Florida Teacher Certification Exam (link to http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce)

Or

* Effective for tests administered on or after July 1, 2015, achievement of passing scores, as identified in Rule 6A-4.0021(12), F.A.C., on test sections of the GRE® revised General Test GRE Analytical Writing combined score of 4 out of 6 acceptable for GK Essay GRE Quantitative Reasoning scaled score of 147 acceptable for GK Mathematics GRE Verbal Reasoning scaled score of 151 acceptable for .GK English Language Skills and GK Reading

Curriculum Requirements

Total Minimum Hours: 50 Credit hours*

Shared Core Requirements – 6 Credit Hours
Specialization – 30 Credit Hours
ESOL – 9 Credit Hours
Internship – 6 Credit Hours

**(Students entering with an ESOL endorsement and certification in Elementary Education have a minimum of 36 hours required to complete the program)*

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Shared Core Requirements: (6 Credit Hours Minimum)

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- EEX 6943 Practicum in Exceptional Student Education **Credit Hours: 1-4**

Specialization Requirements (30 Credit Hours Minimum)

- EEX 6051 Creating Positive Learning Environments for Students with Disabilities **Credit Hours: 6**
- EEX 6224 Developing Individualized Educational Programs for Students with Disabilities **Credit Hours: 6**
- EEX 6247 Implementing Programs for Students with Disabilities **Credit Hours: 6**
- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**
- RED 6514 The Reading Process in the Elementary Grades **Credit Hours: 3**
- RED 6544 Cognition, Comprehension, and Content Area Reading: Remediation of Reading **Credit Hours: 3**
- MAE 6117 Teaching Elementary Math **Credit Hours: 3**

ESOL Requirements (9 Credit Hours)

NOTE: The special requirements for ESOL endorsement through infusion are as follows: Successful completion of (1) TSL 5085, TSL 5086, and TSL 5240, with a minimum grade of 70% or better on all three sections of the ESOL Comprehensive Exam administered in the three ESOL courses; (2) a 20-hour early ESOL field experience in ESOL 1; 3 a late ESOL field experience where students plan, implement, and evaluate lessons for one or more ESOL students over a series of weeks; and 4 an ESOL folder, containing all assignments and test results from ESOL 1, 2, and 3.

Note: If a student obtains a state approved ESOL Endorsement prior to internship, consideration will be given to waiving TSL 5085, TSL 5086 and TSL 5240 with the appropriate program and college approvals.

- TSL 5085 ESOL I - Theory and Practice of Teaching English Language Learners **Credit Hours: 3**
- TSL 5086 ESOL II-Secondary Language & Literacy Acquisition in Children & Adolescents **Credit Hours: 3**
- TSL 5240 - Language Principles, Acquisition, and Assessment for Teaching English Language Learners **Credit(s): 3**

Internship (6 Credit Hours)

- EDG 6947 MAT Final Internship **Credit Hours: 1-9**

Practicum and Internship

Practicum Requirements

All students are required to register for and complete 3 total hours of practicum (listed above under core requirements). Students who are employed as an ESE-teacher, or as teaching assistant/paraprofessional may complete the practicum in the classroom where they are employed. Students who are not employed as a teacher or teaching assistant/paraprofessional will be placed in a classroom practicum setting with a mentor teacher in the local school district.

Internship Requirements

All students are required to complete a full-time semester long internship as a special education teacher in a K-12 classroom setting. The internship can be a supervised paid internship which an employed teacher can complete in his/her own classroom. If a student is not employed as a special education teacher, he/she must complete the internship (non-paid) in a supervising teacher's (Professional Practice Partner) classroom.

Comprehensive Exam

The successful completion of a comprehensive exam in the form of an action research project is required of all students in their final semester of the program. If the student does not successfully complete the action research project in the last semester of the program, the student must pass 2 hours of EDG 6970 – Project Master's the following semester for a maximum of two attempts.

Tests and Examinations

All students must pass the following examinations:

- General Knowledge Test (all four subtests) – if the CLAST (taken after July 1, 2002) was used to fulfill admission requirements instead of the General Knowledge Test (GKT), the GKT must be passed before internship.
- Florida Teacher Certification Professional Education Test – must be passed prior to graduation.
- Florida Teacher Certification ESE Subject Area Test – must be passed prior to graduation.

Foreign Language Education, M.A.

Degree Information

*This Program is Closed for Admissions – being terminated

Minimum Total Hours: 30
Level: Masters
CIP Code: 13.1306
Dept. Code: EDI
Major/College Codes: FLE EJ

Concentrations

Foreign Language Ed., French (AFF)
Foreign Language Ed., German (AFG)
Foreign Language Ed., Spanish (AFS)

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: www.grad.usf.edu

Prepares educators for teaching foreign language in a K-12 environment.

Major Research Areas

German, Spanish, French, Latin, Foreign Language Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

For admission, all programs require earned degrees from regionally accredited institutions or an international equivalent. The admissions committee will consider each applicant in light of his or her qualifications and likelihood of success. The faculty employs a holistic approach to the admissions consideration, taking into account all the information and balancing previous grade point averages, test scores, previous success in graduate coursework, recommendations, and professional experiences as well as fit of the program to the applicants' personal and professional goals. In order to be admitted to the graduate program in Foreign Language Education, students must present the following:

Requirements for all applicants include the following:

- Proof of relevant educational or professional experience
- A current resume
- A clear and detailed statement of professional and personal goals describing the reasons that earning the degree is important to those goals.

- Two letters of recommendation, preferably at least one from a current or former professor (or school principal if working in a school environment) who will attest to the applicant's likelihood of success in a graduate program.
- Strong GRE scores with no more than one sub-score below the 33rd percentile. If a score in one area is very low, the other should be considerably higher.
- Evidence of 30 credit hours in foreign language coursework or evidence of native language proficiency.
- An appropriate level of proficiency in foreign language demonstrated by an interview with the program faculty (in person or by telephone), by presenting an ACTFL OPI score of intermediate high or higher, or by any equivalent measure as approved by the program faculty.

Additional requirements for German Concentration:

- A social security number in degree programs requiring practica or internships; and
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Curriculum Requirements

For M.A. - Plan I
Program of Study 36 hours

Core Requirements

Professional Education

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**

or

- EDF 6215 Learning Principles Applied to Instruction **Credit Hours: 4 (3 credits for this program)**

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- FLE 6665 Current Trends in Secondary Foreign Language Education **Credit Hours: 3**
- FLE 5291 Technology in the Foreign Language Classroom **Credit Hours: 3** (except if taken as part of the B.A.)

Select one from the following:

- EDF 6517 Historical Foundations of American Education **Credit Hours: 3 (4 credits for this program)**

or

- EDF 6606 Socio-Economic Foundations of American Education **Credit Hours: 4**

Concentration Requirements

Students select one of the following concentrations:

French (AFF) (18 Credit Hours)

Offered from the Department of Teaching and Learning
Description: Prepares educators for teaching French in a K-12 environment.

Concentration Requirements

In addition to the Program requirements, students must complete the following concentration requirements:

At the 5000 and 6000 Level: Six (6) courses in the French language are taken at the 5000 and 6000 level in the World Language Education Department in the College of Arts & Sciences to provide students with further specialization in the foreign language. With their advisor, students are encouraged to select a mix of courses based on the areas (literature, civilization, linguistics) they wish to be examined on during their comprehensive examination. Please refer to the USF courses as well as your advisor for course selection.

German (AFG) (18 Credit Hours)

Offered from the Department of Teaching and Learning
Description: Prepares educators for teaching German in a K-12 environment.

Concentration Requirements

In addition to the Program requirements, students must complete the following concentration requirements:

At the 5000 and 6000 Level: Six (6) courses in the French language are taken at the 5000 and 6000 level in the World Language Education Department in the College of Arts & Sciences to provide students with further specialization in the foreign language. With their advisor, students are encouraged to select a mix of courses based on the areas (literature, civilization, linguistics) they wish to be examined on during their comprehensive examination. Please refer to the USF courses as well as your advisor for course selection.

Comprehensive Examination

A Comprehensive Examination must be taken in the final semester in the program. It is a 3-hour exam where the candidate will be expected to answer questions that display knowledge about the broad subjects that were covered in your program of studies.

Spanish (AFS) (18 Credit Hours)

Offered from the Department of Teaching and Learning
Description: Prepares educators for teaching Spanish in a K-12 environment.

Concentration Requirements

In addition to the Program requirements, students must complete the following concentration requirements:

At the 5000 and 6000 Level: Six (6) courses in the French language are taken at the 5000 and 6000 level in the World Language Education Department in the College of Arts & Sciences to provide students with further specialization in the foreign language. With their advisor, students are encouraged to select a mix of courses based on the areas (literature, civilization, linguistics) they wish to be examined on during their comprehensive examination. Please refer to the USF courses as well as your advisor for course selection.

Comprehensive Examination:

Required in both Foreign Language and Foreign Language Education.

Plan II

inactive.

Plan III

A Plan III, non-certification option is also available for those who do not desire teacher certification. For information on Plan III, contact the program coordinator. This plan is closed for new applications for the German Concentration.

Foreign Language Education, M.A.T.

Degree Information

Priority Admission Application Deadlines http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 13.1306
Dept. Code: EDI
Major/College Codes: TFL ED
Approved 2002

Concentrations:

General Education (GNE) – *Fast-Track Concentration (with no ESOL Endorsement)*
Chinese (CHN)
French (AFF)
German (AFG)
Italian (ITA)
Japanese (JPN)
Latin (LAT)
Russian (BFR)
Spanish (AFS)

Also offered as an Accelerated Major Option

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The M.A.T. degree is designed for individuals with a Bachelor's degree in a field other than education who wish to become certified teachers in foreign language at the middle or high school level in the following Languages: Spanish, French, German, Latin, Italian, Chinese, Japanese, or Russian. Students can earn ESOL endorsement at the same time as the Master's degree.

Accreditation
Accredited by the National Council for the Accreditation of Teacher Education, and the Department of Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Two Letters of recommendation (1 personal and 1 professional) stating the ability of the student to complete graduate studies.

- Concept Paper or goal statement
- Evidence of 30 credit hours in foreign language coursework or evidence of native language proficiency.
- An appropriate level of proficiency in the foreign language demonstrated by an interview with the program faculty (in person or by telephone, by presenting an ACTFL OPI score of intermediate high or higher, or by any equivalent measure as approved by the program faculty.

For admission to a Master of Arts in Teaching degree program, the student must demonstrate mastery of general knowledge by one of the following:

* Passing the General Knowledge Test, a portion of the Florida Teacher Certification Exam (link to http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce)
Or
* Effective for tests administered on or after July 1, 2015, achievement of passing scores, as identified in Rule 6A-4.0021(12), F.A.C., on test sections of the GRE® revised General Test GRE Analytical Writing combined score of 4 out of 6 acceptable for GK Essay GRE Quantitative Reasoning scaled score of 147 acceptable for GK Mathematics GRE Verbal Reasoning scaled score of 151 acceptable for both GK English Language Skills and GK Reading

During the 2014 Legislative Session, the passage of House Bill 433 amended s. 1012.56, FS, to eliminate the obsolete option of achieving a passing score on the CLAST earned prior to July 1, 2002, to satisfy the general knowledge requirement.

International Students
In addition to University requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships; and
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Curriculum Requirements

Minimum Hours: 33 (without ESOL), 42 (with ESOL)

Core – 6 Credit Hours
Additional Required Courses – 9 Credit Hours
ESOL Endorsement Option– 21 Credit Hours
General Track – 15 Credit Hours minimum
Concentration/Internship – 6 Credit Hours minimum

A program of study designed for the holder of a non-education baccalaureate degree who is functionally competent and proficient in the target language. This program meets initial certification requirements (K-12) as well as full ESOL endorsement. There is also a fast-track concentration without ESOL endorsement.

Please be advised that curriculum and/or course requirements are subject to change per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

Core Requirements (6 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- FLE 6665 Current Trends in Secondary Foreign Language Education **Credit Hours: 3**

Additional Required Courses (9 Credit Hours Minimum)

- ESE 5342 Teaching the Adolescent Learner **Credit Hours: 3**
- ESE 5344 Classroom Management for a Diverse School and Society **Credit Hours: 3**
- RED 6365 Disciplinary Literacies and Reading **Credit Hours: 3**

ESOL Endorsement Track (21 Credit Hours)

This track is for individuals who wish to receive the ESOL Endorsement.

- TSL 5085 ESOL I - Theory and Practice of Teaching English Language Learners **Credit Hours: 3**
- TSL 5086 ESOL II-Secondary Language & Literacy Acquisition in Children & Adolescents **Credit Hours: 3**
- TSL 5242 ESOL III-Language Principles, Acquisition & Assessment for English Language Learners **Credit Hours: 3**
- FLE 5291 Technology in the Foreign Language Classroom **Credit Hours: 3**
- FLE 5895 Dual Language Education **Credit Hours: 3**
- FLE 5946 Practicum in Foreign Language/ESOL Teaching **Credit Hours: 3**
- TSL 6390 Instructional Methods and Strategies for Teaching ESOL **Credit Hours: 3**

Concentration Requirements

Students select one of the following Concentrations:

General Education (GNE) (12 Credit Hours Minimum)

Fast-Track Concentration, with No ESOL Endorsement

The fast track program is designed for the individuals who wish to become certified teachers in foreign language at the elementary, middle, or high school level (K-12), in the following languages: **Spanish, French, German, Latin, Italian, Chinese, Japanese, or Russian, but do not want or need the ESOL Endorsement.**

- TSL 5326 L2 Reading for ESOL Students across Content Areas **Credit Hours: 3**
- TSL 6390 Instructional Methods and Strategies for Teaching ESOL **Credit Hours: 3**
- FLE 5895 Dual Language Education **Credit Hours: 3**
- FLE 5946 Practicum in Foreign Language/ESOL Teaching **Credit Hours: 3**

Chinese (CHN) Concentration (6 Credit Hours)

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admissions requirement)

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6**

French (AFF) Concentration (6 Credit Hours)

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admissions requirement)

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6**

German (AFG) Concentration (6 Credit Hours)

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admissions requirement)

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6**

Italian (ITA) Concentration (6 Credit Hours)

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admissions requirement)

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6**

Japanese (JPN) Concentration (6 Credit Hours)

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admissions requirement)

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6**

Latin (LAT) Concentration (6 Credit Hours)

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admissions requirement)

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6**

Russian (BFR) Concentration (6 Credit Hours)

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admissions requirement)

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6**

Spanish (AFS) Concentration (6 Credit Hours)

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admissions requirement)

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6**

Comprehensive Examination

A Comprehensive Examination must be taken in the final semester in the program. It is a 3-hour exam where the candidate will be expected to answer questions that display knowledge about the broad subjects that were covered in the program of studies.

Practicum, Internship, Field Work, etc. (6 Credit Hours)

A 6-credit hour internship provides an essential practical and evaluative exit to the program. It is highly recommended to complement it with a 2-credit hour Senior Seminar to debrief and enhance the internship experience.

- FLE 6947 Internship for Secondary Education in Foreign Language **Credit Hours: 6** (PR: CI and passing scores of FTCE)
- FLE 5936 - Senior Seminar (optional)

Accelerated Major

Also available as an Accelerated Majors

Foreign Language Education, M.Ed.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 13.1306
Dept. Code: EDI
Major/College Codes: FME ED
Approved 2019

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

Intended for experienced/certified educators (broadly defined to include not only teachers but all those working in educational agencies, educational publishing, supervision and administration, technology agencies, and so forth) as well as individuals, who hold an undergraduate degree in some field relevant to the area of specialization, interested in advanced study of education but who are not seeking teacher certification. The aim is to provide advanced preparation for professional educators who are willing to apply what they learn to the creation, implementation, and evaluation of effective instructional programs. Accredited by NCATE.

Accreditation

Accredited by the National Council for the Accreditation of Teacher Education, and the Department of Education.
Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below. For admission to a Master of Arts in Teaching degree program, the student must demonstrate mastery of general knowledge by one of the following:

- An earned graduate degree with a minimum GPA of 3.50
- Two Letters of recommendation (1 personal and 1 professional) stating the ability of the student to complete graduate studies.
- Concept Paper or goal statement
- Evidence of a second language proficiency as demonstrated by evidence of 30 credit hours in foreign language coursework or interview with program faculty (in person or by phone).

Curriculum Requirements

Total Minimum Hours: 33 Credit Hours

Core – 6 Credit Hours
Additional required courses – 27 Credit Hours
Optional ESOL Endorsement

Core Requirements (6 Credit Hours)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- FLE 6665 Current Trends in Secondary Foreign Language Education **Credit Hours: 3**

Additional Required Courses (27 credit hours)

- EDG 6627 Foundations of Curriculum and Instruction **Credit Hours: 3**

Psychological/Social Foundations - 3 hours
Choose from list below or similar course:

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**
- EDF 6215 Learning Principles Applied to Instruction **Credit Hours: 4**

Remaining 21 hours of required courses are selected with Graduate Director.

Comprehensive Exam

A Comprehensive Examination must be taken in the final semester in the program. It is a 3-hour exam where the candidate will be expected to answer questions that display knowledge about the broad subjects that were covered in the program of studies.

Other Requirements for Degree Completion

International Students
In addition to meeting university English Language Proficiency requirements, students must provide the following in order to be enrolled in a practicum:

- A social security number in degree programs requiring practica; and
- Other information as required (e.g. Graduate Record Exam scores, etc.).

Other information
Please be advised that curriculum and/or course requirements are subject to change per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria.

For Optional ESOL Endorsement Track: Refer to the MAT FLE Program, or the ESOL Endorsement Stand-alone certificate.

Mathematics Education (6-12), M.A.T.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 40
Level: Masters
CIP Code: 13.1311
Dept. Code: EDI
Major/College Codes: TSM ED
Approved 2005

This major shares core requirements with the M.A. in Mathematics Education and the M.A.T. in Middle Grades Mathematics (5-9).

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The M.A.T. in Mathematics Education (6-12) is designed for individuals seeking initial certification to teach High School or Middle School mathematics (grades 6-12) while working towards a Master's degree. It is planned for graduates of B.A. Liberal Arts Mathematics programs or for graduates of other programs who have completed at least 30 credit hours of mathematics courses that include 6 hours of calculus, 3 hours of linear or abstract algebra, 3 hours of number theory. . Please be advised that program and/or course requirements are subject to change per state legislative mandates, Florida Department of Education program approval standards and accreditation criteria.

Accreditation: Accredited by the Florida Department of Education, and the National Council for the Accreditation of Teacher Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Meet one of the following criteria:
  - Have completed 21 credit hours in mathematics at or above the level of college algebra and a passing score on the Florida Subject Area Exam in Mathematics 6-12 (FTCE)
  - have completed at least 30 credit hours in mathematics at or above the level of College Algebra
  - Passed the Florida General Knowledge Test (GKT). For the graduate level teacher preparation programs, GRE scores of 150 (48th percentile) verbal and 156 (60th percentile) quantitative or higher, taken within the last five years may be accepted in place of GKT, for admission to the program.

For admission to a Master of Arts in Teaching degree program, the student must demonstrate mastery of general knowledge by one of the following:

* Passing the General Knowledge Test, a portion of the Florida Teacher Certification Exam (link to http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce)
Or

* Effective for tests administered on or after July 1, 2015, achievement of passing scores, as identified in Rule 6A-4.0021(12), F.A.C., on test sections of the GRE® revised General Test GRE Analytical Writing combined score of 4 out of 6 acceptable for GK Essay GRE Quantitative Reasoning scaled score of 147 acceptable for GK Mathematics GRE Verbal Reasoning scaled score of 151 acceptable for both GK English Language Skills and GK Reading

During the 2014 Legislative Session, the passage of House Bill 433 amended s. 1012.56, FS, to eliminate the obsolete option of achieving a passing score on the CLAST earned prior to July 1, 2002, to satisfy the general knowledge requirement.

International Students
In addition to the University requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Curriculum Requirements

Total Minimum Hours: 40 Credit Hours

Shared Core Requirements - 15 Credit Hours

Trends - 3 Credit Hours

Specialization - 12 Credit Hours

Practicum/Internship - 10 Credit Hours

Pre-requisites
Students without appropriate ESOL training and/or a measurement course must complete graduate course(s) to satisfy those two program prerequisites. Students admitted without a 30-hour mathematics background will have to take undergraduate course work to insure that their background reflects at least:

- 6 hours of Calculus
- 3 hours of linear algebra or abstract algebra
- 3 hours of Number Theory or Discrete Mathematics
- 3 hours of geometry
- 3 hours of History of Mathematics
- 3 hours of Probability or Statistics

Any pre-requisite undergraduate credit hours taken will not apply to the minimum curriculum requirements for the Major.

Shared Core Requirements (15 Credit Hours)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- ESE 5344 Classroom Management for a Diverse School and Society **Credit Hours: 3**
- ESE 5342 Teaching the Adolescent Learner **Credit Hours: 3**
- TSL 5325 ESOL Strategies for Content Area Teachers **Credit Hours: 3**
- RED 6365 Disciplinary Literacies and Reading **Credit Hours: 3**

Current Trends in Teaching Concentration (3 Credit Hours)

- MAE 6136 Current Trends in Secondary Mathematics Education **Credit Hours: 3**

Specialization Requirements (12 Credit Hours Minimum)

Students may waive up to 6 hours of course credit based upon approval of their academic advisor and the Department. *(Other coursework would be taken in lieu of the 6 hours)*

- MAE 6337 Topics in Teaching Algebra **Credit Hours: 1-4 (3 credits for this program)**
- MAE 6338 Topics in Teaching Geometry **Credit Hours: 1-4 (3 credits for this program)**
- MAE 6317 - Topics in Teaching Probability and Statistics **Credit(s): 3**
- MAE 6336 Topics in Teaching Calculus **Credit Hours: 3**
- MAE 6370 Mathematics for High School Teachers **Credit Hours: 3**
- MAE 6362 Senior High Mathematics Methods **Credit Hours: 3**

Practicum, Internship, Field Work, etc. (10 Credit Hours)

- MAE 6945 Practicum in Mathematics Education **Credit Hours: 3**
- MAE 6947 Internship in Secondary Education for Mathematics **Credit Hours: 6**
- MAE 6899 Internship Seminar in Mathematics Education **Credit Hours: 1-3 (1 credit for this program)**

Testing

All portions of the General Knowledge Test (GK) of the Florida Teacher Certification Exam (FTCE) must be passed prior to internship. Both the Mathematics 6 – 12 test and the Professional Education test of the FCTE must be passed prior to completion of internship

Comprehensive Examination:

Passing a comprehensive exam is required prior to graduation. Students should contact their academic advisor to make arrangements to take the comprehensive exam in last fall or spring semester it can only be taken while enrolled in at least 2 credits. Making these arrangements two semesters prior to graduation is advised.

Mathematics Education, M.A.

Degree Information

This Program is Closed for Admissions.

Minimum Total Hours: 33
Level: Masters
CIP Code: 13.1311
Dept. Code: EDI
Major/College Codes: AMA EJ
Approved 1966

This major shares core requirements with the M.A.T. in Middle Grades mathematics (5-9) and the M.A.T. in Mathematics Education (6-12).

Contact Information

College: Education
Department: Teaching and Learning

Contact Information www.grad.usf.edu

This degree is designed primarily for secondary school teachers desiring to improve their skills in the teaching of mathematics to secondary students,

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

For admission, all majors require earned degrees from regionally accredited institutions or an international equivalent.

MA Plan I
Meet one of the following criteria:

- Shall have earned a "B" (3.0 on a 4.0 scale) average or better in all upper division level undergraduate coursework in the baccalaureate degree OR the equivalent bacehlors and/or graduate degrees from a foreign institution
- OR Shall have GRE preferred scores of 450 verbal and 550 quantitative or higher taken within five years.
- Certification in mathematics education (Include copy of your Florida State Teaching Certification with your application. Temporary Certificates are not acceptable).

MA Plan II Inactive
MA Plan III Inactive

For international applicants
Applicants whose native language is not English or who have not earned a degree in the U.S. must, according to university policy, submit a TOEFL score (minimum of 550 paper-based, 213 computer-based, or 80 internet-based test). Seethe Graduate Admissions website for further clarification and possible

exemptions. Please check with program regarding the policy on evaluation of transcripts. For more information, please visit. http://www.usf.edu/admissions/graduate/index.aspx

Curriculum Requirements

The Master of Arts in Teaching (M.A.T.) in Mathematics Education Degree program is currently available at the middle grades (5-9) level and secondary grades (6-12). Please check the Mathematics Education website for an update as well as other sections of this catalog.

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria

Plan I Option

Shared Core Requirements (9 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- EDF 6481 Foundations of Educational Research **Credit Hours: 3**

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**

or

- EDF 6215 Learning Principles Applied to Instruction **Credit Hours: 4**

Current Trends

- MAE 6136 Current Trends in Secondary Mathematics Education **Credit Hours: 3**

Course Requirements (18 Credit Hours Minimum)

Graduate level mathematics courses to be approved by the student's advisor.
Courses with the following prefixes are acceptable: MAA, MAD, MAE, MAP, MAT, MHF, and STA

Elective:

3 graduate hours of mathematics education

Comprehensive Examination

The comprehensive examination will consist of a written and/or oral examination in the concentration area.

Plan III Option

A **Plan III option** is available for individuals who are neither certified nor desire certification.

Process Core: (9 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- EDF 6481 Foundations of Educational Research **Credit Hours: 3**

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**

or

- EDF 6215 Learning Principles Applied to Instruction **Credit Hours: 4**

Middle Grades Mathematics (5-9), M.A.T.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 39
Level: Masters
CIP Code: 13.1311
Dept. Code: EDI
Major/College Codes: TMA ED
Approved 2002

This major shares core requirements with the M.A. in Mathematics Education and the M.A.T. in Mathematics Education (6-12).

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The M.A.T. in Middle Grades Mathematics Education (5-9) is designed for individuals seeking initial certification to teach mathematics at the middle grades level. Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida Department of Education program approval standards, and accreditation criteria.

Accreditation
Accredited by the Florida Department of Education and the Council for the Accreditation of Educator Preparation (CAEP)

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Meet one of the following criteria:

- Have passed the Florida Subject Area Exam in Mathematics 5-9
- Have completed at least 18 credit hours in mathematics at the level of college algebra
- Passed the Florida General Knowledge Test (GKT). For the graduate level teacher preparation programs, preferred GRE scores of 150 verbal and 156 quantitative or higher, taken within the last five years may be accepted in place of GKT, for admission to the program.

For admission to a Master of Arts in Teaching Program, the student must demonstrate mastery of general knowledge by one of the following:

* Passing the General Knowledge Test, a portion of the Florida Teacher Certification Exam (link to http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce)
Or
* Effective for tests administered on or after July 1, 2015, achievement of passing scores, as identified in Rule 6A-4.0021(12), F.A.C., on test sections of the

GRE® revised General Test GRE Analytical Writing combined score of 4 out of 6 acceptable for GK Essay GRE Quantitative Reasoning scaled score of 147 acceptable for GK Mathematics GRE Verbal Reasoning scaled score of 151 acceptable for both GK English Language Skills and GK Reading

International Students
In addition to the University requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Curriculum Requirements

Total Minimum Hours 39 hours

Foundational Courses - 6 Credit Hours

Shared Core Requirements - 9 Credit Hours

Specialization - 9 Credit Hours

Math Ed Courses - 15 Credit Hours

Foundational Courses (6 Credit Hours)

Students must complete this prior to proceeding with the other required courses.

- EDF 6432 Foundations of Measurement **Credit Hours: 3** (Or Equivalent)
- FLE 5366 ESOL Education in Content Areas **Credit Hours: 3**

Shared Core Requirements (9 Credit Hours)

- ESE 5344 Classroom Management for a Diverse School and Society **Credit Hours: 3**
- ESE 5342 Teaching the Adolescent Learner **Credit Hours: 3**
- RED 6365 Disciplinary Literacies and Reading **Credit Hours: 3**

Concentration Requirements (9 Credit Hours)

- MAE 6328 Algebra for Middle Grades Teachers **Credit Hours: 3**
- MAE 6329 Geometry and Measurement for Middle Grades Teachers **Credit Hours: 3**
- MAE 6127 Probability and Statistics for Middle Grades Teachers **Credit Hours: 3**

Math Education (15 Credit Hours)

- MAE 6356 Teaching of Pre-Secondary School Mathematics **Credit Hours: 3**
- MAE 6126 Current Trends in Middle Grades Mathematics **Credit Hours: 3**
- MAE 6945 Practicum in Mathematics Education **Credit Hours: 3**
- MAE 6947 Internship in Secondary Education for Mathematics **Credit Hours: 6**

Project

Action Research Project to be taken in the last fall or spring: Can only be taken while enrolled in at least two credits.

Physical Education, M.A.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 13.1314
Dept. Code: EDP
Major/College Codes: APH ED
Approved 1962
Offered only online

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

This degree is designed for anyone interested in the lifelong process of becoming a reflective, effective teacher who is prepared to lead youngsters to become physically active for a lifetime. The master's degree in Physical Education is offered online only. Consequently, an I-20 cannot be issued for international students to come to Tampa to enroll in this program. If accepted to the program, international students may only enroll in the program's online courses from outside the United States.

Accreditation
Accredited by the National Council for Accreditation of Teacher Education, National Association for Sport and Physical Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Requirements:

- A bachelor's degree from a regionally accredited institution OR the equivalent bachelors and/or graduate degrees from a foreign institution and satisfying at least one of the following criteria:
  - A "B" average (3.0 on a 4.0 scale) or higher in all work attempted while registered as an upper division student in a Baccalaureate degree OR A previous graduate degree from a regionally accredited institution with a grade point average of at least a 3.5
- Proof of initial certification (Plan I)

International Students
In addition to the University requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Please be advised that program and/or course requirements are subject to change, per state legislative mandates, Florida State Department of Education program approval standards, and accreditation criteria

Curriculum Requirements

Physical Education K-12
Two plans are available (Plan I and Plan III).

Plan I

Program of Study 30 hours minimum

Core Requirements: (6 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- EDF 6481 Foundations of Educational Research **Credit Hours: 3**

or (Exercise Science Concentration)

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**

- Other 24 hours determined by Program.

Plan III

Program of Study 30 hours minimum

Core Requirements (6 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- EDF 6481 Foundations of Educational Research **Credit Hours: 3**

Other Requirements

- PET 6419 Clinical Supervision in Physical Education **Credit Hours: 3**
- PET 6443 Instructional Design and Content: Games **Credit Hours: 3**
- PET 6444 Instructional Design and Content: Dance and Gymnastics **Credit Hours: 3**
- PET 6516 Learner Assessment in Physical Education **Credit Hours: 3**
- PET 6706 Analysis of Research in Physical Education **Credit Hours: 3**
- PET 6716 Analysis of Teaching in Physical Education **Credit Hours: 3**

Electives (6 Credit Hours)

- PET 6419 Clinical Supervision in Physical Education **Credit Hours: 3**

- PET 6447 Specialized Study in Curriculum and Instructional Process in Physical Education **Credit Hours: 1-4 (3 credit for this program)** (Grant Writing in PE)
- PET 6447 Specialized Study in Curriculum and Instructional Process in Physical Education **Credit(s): 1-4 (3 credit for this program)** (Adapted PE)

Comprehensive Exam

A written comprehensive examination is required during the semester in which the student completes the requirements for the master's degree.

Reading Education, M.A.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 13.1315
Dept. Code: EDR
Major/College Codes: ARD ED
Approved 1962

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

This degree is designed to prepare special reading teachers, clinicians, supervisors, directors, and coordinators of reading for school systems, as well as non-educational contexts. The MA in Reading Education includes spiraled competencies in Digital/Media Literacies as well Disciplinary Literacies and Global Literacies in its coursework.

Accreditation: Accredited by the National Council for the Accreditation of Teacher Education, and the Department of Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below. In order to be considered for admission, first-time or transferring graduate applicants must:

- Have an earned, valid teaching certificate for Plan II OR
- Be eligible for professional certification through the completion of a Bachelor's degree in Education Or
- enroll in the Plan III MA in Reading which focuses on non-school literacies and does not grant Reading Certification

Exceptions to minimum requirements will be considered for National Board Certification and an outstanding professional record.

For International Students
In addition to the University requirements, applicants to the College of Education must provide the following:

- A social security number for purposes of State testing, internship and practica.

Curriculum Requirements

Program of Study 36 hours minimum

Two options are available:
Option 1: Reading Education Plan I leading to State of Florida K-12 add-on Certification
Option 2: Reading Education Plan II

Core – 30
Additional courses – 3
Practicum – 3

Core Requirements (30 Credit Hours)

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- RED 6656 Literature for a Diverse Society **Credit Hours: 3**
- RED 6247 Supervision and Coaching in Literacy **Credit Hours: 3**
- RED 6449 Literacy and Technology **Credit Hours: 3**
- RED 6540 Assessment in Developing Literacies **Credit Hours: 3**
- RED 6544 Cognition, Comprehension, and Content Area Reading: Remediation of Reading **Credit Hours: 3**
- RED 6545 Issues in Vocabulary and Word Study **Credit Hours: 3**
- RED 6747 - History and Foundations of Reading in STEM Disciplines: Prevention and Intervention of Reading Difficulties **Credit(s): 3**
- RED 6068 Adolescent Literacy: In and Out of School Literacy Practices **Credit Hours: 3**
- LAE 6315 Composing Texts: Disciplinary Practices for Writers & Writing **Credit Hours: 3**

Additional Requirements (3 Credit Hours)

For Option 1, Students Also Complete:

This course may be waived with appropriate documentation by the COEDU ESOL Coordinator.

- TSL 5085 ESOL I - Theory and Practice of Teaching English Language Learners **Credit Hours: 3**

For Option 2, Students Also Complete:

- EDF 6517 Historical Foundations of American Education **Credit Hours: 3**

or

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**

Comprehensive Examination

Successful performance on a Comprehensive Examination is required for degree completion.

Practicum (3 Credit Hours)

- RED 6846 Practicum in Reading **Credit Hours: 3**

Critical Tasks and Projects

Students must successfully complete Critical Tasks/Projects in designated courses. These tasks/projects are posted to a Chalk and Wire account.

Science Education, M.A.

Degree Information

This Program is Closed for Admission

Minimum Total Hours: 33
Level: Masters
CIP Code: 13.1316
Dept. Code: EDI
Major/College Codes: SCE EJ

Concentrations:

Biology (ASB)
Chemistry (ASC)
Physics (ASY)

This major shares core requirements with the M.A.T. in Science Education.

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: www.grad.usf.edu/majors

Plan I – The Plan I track is a program of graduate study designed for those with initial certification in the area of concentration (typically with a baccalaureate degree from a college of education) who desire to increase their competence in the subject specialization. It is an individually planned program of study in consultation with a departmental advisor.

Accreditation: Accredited by the National Council for Accreditation of Teacher Education, and the Department of Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- A bachelor's degree or the equivalent bachelors and/or graduate degrees from a foreign institution in a science field (biology, chemistry, physics, geology, etc.) or coursework in a science teaching field acceptable to the program faculty. Students should provide a typed listing of science courses as part of their application. Students who do not meet this requirement can enroll in undergraduate courses prior to application. These courses will not be counted toward the master's degree and can be taken at any regionally accredited university or community college
- A "B" (3.0 on a 4.0 scale) average or higher in all work attempted while registered as an upper division student working for a baccalaureate degree, **or** students seeking admission by completing three graduate courses with a B or higher in each course while a non-degree seeking student should take: * EDF 6432 Foundations of Measurement and * EDF 6215 or 6215 Psychological Foundations and * SCE 5337 or SCE 5364, and
- CLAST, GKT, Praxis I or GRE is required. For the GRE the following score minimums are preferred: V:430, Q:570, AW:4.

- Proof of educational or professional experience.
- Proof of initial certification or relevant degree (Plan I).

Curriculum Requirements

Plan I

Program of Study 33 hours minimum

Courses to be taken in the College of Arts and Sciences based on the prior background and interests of the student.

Shared Core Requirements (12 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**

- EDF 6211 Psychological Foundations of Education **Credit Hours: 3**

or

- EDF 6215 Learning Principles Applied to Instruction **Credit Hours: 4 (3 credits for this program)**

Select one from the following:

- EDF 6517 Historical Foundations of American Education **Credit Hours: 3 (4 credits for this program)**
- EDF 6606 Socio-Economic Foundations of American Education **Credit Hours: 4**
- EDF 6481 Foundations of Educational Research **Credit Hours: 3**

or

- an equivalent research methods course

Current Trends in Teaching Concentration (3 Credit Hours Minimum)

- SCE 6634 Current Trends in Secondary Science Education **Credit Hours: 3**

Concentration Requirements (18 Credit Hours Minimum)

Students select from the following concentrations:

Biology (ASB)

Chemistry (ASC)

Physics (ASY)

Comprehensive Examination

The comprehensive exam will consist of a written and/or oral examination in the major area.

Science Education, M.A.T.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 39
Level: Masters
CIP Code: 13.1316
Dept. Code: EDI
Major/College Codes: TSC ED
Approved: 2002

Concentrations:

Biology (ASB)
Chemistry (ASC)
Earth & Space Science (AES)
Physics (ASY)

Also offered as an Accelerated Major

This major shares core requirements with the M.A. in Science Education.

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The Master of Arts in Teaching (MAT) in Science Education prepares students to teach science at the middle or high school levels. There are four science subject areas that students can choose from: Biology, Chemistry, Earth Science, and Physics. The M.A.T. program is a state approved program for certification in Biology, Chemistry, and Physics, but not Earth Science. However, students who complete the M.A.T. with the concentration in Earth Science can apply directly to the State for certification. Students interested in certification in Earth Science should seek academic advising to identify how this impacts initial teacher certification and reciprocity with other states. Candidates for the Master of Arts in Teaching (M.A.T.) in Science Education should have a degree in a science discipline (e.g., biology, chemistry, physics, earth science) that is taught in a middle or high school, or a closely related field.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

For admission to a Master of Arts in Teaching Program, the student must demonstrate mastery of general knowledge by one of the following:

* Passing the General Knowledge Test, a portion of the Florida Teacher Certification Exam (link to http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce)

Or
* Effective for tests administered on or after July 1, 2015, achievement of passing scores, as identified in Rule 6A-4.0021(12), F.A.C., on test sections of the GRE® revised General Test GRE Analytical Writing combined score of 4 out of 6 acceptable for GK Essay GRE Quantitative Reasoning scaled score of 147 acceptable for GK Mathematics GRE Verbal Reasoning scaled score of 151 acceptable for both GK English Language Skills and GK Reading

International Students
In addition to the University requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.).

Curriculum Requirements

Total Minimum Hours 39 hours minimum

Shared Core Requirements - 30 Credit Hours

Additional Required Course - 3 Credit Hours

Concentrations - 6 Credit Hours

The courses required for the M.A.T. in Science Education are listed below. Please check with the program for other program requirements.

Shared Core Requirements (30 Credit Hours Minimum)

- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- ESE 5342 Teaching the Adolescent Learner **Credit Hours: 3**
- ESE 5344 Classroom Management for a Diverse School and Society **Credit Hours: 3**
- TSL 5325 ESOL Strategies for Content Area Teachers **Credit Hours: 3**
- SCE 5325 Methods of Middle Grades Science Education **Credit Hours: 3**
- RED 6365 Disciplinary Literacies and Reading **Credit Hours: 3**
- SCE 5337 Methods of Secondary Science Education **Credit Hours: 3**
- SCE 6416 Teaching Secondary School Biology **Credit Hours: 3**
- SCE 6456 Teaching Secondary School Physical and Earth Science **Credit Hours: 3**
- SCE 6634 Current Trends in Secondary Science Education **Credit Hours: 3**
- SCE 6938 Topics in Science Education: Field Practicum **Credit Hours: 3**

Additional Required Courses (3 Credit Hours)

- SCE 6938 Topics in Science Education: Field Practicum **Credit Hours: 3**

Concentration Requirements (6 Credit Hours)

Students select from the following Concentrations:

Biology

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admission's requirement).

- SCE 6947 Internship in Secondary Education for Social Sciences **Credit Hours: 6** (PR: CI and passing scores of FTCE exam)

Chemistry

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admission's requirement).

- SCE 6947 Internship in Secondary Education for Social Sciences **Credit Hours: 6** (PR: CI and passing scores of FTCE exam)

Earth & Space Science

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admission's requirement).

- SCE 6947 Internship in Secondary Education for Social Sciences **Credit Hours: 6** (PR: CI and passing scores of FTCE exam)

Physics

- Student's participation in the internship experience in classes that correspond to the specific area in which he or she will be certified.
- Passing score on the appropriate subject area exam.
- Student's content degree or equivalent (an admission's requirement)

- SCE 6947 Internship in Secondary Education for Social Sciences **Credit Hours: 6** (PR: CI and passing scores of FTCE exam)

Comprehensive Examination

A written narrative exam tailored to the individual student. Exam needs to be completed by two weeks before final exam week of the student's graduating semester. Exams will only be accepted during fall or spring semester, unless previous contract is established with the student's advisor.

Accelerated Major

Also available as an Accelerated Majors

Social Science Education, M.A.T.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 39
Level: Masters
CIP Code: 13.1317
Dept. Code: EDI
Major/College Codes: TSS ED
Effective: 2002

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The M.A.T. degree is for individuals with a bachelor's degree in a field other than education who wish to become certified teachers in social science at the middle or senior high school level. This major leads to teaching certification in grade 6-12 social sciences as part of the master's degree program.

Accreditation
Accredited by the Florida State Department of Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Prerequisites:

- Major: A bachelor's degree in a social studies field that is taught at the 6-12 grade level OR the equivalent bacehlors and/or graduate degrees from a foreign institution
- Survey of American History 1 & 2;
- Survey of Western Civilization or World History 1 & 2; and
- Geography, economics. psychology, and either anthropology or sociology

Students who do not have these eight (8) courses can submit passing scores on the Florida 6-12 Social Sciences Subject Area Exam with their application in partial or full consideration of the prerequisites and consideration for admission.

Requirements for all applicants include:

- 3.00 in graduate coursework can be used to augment the undergraduate GPA.
- Resume
- 250-word letter of interest stating your objectives in pursuing this course of study

- Two letters of recommendation attesting to the applicants' potential success as a graduate student and his/her ability to work with adolescents.
- Disclosure of arrest and conviction information

For admission to a Master of Arts in Teaching Degree Program, the student must demonstrate mastery of general knowledge by one of the following:

* Passing the General Knowledge Test, a portion of the Florida Teacher Certification Exam (link to http://www.fldoe.org/accountability/assessments/postsecondary-assessment/ftce)
Or
* Effective for tests administered on or after July 1, 2015, achievement of passing scores, as identified in Rule 6A-4.0021(12), F.A.C., on test sections of the GRE® revised General Test GRE Analytical Writing combined score of 4 out of 6 acceptable for GK Essay GRE Quantitative Reasoning scaled score of 147 acceptable for GK Mathematics GRE Verbal Reasoning scaled score of 151 acceptable for both GK English Language Skills and GK Reading

International Students
In addition to the University requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest, (e.g. Graduate Record Exam scores, etc.)

Curriculum Requirements

Total Minimum hours: 33 hours Minimum

Core Requirements - 12 Credit Hours
Trends - 3 Credit Hours
Specialization - 9 Credit Hours
Practicum/Internship - 9 hours

The requirements are as follows or as recommended by the graduate advisor and approved by the college and/or Office of Graduate Studies.

Core Requirements (12 Credit Hours)

- ESE 5342 Teaching the Adolescent Learner **Credit Hours: 3**
- TSL 5325 ESOL Strategies for Content Area Teachers **Credit Hours: 3**
- EDF 6432 Foundations of Measurement **Credit Hours: 3**
- ESE 5344 Classroom Management for a Diverse School and Society **Credit Hours: 3**

Current Trends in Teaching Concentration (3 Credit Hours)

- SSE 6636 Trends in Secondary Social Science Education **Credit Hours: 3**

Specialization Requirements (9 Credit Hours)

- SSE 5331 Foundations, Curriculum & Instruction of Social Science Education **Credit Hours: 3**
- SSE 5332 Methods and Strategies in Social Science Education **Credit Hours: 3**
- RED 6365 Disciplinary Literacies and Reading **Credit Hours: 3**

Practicum, Internship, Field Experiences, Etc. (9 Credit Hours)

All sections of the GKT, the FTCE Prof., and Educ. & Subj. Area: Social Science 6-12 must be passed prior to internship.

Program of studies will be planned so that all course work will be completed prior to the internship. However, should there be a need for an exception; M.A.T. students may take one 3-credit course during internship—although this is unadvisable given the full-time nature of the teaching experience and one 3-credit course after internship.

All school districts require fingerprints for a minimum of practica and final internship. Students must pass a criminal background check to the satisfaction of the school district. Some districts also require drug testing.

- SSE 5946 Practicum in Social Science Education **Credit Hours: 3** (Prereq: SSE 5331)
- SSE 6947 Internship in Secondary Education for Science **Credit Hours: 6**

Comprehensive Examination

The Comprehensive exam is taken while enrolled in SSE 6636 Trends in Secondary Social Science Education.

Special Education, Gifted, M.A.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 13.1004
Dept. Code: EDS
Major/College Codes: AGI ED
Approved: 1966

Contact Information

College: Education
Department: Teaching and Learning

Contact Information: http://www.grad.usf.edu/majors

The Master's Degree Program in Gifted Education (Plan I) provides advanced training for certified teachers to work with gifted and talented students and with other teachers on a consultant or collaborative basis. The courses for this major are offered through an on-line format, though some courses may be taken on campus. Emphasis is placed on developing specific skills in identification of gifted students; focusing on the characteristics and needs of special populations; assessing students' cognitive and affective strengths; modifying educational programs to develop gifted students' potential; and consulting with gifted students, their families, and teachers. This Major qualifies students for the State of Florida Endorsement in Gifted Education.

After admission to a major, the candidate and the department advisor together chart a program of study incorporating major requirements. Courses stress field based experiences. Students provide their own transportation to practicum sites in K-12 education settings. The practicum experience requires candidates to access assessment information about K-12 students in their school setting, including performance on individualized intelligence tests, achievement tests, and educational programs (EPs). Practicum coursework also requires candidates to conduct extended projects focused on the development and educational progress of K-12 gifted students. Employment in a K-12 classroom as a licensed educator is required to successfully complete major coursework. The Major also incorporates coursework in Instructional Technology, and Teacher Leadership. Electives lead to the completion of a graduate certificate in Teacher Leadership, Instructional Technology, or Autism Spectrum Disorders.

Accreditation
Accredited by National Council for Accreditation of Teacher Education, and the Florida Department of Education

Plan III: Inactive

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- An undergraduate GPA of 3.00 on a 4.00 scale as an upper division student in a baccalaureate degree OR the following GRE preferred scores:
  - Verbal: 71st percentile or higher
  - Quantitative: 18th percentile or higher
- Two letters of recommendation from administrators familiar with applicant's professional teaching experience and expertise that verify applicant's K-12 employment status
- A written statement of intent to pursue degree in gifted education, including applicant's professional goals
- Copy of professional teaching certificate (not a temporary certificate)
- Evidence that applicant currently holds a teaching position in a K-12 setting

All materials should be forwarded to Heather Van Allen athvallen@usf.edu or to Department of Teaching and Learning, Gifted Education Admissions, EDU 105, College of Education, University of South Florida, Tampa, FL 33620

Curriculum Requirements

Total Minimum Hours 36 hours

Core requirements – 9 hours minimum
Area of Study – 18 hours minimum
Electives – 9 hours minimum

Core Requirements (9 Credit Hours)

- EDF 6481 Foundations of Educational Research **Credit Hours: 3**
- EDE 6486 Teacher Research for Student Learning **Credit Hours: 3**

Instructional Technology:

Any 1 of the following:

- EME 6207 Web Design **Credit Hours: 3**
- EME 6208 Interactive Media **Credit Hours: 3**
- EME 7458 Research in Distance Learning **Credit Hours: 3**
- EME 6053 Internet in Education **Credit Hours: 3**

Area of Study Requirements (18 Credit Hours Minimum)

- EGI 5051 Nature and Needs of the Gifted **Credit Hours: 3**
- EGI 5307 Theory and Development of Creativity **Credit Hours: 3**
- EGI 6232 Advanced Educational Strategies for the Gifted **Credit Hours: 3**
- EGI 6415 Consultation, Counseling, and Guidance Skills for Gifted Students **Credit Hours: 3**
- EGI 6416 - Consultation, Counseling, and Guidance of the Gifted **Credit(s): 3**
- EGI 6943 Supervised Practicum in Gifted Education **Credit Hours: 1-12 (3-6 credits for this program)**

Electives (9 Credit Hours Minimum)

Teacher Leadership (9 Credit Hours):

- EDE 6486 Teacher Research for Student Learning **Credit Hours: 3**
- EDE 6556 Coaching for Student Learning **Credit Hours: 3**
- EDE 6366 Professional Development for Student Learning **Credit Hours: 3**

Instructional Technology (9 Credit Hours):

(FL Digital/Virtual Educator, Distance Learning, or Web Design)

Florida Digital/Virtual Educator

- EME 6053 Internet in Education **Credit Hours: 3** (May be taken As Core Requirement)
- EME 5403 Computers in Education **Credit Hours: 3** (Spr) (This course include 7 week internship at FLVS. The course number and title is under revision consideration)

- EME 6457 Distance Learning **Credit Hours: 3** (May be taken as core requirement)

or

- EME 7458 Research in Distance Learning **Credit Hours: 3** (May be taken as core requirement)

And 1 of the following:

- EME 6055 Current Trends in Instructional Technology **Credit Hours: 3** (may be taken as core requirement)
- EME 6208 Interactive Media **Credit Hours: 3** (may be taken as core requirement)

Web Design:

- EME 6215 Instructional Graphics **Credit Hours: 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**

1 of the Following:

- EME 6208 Interactive Media **Credit Hours: 3**
- EDF 6284 Problems in Instructional Design for Computers **Credit Hours: 3**
- EME 6930 Programming Languages for Education **Credit Hours: 3**

Distance Education:

- EME 6053 Internet in Education **Credit Hours: 3** (May be taken as core requirement)
- EME 6207 Web Design **Credit Hours: 3** (May be taken as core requirement)

- EME 6457 Distance Learning **Credit Hours: 3** (May be taken as core requirement)

or

- EME 7458 Research in Distance Learning **Credit Hours: 3** (May be taken as core requirement)

And choose 1 of the following:

*Prerequisite: EDF 6284 Problems in Instructional Design for Computers (3 hours)

- EME 6235 Technology Project Management **Credit Hours: 3** *
- EME 7631 Research in Technology Project Management **Credit Hours: 3** *

or

Autism Spectrum Disorders*

(12 hours/requires only 3 hours of EGI 6943 Supervised Practicum in Gifted Education):

*Prerequisite: EDF 6284 Problems in Instructional Design for Computers (3 hours)

- EEX 6234 Identification and Assessment of Individuals with Low Incidence Intellectual Disabilities and ASD **Credit Hours: 3**
- EED 6246 - Educating Students with Autism **Credit(s): 3**
- EEX 6619 Positive Behavior Support Low Incid. Intellectual Disab. & ASD **Credit Hours: 3**
- EEX 6767 Assistive Technology for Students with Low Incidence **Credit Hours: 3**

Comprehensive Examination (Portfolio)

In lieu of a comprehensive examination, candidates will take the Praxis II Exam in Gifted Education and earn a score of 160/200 (80%) to pass. Candidates may take the exam after completing a minimum of 15 hours of coursework (EGI 5051, EGI 5307, EGI

Technology in Education and Second Language Acquisition (TESLA), Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 67 post-master's
Level: Doctoral
CIP Code: 13.1401
Dept. Code: EDI
Major/College Codes: TLD ED

Contact Information

Colleges: Education
Department: Secondary Education

Contact Information: http://www.grad.usf.edu/majors

This is a doctoral major in the College of Education. It combines the expertise of both faculties from Foreign Languages and Instructional Technology to provide a curriculum in pedagogy, second language acquisition, sociocultural theory, , pragmatics, instructional technology, statistics, and research design. The goal of the major is to prepare students for careers in academia.

Major Research Areas
Second Language Acquisition, Instructional Technology, Foreign Language Education, Pragmatics, TESOL, ESOL, Distance Learning.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

In addition to the general admission requirements under the advanced graduate education majors, applicants must do the following:

- Possess a Master's degree (or equivalent academic level) from a regionally accredited institution or its international equivalent;
- present a minimum GPA of 3.5 at the Master's level (or international equivalent);
- preferred score at or above 500 on the GRE verbal reasoning (or 153 on New GRE) and 4 on the GRE analytical writing section; and
- Submit a "Statement of Purpose" relating their career goals specifically to this doctoral major and describing their experience with instructional technology and language teaching and offering evidence of research experience and/or scholarly promise;
- Supply a current curriculum vitae;
- Provide 3 letters of recommendation from professors or other individuals who can attest to the applicant's experience and background;
- Meet with the graduate faculty for a personal/phone interview; and

- In addition to proficiency in their native language (L1), students must demonstrate proficiency in another world languages (L2). Proficiency in speaking the L2 must be at the "Advanced" level or higher, as measured on the Oral Proficiency Guidelines (OPI) of the American Council on the Teaching of Foreign Languages (ACTFL). For specific information, consult www.actfl.org. The graduate advisors will determine whether the students have met this requirement based on these as well as other criteria identified by the SLA/IT faculty.

The faculty will evaluate each applicant's dossier based on a composite of variables and appropriateness of fit with the major.

For international applicants

In addition to university requirements, applicants to the College of Education must provide the following:

- A social security number in degree programs requiring practica or internships;
- Other information as required by the major of interest.

Curriculum Requirements

Total Minimum Hours 67 hours minimum post-masters

40 hours of core requirements (with suggested credit hours for different sub-categories);
18 credit hours of electives; and
9 hours of dissertation work.

Core Requirements (40 Credit Hours)

Technology in Education (9 Credit Hours)

- EDF 6284 Problems in Instructional Design for Computers **Credit Hours: 3**
- EME 7938 Computer-Augmented Instructional Paradigms in Education **Credit Hours: 3**

And One of the Following:

- EME 6208 Interactive Media **Credit Hours: 3**
- EME 6613 Development of Technology-Based Instruction **Credit Hours: 3** (pre-requisite: EDF 6284)
- EME 7939 Research in Technology-Based Education **Credit Hours: 3**

Second Language Acquisition (15 Credit Hours)

- SLA 7911 Second Language Acquisition Research Laboratory **Credit Hours: 1-4**

(3 credits for this program)

- SLA 7938 Advanced Seminar in Second Language Acquisition **Credit Hours: 3**
- FLE 7939 Advanced Seminar in Foreign Language Education **Credit Hours: 3**
- FLE 7700 Applications of Technology in Second Language Acquisition **Credit Hours: 3**
- FLE 7367 Sociocultural Theory in Second Language Acquisition **Credit Hours: 3**

Statistics/Measurement/Research Design (16 Credit Hours Minimum)

- EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**

- EDF 7477 Qualitative Research in Education Part I **Credit Hours: 4**

And Two of the Following:

- EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
- EDF 7478 Qualitative Research in Education Part II **Credit Hours: 4**
- EDF 7410 Design of Systematic Studies in Education **Credit Hours: 3** (final semester)
- Other relevant research course(s) as needed.

Electives (18 Credit Hours)

Courses are selected with the approval of the student's graduate advisor or committee with a minimum of nine (9) hours completed in the area of Second Language Acquisition. Elective coursework must be taken at the graduate and/or advanced graduate level.

Examples:

- EDG 6931 Selected Topics in Education **Credit Hours: 1-4** (Heritage Language Teaching & Learning)
- EME 6053 Internet in Education **Credit Hours: 3**
- EME 6055 Current Trends in Instructional Technology **Credit Hours: 3**
- EME 6613 Development of Technology-Based Instruction **Credit Hours: 3** (pre-requisite: EDF 6284)
- FLE 6639 Second Language Reading and Literacy **Credit Hours: 3**

Qualifying Examination

All students will be required to pass a written qualifying examination (QE). The QE integrates work in the specialization, cognate, and foundations areas, in this case, in Technology Education, Second Language Acquisition, and Teacher Education.

Dissertation (9 Credit Hours)

- SLA 7980 Dissertation **Credit Hours: 2-18 (9 credits for this program)**

Residency Requirements

Students must enroll in a minimum of nine hours for each of two semesters in a 12-month period to fulfill the residency requirements. Students in the Ph.D. major should be engaged in no more than half-time employment during the residency period.

Please be advised that major and/or course requirements are subject to change, per state legislative mandates, Florida Department of Education program approval standards and accreditation criteria.

Autism Spectrum Disorder Graduate Certificate

This program is offered fully online.

Certificate Code: XAU
Approved 200901

Description

This 12-hour program of study provides teachers with additional expertise in the field of educating students with autism spectrum disorders (ASD). It is anticipated that these courses will meet the requirements of the Florida Department of Education's Endorsement in the field of autism. Emphasis is placed on assessment and diagnosis of ASD, understanding the nature of autism, the use of assistive and instructional technology and positive behavior support. Meaningful application of knowledge and skills is required through the extensive field-based experiences.

Course Location/Delivery

The Certificate is offered fully online. Students will need a headset with a microphone for real-time meetings, access to high-speed internet, email, Word, PowerPoint, PDF files and a media video player.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

In addition applicants should have approximately 30 credit hours of coursework in education or a related field (speech-language pathology, physical therapy, occupational therapy that deals with students with severe/profound disabilities).

Preference will be given to professional practitioners who have minimum one-year experience working with students with Autism Spectrum Disorder.

Application Process

To learn about the application process, and to access the application, please review our **application process**.

Pre-Requisites

None are required.

Curriculum Requirements (12 Credit Hours)

- EEX 6234 Identification and Assessment of Individuals with Low Incidence Intellectual Disabilities and ASD **Credit Hours: 3**
- EBD 6246 Educating Students with Autism **Credit Hours: 3**
- EEX 6619 Positive Behavior Support Low Incid. Intellectual Disab. & ASD **Credit Hours: 3**
- EEX 6767 Assistive Technology for Students with Low Incidence **Credit Hours: 3**

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is three years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Disabilities Education: Severe/Profound Graduate Certificate

This program is offered fully online.

Certificate Code: XDI
Approved 200908

Description

This certificate supports teachers and related professionals to work more effectively with students who have labels of severe/profound disabilities in sensitively accessing general education curriculum in meaningful ways. It is anticipated that these courses will meet the requirements of the Florida Department of Education's Endorsement in the field of Intellectual Development Disabilities (Severe/Profound). Collaborative and multidisciplinary working is a theme through each course as a way to increase student access to general education curriculum in the least restrictive environment.

Course Location/Delivery

Fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Applicants must hold an earned bachelor's degree from a regionally accredited institution and approximately 30 undergraduate credit hours of coursework in education or a related field (speech and language pathology, physical therapy, occupational therapy that deals specifically with students who have severe/profound disabilities).

Preference will be given to professional practitioners who have a minimum one year experience working with students with severe/profound learning disabilities.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

- EEX 6234 Identification and Assessment of Individuals with Low Incidence Intellectual Disabilities and ASD **Credit Hours: 3**
- EEX 6476 Curriculum and Instruction for Students with Low Incidence Disabilities **Credit Hours: 3**
- EEX 6065 Collaborative Transition and Career Planning for Students with Low Incidence Disabilities **Credit Hours: 3**

- EEX 6767 Assistive Technology for Students with Low Incidence **Credit Hours: 3**

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Time Limit / Average Time to Completion

Five years.

ESOL Graduate Certificate

This program is offered fully online.

Certificate Code: XES
Approved 200801

Description

This professional certificate in ESOL is designed specifically for those who already hold a bachelor's degree and teaching certification. The certificate provides the curriculum needed for those who wish to specialize in teaching English language learners in the K-12 setting and also fulfills the education requirements for the ESOL endorsement.

Course Location/Delivery

Fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (15 Credit Hours)

- FLE 6167 Cross-Cultural Issues in Teaching ESOL **Credit Hours: 3**
- TSL 6133 Curriculum and Instructional Materials Development **Credit Hours: 3**
- TSL 6390 Instructional Methods and Strategies for Teaching ESOL **Credit Hours: 3**
- TSL 6253 Applied Linguistics for Teaching ESOL **Credit Hours: 3**
- TSL 6470 Assessment and Progress Management for Teaching ESOL **Credit Hours: 3**

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval

Contacts

Contact Information: http://www.grad.usf.edu/cert

Exceptional Student Education Graduate Certificate

This program is offered fully online.

Certificate Code: XEX
Approved 201701

Description

The 12-hour Exceptional Student Education Graduate Certificate program provides teachers or individuals in related fields with the opportunity to develop advanced skills and expertise in the area of special education. Emphasis is placed on effective instructional and assessment practices, creating effective learning environments, and collaborating with others to meet the needs of exceptional students.

Course Location/Delivery

The Certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

In addition, applicants should have approximately 30 credit hours of coursework in education or a related field, or hold a professional teaching credential.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

- EEX 6222 Advanced Psychoeducational Assessment of Exceptional Students **Credit Hours: 3**
- EEX 6248 Instructional Approaches for Exceptional Populations **Credit Hours: 3**
- EEX 6612 Management and Motivation of Exceptional and At-Risk Students **Credit Hours: 3**
- EEX 6732 Consultation and Collaboration in Special Education **Credit Hours: 3**

Time Limit / Average Time to Completion

Five years

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Foreign Language Education: Culture and Content Graduate Certificate

Certificate Code: XFL
Approved 200601

This certificate provides students with an understanding of Foreign Language Education curriculum, methods of instruction, and the 6-12 classroom environments. This program is designed for students who hold a bachelor's degree in a foreign language, or who are native speakers of a language other than English and wish to begin their preparation for the teaching profession.

This certificate leads to the State of Florida teaching endorsement for Foreign Languages.

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

- Have completed approximately 30 credit hours of undergrad or graduate course work in the teaching fields of foreign language OR
- Have native-like proficiency of the foreign language acceptable to the program faculty (e.g., Spanish, French, German, Italian, Latin, Japanese, Chinese)

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

- FLE 6665 Current Trends in Secondary Foreign Language Education **Credit Hours: 3**

Select one of the following courses:

- FLE 6932 Selected Topics in Second Language Acquisition **Credit Hours: 3**

Curriculum Materials Development: Special Project (3 Credit Hours)
Integrating Technology in the Foreign Language Classroom for Intermediate Users (3 Credit Hours)

- FLE 5895 Dual Language Education **Credit Hours: 3**
- FLE 5291 Technology in the Foreign Language Classroom **Credit Hours: 3**

Depending on what you would like to specialize in, you may want to choose the remaining two courses from ESOL, Second Language Acquisition, Applied Language, Foreign Language Education, Spanish, German, French, or Latin specific courses. For a representative sampling of these courses see below:

- LIN 6720 Second Language Acquisition **Credit Hours: 3**
- LIN 6932 Selected Topics **Credit Hours: 1-4**

Language and a Movie (3 Credit Hours)

- LIN 6601 Sociolinguistics **Credit Hours: 3**
- TSL 5440 Language Testing **Credit Hours: 3**

For the French Connoisseur:

- FRW 5934 Selected Topics **Credit Hours: 1-3**

French Women Writers
African Images in Francophone Film

For the German Connoisseur:

- GEW 5934 Selected Topics **Credit Hours: 1-3**

Fantastic Films Early German Cinema
German Popular Film

For the Latin Connoisseur:

- LNW 5934 Selected Topics **Credit Hours: 4**

Roman Elegiac Poets (Proposed LNW 6325)
Vergil (Proposed LNW 6665)

For the Spanish Connoisseur:

- SPW 5135 Colonial Spanish American Literature **Credit Hours: 3**
- SPW 5934 Selected Topics **Credit Hours: 3**

Hispanic Women Writers

For the Chinese Connoisseur:

- EDG 6931 Selected Topics in Education **Credit Hours: 1-4**

Chinese Teaching Methods
China Today

- HIS 6939 Seminar in History **Credit Hours: 3**

History of China

For the ESOL Teacher:

FLE 6932 Theory and Practice of Teaching ELLs (proposed FLE 5340)

- TSL 6253 Applied Linguistics for Teaching ESOL **Credit Hours: 3**
- TSL 6470 Assessment and Progress Management for Teaching ESOL **Credit Hours: 3**
- TSL 6390 Instructional Methods and Strategies for Teaching ESOL **Credit Hours: 3**

FLE 6932 Curriculum and Instructional Materials Development for Teaching ESOL

- FLE 6167 Cross-Cultural Issues in Teaching ESOL **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Foreign Language Education: Professional Graduate Certificate

Certificate Code: XFP
Approved 200701

This graduate certificate is intended for students with undergraduate degrees who are considering a career as a teacher of foreign languages. The coursework gained through this professional training option may be used toward an M.A.T.; for certification for K-12 foreign language education directly by the Florida Department of Education (FDOE); or by a school district training program.

This certificate leads to the State of Florida teaching endorsement for Foreign Languages.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

- Have completed approximately 30 credit hours of undergrad or graduate course work in the teaching fields of foreign language OR
- Have native-like proficiency of the foreign language acceptable to the program faculty (e.g., Spanish, French, German, Italian, Latin, Japanese, Chinese

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Five Years

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

- FLE 5331 Methods of Teaching Foreign Language and ESOL in the Secondary School **Credit Hours: 3**

- FLE 5313 Methods of Teaching Foreign Language and ESOL in the Elementary School **Credit Hours: 3**
- TSL 5086 ESOL II-Secondary Language & Literacy Acquisition in Children & Adolescents **Credit Hours: 3**
- TSL 5440 Language Testing **Credit Hours: 3**
- ESE 5342 Teaching the Adolescent Learner **Credit Hours: 3**
- ESE 5344 Classroom Management for a Diverse School and Society **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Reading Endorsement Graduate Certificate

Certificate Code: XRC
Approved 200208

The Reading Endorsement Certificate program is designed to meet the needs of teachers K-12 who want to increase their effectiveness in the teaching of reading. This program addresses the needs expressed by Governor Bush and the Florida State Department of Education. The program includes five classes which will provide an in depth view of reading research, theory and the application on sound and current scientific research.

Completion of the required 15 credit hours qualifies individuals with a current FL teaching certificate to earn the Florida Reading Endorsement. Please contact Literacy Studies Program Coordinator Jenifer Jasinski Schneider for further information.

Location/Delivery

This certificate is offered fully-online as well as the Tampa and Sarasota campuses.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

In addition to your completed application form, transcripts, resume and letter of interest, you will need to submit the following documents:

- Copy of current FL teaching certificate

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Student must comply with standard rules for graduate students

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

- RED 6749 History and Foundations in Reading and STEM Disciplines **Credit Hours: 3**
- RED 6544 Cognition, Comprehension, and Content Area Reading: Remediation of Reading **Credit Hours: 3**

- RED 6545 Issues in Vocabulary and Word Study **Credit Hours: 3**
- RED 6540 Assessment in Developing Literacies **Credit Hours: 3**
- RED 6846 Practicum in Reading **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Teacher Leadership for Student Learning Graduate Certificate

This program is offered fully online.

Curriculum Code: **XTL**

Description

The purpose of this certificate program is to develop the knowledge, skills and abilities that teachers need to learn from their own teaching as well as facilitate the learning of others in their school to generate student learning. This rigorous program prepares participants to meet the Teacher Leader Model Standards and the National Staff Development Council's standards (now called Learning Forward) for engaging in and facilitating professional learning. Each certificate course will require participants to become familiar with the theoretical framework and research related to professional learning, engage in and facilitate in professional learning activities, generate data that represents the learning activity, and reflect on their own experiences to make evidence based decisions about teaching and learning.

Course Location/Delivery

Online, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

Current teaching cert

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

Courses for the certificate must be taken sequence

- EDE 6076 Teacher Leadership for Student Learning **Credit Hours: 3**
- EDE 6556 Coaching for Student Learning **Credit Hours: 3**
- EDE 6366 Professional Development for Student Learning **Credit Hours: 3**
- EDE 6486 Teacher Research for Student Learning **Credit Hours: 3**

Electives

Time Limit

2 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Engineering

The USF Graduate Council approved the following on the date noted

Major Termination

Civil Engineering	M.C.E.	Terminate Major Under Existing CIP	3/4/19
Environmental Engineering	M.E.V.E.	Terminate Major Under Existing CIP	3/4/19

Majors

Civil Engineering	M.S.C.E.	Change curriculum for compliance	4/1/19
Civil Engineering	Ph.D.	Change curriculum for compliance	4/1/19
Civil Engineering	Ph.D.	Additional change to core	4/15/19
Environmental Engineering	M.S.E.V.	Change curriculum for compliance	4/1/19
Environmental Engineering	Ph.D.	Change curriculum for compliance	4/1/19
Information Technology	M.S.I.T.	Change curriculum for compliance	3/18/19
Mechanical Engineering	M.S.M.E.	Change curriculum for compliance	3/18/19
Mechanical Engineering	Ph.D.	Change curriculum for compliance	3/18/19
Mechanical Engineering	Ph.D.	Additional changes	4/1/19

College of Engineering

EN - Updates for 2019-2020

EN - Programs

University of South Florida
College of Engineering
4202 E. Fowler Ave ENB118
Tampa, FL 33620

Web address: http://www2.eng.usf.edu/

Phone: 813-974-3780
Fax: 813-974-0460
Email: n/a

College Dean: Robert H. Bishop, Ph.D.
Associate Dean: Sanjukta Bhanja, Ph.D.

Mission Statement

The mission of the USF College of Engineering is to improve the quality of life in our community by providing a high quality education for our engineering graduates and practicing professionals; by creating new knowledge and solving real world problems via innovative research; and by engaging in effective community service and outreach.

What We Do

At the graduate level students work in close collaboration with faculty, pursuing advanced topics within their disciplines, which will result in advancements in their fields and society-at-large.

Utilizing the expertise of its individual and collective faculty, the College is dedicated to the development of new fundamental knowledge and processes or procedures, which will benefit all humanity. The College promotes multi-disciplinary approaches, commitment to life-long learning and awareness of societal issues, which are requisite for meeting technological challenges.

The College provides technical assistance and technology transfer to the region, state and nation. In all facets of teaching, research and service, the College emphasizes close liaisons with industry and government to provide students and faculty with the skills and perspectives needed to ensure effective technological leadership.

College Requirements

General Major Requirements

The requirements for graduate degrees from the College of Engineering consist of University requirements, College requirements, and Major requirements. For University requirements refer to the Office of Graduate Studies Policies and Procedures. College requirements are listed below. Refer to the degree sections for other requirements.

Master's Degree Programs

The Master's degree is awarded for advanced study beyond the baccalaureate degree within an area of specialty. The College of Engineering offers several majors leading to degrees at the master's level.

Master of Science in Designated Engineering Field - This degree is normally awarded to a Master's graduate who holds a Bachelor's degree in the designated field. Some majors offer this degree in two options: (1) thesis option (30 credits), and (2) non-thesis option (30 credits).

Master of Designated Discipline - This degree is normally awarded to a Master's graduate who has an undergraduate degree in the discipline and who follows an all coursework major or a project major.

College of Engineering Requirements for Master's Degree

1. A thesis major must contain a minimum of 24 credit hours of coursework and a minimum of 6 credit hours of thesis. (If a student transfers from a thesis major to an all coursework major, no thesis hours may be transferred, converted or counted toward the degree.)
2. Non-thesis major requirements vary according to department but must contain a minimum of 30 credits of approved coursework.
3. Students must maintain an overall grade point average of 3.00. No grade below "C" will be accepted in a graduate major. If a student's average falls below 3.00, the student will be placed on probation.
4. Most majors require students to pass a final oral or written comprehensive examination prior to receiving the degree. These examinations are arranged and administered by the student's department.

Accelerated Majors Leading to Accelerated Bachelor's and Master's Degrees

Students who are clearly interested in graduate study are invited to pursue an Accelerated Major leading to a Bachelor's Degree and Master's degree in the College of Engineering. Students in the Accelerated Major may apply up to 12 credit hours of graduate level coursework, which must be approved by the Graduate Coordinator, to count towards both degrees.
Students apply for admission to this major through their advisors, who should be consulted regarding additional requirements. Several factors, which vary by academic department, are considered for admission.

Doctoral Degree Majors

The Doctor of Philosophy degree is awarded in recognition of demonstrated scholarly competence and ability to conduct and report original and significant research. Unlike the baccalaureate and Master's degrees, the Ph.D. degree cannot be earned by an accumulation of course credits over a period of residence alone. After adequate fundamental preparation to gain competence, the student must demonstrate research capability through completion of an authoritative investigation in the chosen engineering field, culminating in a written dissertation. The dissertation must demonstrate that the student possesses the ability to reason logically, the talent for engaging in significant and original research, and the ability to organize and present conclusions in a professional manner.

Doctor of Philosophy in Designated Engineering Field - This degree is awarded to students pursuing a major in one of the following Engineering disciplines: Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Environmental Engineering, Industrial Engineering, and Mechanical Engineering. Students receiving this degree must demonstrate a thorough foundation in the designated discipline.

College of Engineering Requirements for Doctoral Degrees

1. Supervisory Committee. An advisor will be appointed by the chair of the appropriate department or major for each student during the first semester of registration at the University of South Florida. The advisor will help determine the student's area of research interest and will delineate preliminary course assignments. At the earliest possible date, a major professor will be appointed and a supervisory committee formed. This committee will monitor the student's program of studies and has full responsibility for conducting the student's qualifying examination. The Supervisory Committee consists of a minimum of five members. One member of the committee must be outside the College of Engineering. (The requirement may be waived if special reasons exist and prior approval is obtained from the Engineering Associate Dean for Academic Affairs.) A majority of the committee will be from the College of Engineering, with at least two departments of the College represented.
2. Credit Hours. A minimum of 72 hours beyond the baccalaureate degree, including a minimum of 20 hours of dissertation, and a minimum of 30 hours of coursework (excluding independent study and directed research) is required by the College. Further requirements may be imposed by the candidate's doctoral major and supervisory committee. See individual majors for specific requirements.
3. Learning Focus. Throughout the student's program of study, independent learning will be emphasized. For the first time in the participant's career, in most cases, the student will be responsible for mastering a new domain of knowledge without the aid of organized lectures and textbooks. The principal information source will be current literature. Such experience is a necessary preparation for a meaningful career in engineering and other fields where the professional must keep pace with a large, ever-changing body of knowledge.
4. Qualifying Examination. A written and oral qualifying examination, conducted by the supervisory committee, will be taken by each Ph.D. student as soon as a substantial majority of coursework is completed.
5. Admission to Candidacy. Students must be admitted to candidacy before they register for dissertation. Before admission to candidacy, students must have officially formed a Ph.D. Supervisory Committee and passed the qualifying examination of paragraph 4. Once admitted to candidacy students must enroll for a minimum of 2 credit hours each semester of the academic year until completion of major.
6. Dissertation Research. The student must carry out an investigation resulting in an original and significant contribution to the knowledge in the field of research. The requirement of uniqueness means that the dissertation research will provide an important creative experience for the student. As the final stage of the student's major, the candidate must prepare a written dissertation covering the research. Students in the Ph.D. major must take an appropriate number of doctoral dissertation credits, but not less than 20 hours; the exact number is determined by department and/or individual requirements. The defense of the dissertation will conform to Office of Graduate Studies general rules.
7. Residency. Minimum residency requirements may be satisfied by completing the University's minimal requirement at the University of South Florida. Any graduate work counted toward the fulfillment of the requirement for the Ph.D. degree after admission to candidacy must be accomplished within 5 calendar years.

Collaboration with Other Colleges and Departments

Advanced study and research challenges exist at the interfaces between engineering and other academic disciplines. Examples include surface physics and chemistry applied to semiconductor processing technology; semiconductor physics applied to VLSI and analog integrated circuit design, manufacture and quality control; chemical processing and its relation to chemical principles; environmental engineering and chemical identification of minute impurities; environmental and transportation engineering and its relation to public health and public administration; water resources engineering and geo-hydrology; and biomedical engineering, to name only a few. The College collaborates with other academic units of the University in research activities and selectively educates students to become proficient in such interdisciplinary fields.

Materials Science and Engineering, M.S.M.S.E.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 14.1801
Dept. Code: All Engineering Depts. except Computer Science and Engineering
Major/College Codes: MSE EN
Approved: 2001

Also offered as an Accelerated Major

Contact Information

Colleges: Engineering
Departments:
Chemical & Biomedical Eng
Civil Engineering
Electrical Engineering
Industrial Engineering
Mechanical Engineering

Contact Information: http://www.grad.usf.edu/majors

The field of Materials Science and Engineering (MSE) applies the fundamental principles of physics and chemistry to engineering materials, with a focus on the interrelationship between material structure, their properties, and the means by which they are processed. MSE impacts multiple facets of our economy, such as aerospace, electronics, transportation, communication, construction, recreation, entertainment, environment and energy. It is, by its very nature, an interdisciplinary field. The goal of the M.S.M.S.E. major in Materials Science and Engineering is to provide a route for well-qualified undergraduate students who desire in-depth graduate-level work including structured courses and research experience, in preparation for work in industry or for entrance into a relevant science or engineering Ph.D. major.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Bachelor's degree in Engineering (Chemical, Mechanical, Industrial, Civil, Materials Science, Ceramic, Metallurgy, Manufacturing, Polymer and other related engineering disciplines) or Natural Sciences (Physics, Chemistry or Biology) from a regionally accredited institution.
- GRE with preferred minimum scores of V 50%, Q 50% and AW 50%.
- Three letters of recommendation
- Statement of purpose

Curriculum Requirements

Core Requirements (5 Credit Hours)

- EMA 6510 Characterization of Materials **Credit Hours: 3**
- ECH 6931 Special Problems II **Credit Hours: 1-3 (2 credits for this program)** (Graduate Seminar)

Electives (19 Credit Hours Minimum)

Students will select electives in consultation with the Graduate Director.

Comprehensive Exam

Students in the non-thesis track will complete a comprehensive exam. For students in the thesis track, the thesis and oral defense serve as the comprehensive exam.

Non-Thesis Option (6 Credit Hours)

At least 26 hours must be at the 6000 level with a maximum of 2 hours of Independent Study. For Non-thesis Option six additional credit hours of elective courses is required in lieu of thesis hours.

Thesis Option (6 Credit Hours)

At least 16 credit hours must be at 6000 level with a maximum of 2 hours of Independent Study.

Accelerated Major

Also available as an Accelerated Majors

Robotics Graduate Certificate

This program is offered fully online.

Curriculum Code: **XRO**

Description

Robotics includes many technical aspects, such as mechatronics, kinematics, controls, programming, algorithm development, and more. This certificate in Robotics prepares students for work in robotics and exposes them to several facets of the field. The program allows for a focus on the hardware and modeling or the algorithms, all of which are the integral components of robotics.

Course Location/Delivery

Partial

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (13 Credit Hours)

- EML 6801 Robotic Systems **Credit Hours: 3**
- CIS 6930 Special Topics **Credit Hours: 1-5**

Electives

Select 9 cr:

- EML 6594 Haptics **Credit Hours: 3**
- EML 6273 Advanced Dynamics of Machinery **Credit Hours: 3**
- CIS 6930 Special Topics **Credit Hours: 1-5**
- CIS 6930 Special Topics **Credit(s): 1-5**
- CIS 6930 Special Topics **Credit(s): 1-5**
- CAP 5400 Digital Image Processing **Credit Hours: 3**
- CAP 5625 Introduction to Artificial Intelligence **Credit Hours: 3**

- CAP 6415 Computer Vision **Credit Hours: 3**

Time Limit

5 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Systems Engineering Graduate Certificate

This program is offered fully online.

Curriculum Code: **XSY**

Description

The University of South Florida's Industrial and Management Systems Engineering department offers a fully online Graduate Certificate in Systems Engineering for individuals with technical backgrounds. This certificate program offers both quantitative and qualitative approaches to strengthen systems engineering credentials.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- EIN 6935 Special Industrial Topics II **Credit Hours: 1-3**
- EIN 6455

Electives

Select 2:

- ESI 5306 Operations Research for Engineering Management **Credit Hours: 3**
- ESI 5470
- ESI 5522 Computer Simulation **Credit Hours: 3**
- ESI 5236 Reliability Engineering **Credit Hours: 3**
- ESI 6213 Stochastic Decision Models I **Credit Hours: 3**
- ESI 6247 Statistical Design Models **Credit Hours: 3**
- ESI 6491 Linear Programming and Network Optimization **Credit Hours: 3**

- ESI 6324 Engineering the Supply Chain **Credit Hours: 3**
- EIN 6935

Time Limit

3 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Patricia Anzalone, Dan Nguyen, Gloria Hanshaw
panzalone@usf.edu, dannguyen@usf.edu, ghanshaw@usf.edu

URL

http://imse.eng.usf.edu/

Total Quality Management Graduate Certificate

This program is offered fully online.

Curriculum Code: **XTQ**

Description

The University of South Florida's Industrial & Management Systems Engineering department offers a fully online graduate certificate in Total Quality Management.

Course Location/Delivery

Online, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

Select 5:

- EIN 6936 Special Industrial Topics III **Credit Hours: 1-3**
- ESI 6225
- ESI 6247 Statistical Design Models **Credit Hours: 3**
- ESI 5236 Reliability Engineering **Credit Hours: 3**
- EIN 5174 Total Quality Management Concepts **Credit Hours: 3**
- EIN 6225
- DIN 6179
- EIN 6178 ISO 9000/14000 **Credit Hours: 3**
- EIN 6935 Special Industrial Topics II **Credit Hours: 1-3**

Electives

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Wireless Engineering Graduate Certificate

This program is offered fully online.

Curriculum Code: **XWE**

Description

This certificate recognizes post-bachelors preparation for engineering of modern wireless circuits, antennas and communication systems. The applicable course list allows significant flexibility to accommodate variability in student preparation, and course scheduling. The program allows emphasis to be placed in either circuits and antennas or systems and networks, while requiring exposure to both.

Course Location/Delivery

Online, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

B.S. in Electrical Engineering or Computer Engineering (any other degree track must meet Engineering dept approval)

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

Electives

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Chemical and Biomedical Engineering

Chemical Engineering, M.S.Ch.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 14.0701
Dept. Code: ECH
Major/College Codes: ECH EN
Approved: 1981

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Chemical & Biomedical Engineering

Contact Information: http://www.grad.usf.edu/majors

The Master of Science in Chemical Engineering degree is usually awarded to a student who has an undergraduate degree in Chemical Engineering or strong evidence of undergraduate chemical engineering experience.

Major Research Areas:
The Chemical & Biomedical Engineering faculty research and development interesst cover a broad range of areas in reacting systems, thermodynamics, transport phenomena, systems engineering and characterization, all fundamental as well as applied in biomedical, materials including microelectronic, and environmental domains. Strong collaboration with the College of Medicine, Center of Microelectronic Research, as well as, Departments of Biology, Chemistry, Industrial Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, and Computer Science and Engineering makes most majors in Chemical Engineering truly interdisciplinary.

The Department offers core courses in thermodynamics, transport phenomena, reacting systems, math, and process analysis and modeling. A rich variety of electives are available regularly within the department as well as the University. Chemical & Biomedical Engineering research facilities include modern laboratories for polymer synthesis and characterization, supercritical fluid technology, life sciences, process control, instrumentation, computer aided process design, and phase behavior.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE required with preferred minimum scores of Verbal >50% percentile, Quantitative > 75th percentile , and Analytical Writing of 3.0 or greater. Applicants who have successfully completed the Fundamentals of Engineering (FE) Exam offered by the Society of Professional Engineers will be exempted from the GRE requirement.
- An undergraduate Bachelor's degree or equivalent in Chemical Engineering;

- Two (2) letters of reference; and
- Statement of research interests.

Curriculum Requirements

Total Minimum Hours: 30 hours post-bachelors

Core Requirements – 12 hours
Course Requirements – 18 hours

This degree requires an undergraduate degree in Chemical Engineering or strong evidence of undergraduate chemical engineering experience.

A background with undergraduate chemical engineering courses is needed.

Course Requirements (12 Credit Hours)

- ECH 6105 Advanced Thermodynamics I **Credit Hours: 3**

or

- ECH 6107 Molecular Thermodynamics **Credit Hours: 3**

- ECH 6285 Advanced Transport Phenomena **Credit Hours: 3**

or

- BME 6634 Biotransport Phenomena **Credit Hours: 3**

- ECH 6515 Reacting Systems **Credit Hours: 3**

or

- ECH 6506 Chemical Engineering Kinetics **Credit Hours: 3**

- ECH 6840 Mathematical Methods for Chemical Engineering **Credit Hours: 3**

or

- ECH 6412 Processes Analysis and Modeling **Credit Hours: 3**

Additional Course Requirements (18 Credit Hours)

- Other 5000 or 6000 course or ECH 6907 Independent Study - Variable Title **Credit(s): 3**
- Other 5000 or 6000 course or ECH 6907 Independent Study - Variable Title **Credit(s): 3**
- Other 5000 or 6000 course or ECH 6907 Independent Study - Variable Title **Credit(s): 3**
- Additional approved 5000 or 6000 ECH courses **Credit(s): 9**

Must have a minimum of 16 hours at 6000 level
Must have a minimum of 12 hours of ECH 6000 level
May include a maximum of 4 hours of independent study

Thesis Option (6 Credit Hours Minimum)

At least 2 members of the Thesis committee must be from tenured or tenure track Chemical & Biomedical Engineering faculty. All thesis option students are required to present a departmental seminar based on their research as part of their oral examination. The examination must be scheduled after the Thesis

Supervisory Committee has approved the Thesis. The Graduate Coordinator should be notified so he can coordinate the seminar scheduling. Students in this major are also required to pass the FE (Fundamentals of Engineering Examination) offered by the Society of Professional Engineers.

- ECH 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**

Comprehensive Exam

Candidates who have at least one publication in a journal or proceedings or presentation at a conference (based on their M.S. Thesis research) may be exempted from this comprehensive examination requirement.

Students wishing to continue on for a Ph.D. must apply to the Office of Graduate Studies.

Accelerated Major

Also available as an Accelerated Majors

Chemical Engineering, Ph.D.

Degree Information

Priority Admission Application Deadlines:

Fall: February 15
Spring: October 15
Summer: February 15

International applicant deadlines:
http://www.grad.usf.edu/majors

Minimum Total Hours: 60 post-master's 90 post-bachelor's
Level: Doctoral
CIP Code: 14.0701
Dept. Code: ECH
Major/College Codes: ECH EN
Approved: 1981

Contact Information

College: Engineering
Department: Chemical & Biomedical Engineering

Contact Information: www.grad.usf.edu

Major Research Areas:
The Chemical & Biomedical Engineering faculty research and development interests cover a broad range of areas in reacting systems, thermodynamics, transport phenomena, systems engineering and characterization, all fundamental as well as applied in biomedical, materials including microelectronic, and environmental domains. Strong collaboration with the College of Medicine, Center of Microelectronic Research, as well as, Departments of Biology, Chemistry, Industrial Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, and Computer Science and Engineering makes most majors in Chemical Engineering truly interdisciplinary.

The Department offers core courses in thermodynamics, transport phenomena, reacting systems, math, and process analysis and modeling. A rich variety of electives are available regularly within the department as well as the University. Chemical & Biomedical Engineering research facilities include modern laboratories for polymer synthesis and characterization, supercritical fluid technology, life sciences, process control, instrumentation, computer aided process design, and phase behavior.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE required with preferred scores: Verbal >50% percentile, Quantitative >75% percentile and Analytical Writing >4.0
- An undergraduate Bachelor's degree or equivalent in Chemical Engineering.

- Three (3) letters of reference.
- Statement of Research Interests.

Curriculum Requirements

Total Minimum hours:
For students with an *approved* master's degree: 60 hours minimum post-master's
For students without a master's degree: 90 hours minimum post-bachelor's

Structured Coursework requirements – 45 hours
Electives – 25 hours
Dissertation hours – 20 hours minimum (30 hours maximum)

Requires an undergraduate degree in Chemical Engineering. Complete Background courses in Chemical Engineering as needed.

Structured Coursework Requirements (45 Credit Hours):

- ECH 6105 Advanced Thermodynamics I **Credit Hours: 3**

or

- ECH 6107 Molecular Thermodynamics **Credit Hours: 3**

- ECH 6285 Advanced Transport Phenomena **Credit Hours: 3**
- ECH 6840 Mathematical Methods for Chemical Engineering **Credit Hours: 3**

- ECH 6515 Reacting Systems **Credit Hours: 3**

or

- ECH 6506 Chemical Engineering Kinetics **Credit Hours: 3**

- ECH 6412 Processes Analysis and Modeling **Credit Hours: 3**
- ECH 6931 Special Problems II **Credit Hours: 1-3 (3 credits for this program)**

(Graduate Seminar courses (1 hour each; at least three))

- Other 5000 or 6000 level Courses **Credit(s): 27** (The exact distribution of these hours will be determined by the student, graduate advisor, and the supervisory committee to provide the student with a stimulating educational experience)

Electives (25 Credit Hours)

Qualifying Examination

Qualifying Examination preferably to be completed by the end of the second year of study. The dissertation committee will evaluate a written dissertation proposal and an oral defense. Poor performance on the qualifying exam based on the judgment of the Committee may result in the student failing the exam. If a student does not pass on the first attempt, he/she may request in writing to repeat the exam. Students who fail the Qualifying Examination the second time will be dismissed by the Major.

Dissertation (20 Credit Hours Minimum)

- ECH 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Additional Requirements

Publication in a refereed journal with the student as the first and primary author. At least 1 is required with the expectation that most Ph.D. students will have 3 or more. The publication must be based on your Dissertation research. Presentation at a conference or publication in a proceeding (even if refereed) is not sufficient.

Department of Civil and Environmental Engineering

Civil Engineering, M.S.C.E.

Degree Information

Priority Admission Application Deadlines: https://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 14.0801
Dept. Code: EGX
Major/College Codes: ECE EN
Approved: 1981

Concentrations:

Engineering for International Development (EFD)
Geotechnical (GTL)
Materials (MTL)
Structures (STR)
Transportation (TPT)
Water Resources (WRS)

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Civil and Environmental Engineering

Contact Information: https://www.grad.usf.edu/majors

The M.S.C.E. degree provides a student with the opportunity to earn the advanced degree with either coursework only or research thesis options. Students must have an accredited first degree in engineering or complete a list of prerequisite engineering coursework. The M.S.C.E. with thesis is a research-oriented degree in which the student writes, as a major part of the degree requirements, a thesis that defines, examines, and reports in depth on a subject area relevant to Civil Engineering. Both the thesis and non-thesis options prepare graduates for careers with governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in Civil Engineering planning, design, or policy.

The field of Civil Engineering has long been known for its breadth and ability to adapt to the new technological needs of society. The traditional areas of public works, such as highways, bridges, water supply, building design, and wastewater treatment, remain very important. Graduates of the major are prepared for careers with public agencies or private industry and with firms involved in planning, design, research and development, or regulation. The Department is well-equipped with structures, soils, pavement and hydraulics laboratories.

Accreditation

The Florida Board of Professional Engineers allows for successful completion of a graduate studies leading to Master's degree in engineering to provide credit toward one year of engineering experience.

Major Research Areas

Civil Engineering, including Engineering Mechanics, Geotechnical Engineering, Pavement Engineering, Materials Engineering and Science, Structural Engineering, Transportation Engineering and Planning, and Water Resources Engineering

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Undergraduate degree in an Engineering discipline or completion of pre-requisites.
- Undergraduate GPA greater than 3.00 preferred.
- GRE with preferred minimum scores of V (25th percentile), Q (60th percentile), AW (15th percentile); or valid Fundamentals of Engineering (FE) or professional engineering (PE) certificate. Verification of FE or PE certification should be obtained from the PE board where the certification was obtained.
- Two Letters of Reference provided at the time of application.
- Statement of Purpose provided at the time of application.
- Resume provided at the time of application.
- Intake form: https://docs.google.com/forms/d/e/1FAIpQLSeN_MdTzEBtvJAUMLwOz8WRF1be-bUMg-pzot1FPJRS_b9PIA/viewform

Exceptions made on a case-by-case basis where warranted

Curriculum Requirements

Total Minimum Hours: 30 credit hours

Core Requirement: 4 credit hours
Concentration: 15 credit hours
Electives: 5 credit hours

Thesis/Non-Thesis: 6 credit hours

Core Requirements (4 Hours)

- CGN 6311C Introduction to Data Science for Civil Engineers **Credit Hours: 2**
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4**

Professional Practice of Civil Engineering (proposed as CGN 6152) - 2 Credit Hours

Concentration Requirements (15 Credit Hours Minimum)

The Department supports M.S.C.E. concentration areas in Engineering for International Development (EFD), Geotechnical Engineering (GTL), Materials Engineering and Science (MTL), Structures Engineering (STR), Transportation Engineering (TPT), and Water Resources (WRS). Students may select from one of these concentrations, or may select no concentration.

Engineering for International Development (EFD)(15 Credit Hours Minimum)

Students must engage in full-time global training and service as part of the EFD concentration (e.g., in the U.S. Peace Corps, with a non-governmental organization, UNESCO-IHE, or equivalent). This work must be incorporated into the student's thesis. Students may register for CST 6990 for 0 credit hours while in their country of service. Note that EFD concentration is available to thesis option students only.

- ENV 6510 Sustainable Development Engineering **Credit Hours: 3**
- 3 additional graduate level credit hours of coursework in international development engineering or closely related areas.

A minimum of 1 course from the following applied anthropology courses: (3 Credit Hours)

- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- ANG 6730 Socio Cultural Aspects of HIV/AIDS **Credit Hours: 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3** (Health, Illness and Culture)

A minimum of one course from the following global public health courses: (3 Credit Hours)

- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**

Geotechnical (GTL)(15 Credit Hours Minimum)

- CEG 5115 Foundation Engineering **Credit Hours: 3**
- CES 6118 Applied Finite Elements **Credit Hours: 3**
- 6 additional credit hours of coursework in Geotechnical engineering or closely related areas.

Materials (MTL)(15 Credit Hours Minimum)

- 6 additional credit hours of coursework in Materials Engineering and Science or closely related areas.

At least 2 courses from the following list: (6 Credit Hours)

- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4** (Advanced Construction Materials)
- CGN 6720 Electrochemical Diagnostic Techniques **Credit Hours: 3**
- CES 6010 Structural Life Prediction **Credit Hours: 3**
- EMA 5326 Corrosion Control **Credit Hours: 3**
- EMA 6510 Characterization of Materials **Credit Hours: 3**

Structures (STR)(15 Credit Hours Minimum)

- 6 additional credit hours of coursework in Structures Engineering or closely related areas.

At least 1 course from the following list of design courses: (3 Credit Hours)

- CES 6706 Advanced Concrete Design **Credit Hours: 3**
- CES 6835 Design of Masonry Structures **Credit Hours: 3**
- CES 5715C Prestressed Concrete **Credit Hours: 3**

At least 1 course from the following list of analysis courses: (3 Credit Hours)

- CES 6118 Applied Finite Elements **Credit Hours: 3**
- CES 6230 Advanced Structural Mechanics **Credit Hours: 3**
- CES 6144 Advanced Structural Analysis **Credit Hours: 3**
- CES 5209 Structural Dynamics **Credit Hours: 3**

Transportation (TPT)(15 Credit Hours Minimum)

- TTE 5205 Traffic Systems Engineering **Credit Hours: 3**
- TTE 5501 Transportation Planning and Economics **Credit Hours: 3**

- TTE 6507 Travel Demand Modeling **Credit Hours: 3**

or

- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4** (Statistical and Econometric Methods)

- 3 additional credit hours of coursework in Transportation Engineering or closely related areas.

Water Resources (WRS)(15 Credit Hours Minimum)

4 courses (12 credit hours) from the following list:

- CWR 6235 Free Surface Flow **Credit Hours: 3**
- CWR 6239 Waves and Beach Protection **Credit Hours: 3**
- CWR 6305 Urban Hydrology **Credit Hours: 3**
- CWR 6534 Coastal and Estuary Modeling **Credit Hours: 3**
- CWR 6535 Hydrologic Models **Credit Hours: 3**
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4** (Vadose Zone Hydrology)
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit(s): 1-4** (Groundwater Hydraulics)
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit(s): 1-4** (Advanced Computational Fluid Mechanics)
- CWR 6820 Coastal Waves and Structures **Credit Hours: 3**
- CWR 6538 Advanced Hydrologic Models **Credit Hours: 3**
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit(s): 1-4** (Advanced Numerical Methods)
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit(s): 1-4** (Global Sustainability)
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit(s): 1-4** (Ecological Engineering)

Comprehensive Exam

For Thesis Option: The thesis and defense are used in lieu of a comprehensive exam.

For Non-Thesis Option: Portfolio and oral interview are used in lieu of a comprehensive exam. The purpose of the portfolio and interview is for students to demonstrate that they have achieved a minimum level of proficiency in stipulated competencies. Specifically, by the time they graduate, students will demonstrate:

- an ability to plan, compose and integrate verbal, written, virtual, and graphical communication of a project to technical and non-technical audiences, and

- an ability to formulate and solve complex problems in Civil Engineering using relevant data and techniques.

Additional details regarding portfolio requirements will be provided to students by the Department.

Other Requirements

- A maximum of 12 graduate level credits taken outside the CEE department may be applied to meet the degree requirements.
- A maximum of 6 credits of independent study may be applied to meet the degree requirements.

Electives (5 Credit Hours Minimum)

Electives selected in consultation with advisor.

Thesis (6 Credit Hours Minimum)

Students must conduct a suitable research project under the guidance of their thesis advisor, write an original thesis based upon the results of the research project, and defend the thesis to a committee that must subsequently approve the completed thesis. For students in the EFD concentration, the thesis must be associated with research in a developing-world context.

Non-Thesis Option – 6 hours
Six credits of elective courses

- CGN 6971 Thesis: Master's **Credit Hours: 2-19**

6 hours minimum

Accelerated Major

Also available as an Accelerated Majors

Civil Engineering, Ph.D.

Degree Information

Priority Admission Application Deadlines: https://www.grad.usf.edu/majors

Minimum Total Hours: 78 post-bachelor's, 48 post-master's
Level: Doctoral
CIP Code: 14.0801
Dept. Code: EGX
Major/College Codes: ECE EN
Approved: 1982

Concentrations:

Engineering for International Development (EFD)
Environmental Engineering (EVE)
Geotechnical (GTL)
Materials (MTL)
Structures (STR)
Transportation (TPT)
Water Resources (WRS)

Contact Information

College: Engineering
Department: Civil and Environmental Engineering

Contact Information: https://www.grad.usf.edu/majors

The Ph.D. degree is awarded in recognition of demonstrated scholarly competence and ability to conduct and report original and significant research in Civil Engineering.

The field of Civil Engineering has long been known for its breadth and ability to adapt to the new technological needs of society. The traditional areas of public works, such as highways, bridges, water supply, building design, and wastewater treatment, remain very important. In addition, the modern area of managing the environment, including sustainable development, has been included in the Civil Engineering domain. Graduates of the major are prepared for careers in academia, with public agencies, or with private industry, including firms involved in planning, design, research and development, or regulation.

Ph.D. students may work in any of the areas of Civil Engineering, including Engineering Mechanics, Environmental Engineering, Geotechnical Engineering, Pavement Engineering, Materials Engineering and Science, Structures Engineering, Transportation Engineering and Planning, and Water Resources Engineering.

Accreditation

The Florida Board of Professional Engineers allows for successful completion of a graduate studies leading to Ph.D, degree in engineering to provide credit toward two year of engineering experience.

Major Research Areas:
Civil Engineering, including Engineering Mechanics, Environmental Engineering, Geotechnical Engineering, Pavement Engineering, Materials Engineering and Science, Structures Engineering, Transportation Engineering and Planning, and Water Resources Engineering.

The department has a high bay structures laboratory, which includes an MTS 250 kip testing machine. There are also well-equipped environmental, soils, pavement and hydraulics laboratories. These laboratories include equipment for water and air quality analysis, bench and pilot scale reactor studies, field instrumentation for environmental and water resources studies, constant rate of stress consolidometer, triaxial units, and Superpave testing equipment.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Undergraduate GPA greater than 3.30 preferred
- GRE with V (45th percentile), Q (75th percentile), and AW (55th percentile)
- Resume provided at the time of application.
- Three (3) letters of reference provided at the time of application
- Statement of Purpose provided at the time of application
- Intake form https://docs.google.com/forms/d/e/1FAIpQLSeN_MdTzEBtvJAUMLwOz8WRF1be-bUMg-pzot1FPJRS_b9PIA/viewform
- Exceptions made on a case-by-case basis where warranted.

Curriculum Requirements

Total Program Hours:
78 hours minimum post-bachelor's
48 hours minimum post-master's

Core requirement – 4 hours
Concentration – 15 hours
Electives – 30 hours
Dissertation – 20 hours
Other course requirement – 9 hours

Core Requirement (4 Credit Hours)

- CGN 6310 Introduction to Data Science for Civil Engineerings (2 Credit Hours)
- CGN 6945 Graduate Research Methods in Civil & Environmental Engineering **Credit Hours: 2**

Concentration Requirements (15 Credit Hours Minimum)

Students may select from one of these concentrations.

Engineering for International Development (EFD) (15 Credit Hours)

Students must engage in full-time global training and service as part of the EFD concentration (e.g., in the U.S. Peace Corps, with a non-governmental organization, UNESCO-IHE, or equivalent). This work must be incorporated into the student's dissertation. Note that a student may register for CST 6990 for 0 credit hours while in their country of service.

- ENV 6510 Sustainable Development Engineering **Credit Hours: 3**

A minimum of 1 course from the following applied anthropology courses: (3 Credit Hours)

- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- ANG 6730 Socio Cultural Aspects of HIV/AIDS **Credit Hours: 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3** (Health, Illness, and Culture)

A minimum of 1 course from the following global public health courses: (3 Credit Hours)

- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**

Additional 6 graduate level credit hours of coursework in EFD or closely related areas

Environmental (EVE) (15 Credit Hours)

- ENV 6002 Physical and Chemical Principles in Environmental Engineering **Credit Hours: 3**
- EES 6107 Biological Principles of Environmental Engineering **Credit Hours: 3**
- ENV 6666 Aquatic Chemistry **Credit Hours: 3**

At least one course from the following:

- ENV 6617 Green Engineering for Sustainability **Credit Hours: 3**
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4 (3 credits for this program)** (Resilient Infrastructure)

ENVISION Sustainable Communities (3 Credit Hours) (Proposed)

- ENV 6510 Sustainable Development Engineering **Credit Hours: 3**

3 Additional credit hours of graduate coursework in Environmental Engineering

Geotechnical (GTL) (15 Credit Hours)

- CEG 5115 - Foundation Engineering **Credit(s): 3**
- CES 6118 Applied Finite Elements **Credit Hours: 3**
- Additional 9 graduate level credit hours of coursework in Geotechnical Engineering or closely related areas

Materials (MTL) (15 Credit Hours)

- Additional 9 graduate level credit hours of coursework in Materials Engineering and Science or closely related areas

At least 2 courses from the following list: (6 Credit Hours)

- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4 (3 credits for this program)** (Advanced Construction Materials)
- CGN 6720 Electrochemical Diagnostic Techniques **Credit Hours: 3**
- CES 6010 Structural Life Prediction **Credit Hours: 3**
- EMA 5326 Corrosion Control **Credit Hours: 3**
- EMA 6510 Characterization of Materials **Credit Hours: 3**

Structures (STR) (15 Credit Hours)

1 course from the following list of courses: (3 Credit Hours)

- CES 6706 Advanced Concrete Design **Credit Hours: 3**
- CES 6835 Design of Masonry Structures **Credit Hours: 3**
- CES 5715C Prestressed Concrete **Credit Hours: 3**

1 course from the following list of courses: (3 Credit Hours)

- CES 6118 Applied Finite Elements **Credit Hours: 3**
- CES 6230 Advanced Structural Mechanics **Credit Hours: 3**
- CES 6144 Advanced Structural Analysis **Credit Hours: 3**
- CES 5209 Structural Dynamics **Credit Hours: 3**
- EGN 6333 Continuum Mechanics **Credit Hours: 3**

Additional 9 graduate level credit hours of coursework in Structures Engineering or closely related areas

Transportation (TPT) (15 Credit Hours)

- TTE 5205 Traffic Systems Engineering **Credit Hours: 3**
- TTE 5501 Transportation Planning and Economics **Credit Hours: 3**
- TTE 6507 Travel Demand Modeling **Credit Hours: 3**
- Additional 6 graduate level credit hours of coursework in Transportation Engineering or closely related areas

Water Resources (WRS) (15 Credit Hours)

A minimum of 4 courses from the following list: (12 Credit Hours)

- CWR 6235 Free Surface Flow **Credit Hours: 3**
- CWR 6239 Waves and Beach Protection **Credit Hours: 3**
- CWR 6305 Urban Hydrology **Credit Hours: 3**
- CWR 6534 Coastal and Estuary Modeling **Credit Hours: 3**
- CWR 6535 Hydrologic Models **Credit Hours: 3**
- CWR 6105 Vadose Zone Hydrology **Credit Hours: 3**
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4 (3 credits for this program)** (Groundwater Hydraulics)
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit(s): 1-4 (3 credits for this program)** (Advanced Computational Fluid Mechanics)
- GLY 6836 Numerical Modeling of Hydrogeologic Systems **Credit Hours: 3**
- GLY 6827C Advanced Hydrogeology **Credit Hours: 4**

- CWR 6820 Coastal Waves and Structures **Credit Hours: 3**
- CWR 6538 Advanced Hydrologic Models **Credit Hours: 3**

Electives (30 Credit Hours)

Graduate level electives are selected in consultation with the student's major research advisor and/or advisory committee

- No more than 9 credit hours of Independent Study may be applied to meet the coursework requirement.
- No more than 6 credit hours of thesis may be applied to meet the coursework requirement.
- Directed research and/or dissertation credits may not be counted towards the coursework requirement.

Qualifying Exam

Doctoral students are expected to pass a qualifying examination no later than the semester following the completion of 48 credits of coursework beyond a bachelor's degree. At minimum, the exam will include a written dissertation proposal and oral defense by the dissertation committee. A written exam in the area of concentration may also be required. Poor performance on the qualifying exam based on the judgment of the committee may result in the student failing the exam. If a student does not pass on the first attempt, he/she may request in writing to repeat the exam. Students who fail the Qualifying examination the second time will be dismissed by the Major.

Dissertation Requirements (20 Credit Hours Minimum)

A minimum of 20 credits of dissertation, an approved PhD dissertation, and a dissertation defense are required. Students may not sign up for dissertation credits until they have defended their proposal and advanced to candidacy (see Qualifying Exam, above).

- CGN 7980 Dissertation Doctoral **Credit Hours: 2-19 (20 credits for this program)**

Additional Requirements (9 Credit Hours Minimum)

Nine (9) credits of additional graduate level coursework, dissertation, or directed research are required.

Publication Requirement

Students must have at least one paper accepted to a peer-reviewed journal or peer-reviewed conference based on their research carried out during their doctoral studies at USF.

Environmental Engineering, M.S.E.V.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 14.1401
Dept. Code: EGX
Major/College Codes: EVE EN
Approved: 1996

Concentration

Engineering for International Development (EFD)

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Civil and Environmental Engineering

Contact Information: http://www.grad.usf.edu/majors

The M.S.E.V. degree provides a student with the opportunity to earn the advanced degree with either coursework only or research thesis options. Students must have an accredited first degree in engineering or complete a list of prerequisite engineering coursework. An optional concentration in Engineering for International Development allows students to combine their graduate education and research with international engineering service. The M.S.E.V. with thesis is a research-oriented degree in which the student writes, as a major part of the degree requirements, a thesis that defines, examines, and reports in depth on a subject area relevant to Environmental Engineering. Both the thesis and non-thesis options prepare graduates for careers with governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in Environmental Engineering planning, design, or policy. The environmental engineering laboratories provide state-of-the-art analytical and experimental equipment for chemical and biological research. Equipment includes an ion chromatograph, atomic absorption spectrophotometer, several gas chromatrographs (including with mass spectometry), HPLC, TOC machine, and environmental chambers. Field research sites are available locally and in several international settings that include developing world communities. Graduates of the major are prepared for careers in academia, governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in planning, design, research and development, or policy.

Accreditation:

The Florida Board of Professional Engineers allows for successful completion of a graduate studies leading to Master's degree in engineering to provide credit toward one year of engineering experience.

Major Research Areas:

Water quality engineering; air quality engineering; fate and transport of contaminants in the environment; environmental biotechnology and nanotechnology; waste management; sustainability and ecological engineering; surface water hydrology and hydraulics; groundwater hydrology; water reuse; green engineering; renewable energy; fate of emerging contaminants; and humanitarian engineering with a focus on the developing world.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE with preferred minimum scores of V (25th percentile), Q (60th percentile), AW (15th percentile); or valid Fundamentals of Engineering (FE) certificate. Verification of FE certification should be obtained from the professional engineering (PE) board where the FE certification was obtained.
- Two (2) Letters of Reference provided at the time of application. EFD students must submit 3 Letters of Reference.
- Statement of Purpose provided at the time of application.
- Resume provided at the time of application.
- Exceptions made on a case-bay-case basis where warranted.
- Intake form https://docs.google.com/forms/d/e/1FAIpQLSeN_MdTzEBtvJAUMLwOz8WRF1be-bUMg-pzot1FPJRS_b9PIA/viewform

Curriculum Requirements

Total Minimum Hours - 30 hours
Core courses – 9 hours
Other required courses – 3 hours
Concentration or Electives - 12 hours
Thesis or Non-thesis Option – 6 hours

Core Courses (9 Credit Hours)

- ENV 6002 Physical and Chemical Principles in Environmental Engineering **Credit Hours: 3**
- EES 6107 Biological Principles of Environmental Engineering **Credit Hours: 3**
- ENV 6666 Aquatic Chemistry **Credit Hours: 3**

Other required courses (3 Credit Hours Minimum)

At least one of the following:

- ENV 6617 Green Engineering for Sustainability **Credit Hours: 3**
- ENV 6070 Resilient and Sustainable Infrastructure (RESIN) **Credit Hours: 3**
- ENV 6510 Sustainable Development Engineering **Credit Hours: 3**
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4 (3 credits for this program)** (Resilient Infrastructure for Sustainable Communities)

Concentration Requirements (12 Credit Hours Minimum)

Students select either the concentration or electives.

Engineering for International Development (EFD) Concentration (12 Credit Hours Minimum)

Students must engage in full-time global training and service as part of the EFD concentration (e.g., in the U.S. Peace Corps, with a nongovernmental organization, UNESCO-IHE, or equivalent). This work must be incorporated into the student's thesis. Students may register for CST 6990 for 0 credit hours while in their country of service. Note that the EFD concentration is not open for non-thesis option students.

- ENV 6510 Sustainable Development Engineering **Credit Hours: 3**

A minimum of 1 course (3 credits) from the following applied anthropology courses:

- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- ANG 6730 Socio Cultural Aspects of HIV/AIDS **Credit Hours: 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**

A minimum of 1 course (3 credits) from the following global public health courses:

- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**
- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**

A minimum of 1 course (3 credits), chosen with approval of the student's graduate committee.

Elective Courses (12 Credit Hours Minimum)

Beyond the core coursework, 12 additional credit hours are required, based on approval of the student's graduate committee. Students in the EFD Concentration complete the concentration requirements and then one elective course.

Thesis/Non-Thesis (6 Credit Hours Minimum)

- CGN 6971 Thesis: Master's **Credit Hours: 2-19**

Students pursuing the M.S.E.V. are required to complete at least six (6) credits of Thesis. Students must conduct a suitable research project under the guidance of their thesis advisor, write an original thesis based upon the results of the research project, and defend the thesis to a committee that must subsequently approve the completed thesis. For students in the EFD Concentration, the thesis must be associated with research in a developing-world context.

Non-Thesis Portfolio Option – 6 hours minimum
At least two courses (6 credits) must be from this list:

- ENV 6105 Air Pollution Fundamentals **Credit Hours: 3**
- ENV 6438 Physical & Chemical Processes for Treatment of Drinking Water **Credit Hours: 3**
- ENV 6519 Physical and Chemical Processes for Groundwater Remediation **Credit Hours: 3**
- ENV 6564 Environmental Engineering Design **Credit Hours: 3**
- ENV 6667 Environmental Biotechnology **Credit Hours: 3**

The purpose of the portfolio presentation and interview is for students to demonstrate that they have achieved a minimum level of proficiency in stipulated competencies. Specifically, by the time, they graduate, students will demonstrate:

- an ability to plan, compose, and integrate verbal, written, virtual, and graphical communication of a project to technical and non-technical audiences, and
- an ability to formulate and solve complex problems in Environmental Engineering using relevant data and techniques.

Additional details regarding portfolio requirements will be provided to students by the Department.

Comprehensive Exam

The thesis and defense are used in lieu of a comprehensive exam. For non-thesis students, the portfolio, oral presentation and interview are used in lieu of a comprehensive exam.

Accelerated Major

Also available as an Accelerated Majors

Environmental Engineering, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 78 post bachelor's; 48 post master's
Level: Doctoral
CIP Code: 14.1401
Dept. Code: EGX
Major/College Codes: EVE EN
Approved: 2013

Concentration:

Engineering for International Development (EFD)

Contact Information

College: Engineering
Department: Civil and Environmental Engineering

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. degree is awarded in recognition of demonstrated scholarly competence and ability to conduct and report original and significant research in Environmental Engineering.

The field of Environmental Engineering has long been known for its breadth and ability to adapt to the new technological, societal, and global problems facing the environment. Major research areas include water quality engineering; air quality engineering; fate and transport of contaminants in the environment; environmental biotechnology and nanotechnology; waste management; sustainability and ecological engineering; surface water hydrology and hydraulics; groundwater hydrology; water reuse; green engineering; renewable energy; fate of emerging contaminants; and humanitarian engineering with a focus on the developing world. Graduates of the major are prepared for careers in academia, governmental agencies, nongovernmental organizations (NGOs), or private industry and firms involved in planning, design, research and development, or policy.

Accreditation:
The Florida Board of Professional Engineers allows for successful completion of a graduate studies leading to Ph.D., degree in engineering to provide credit toward two year of engineering experience.

Major Research Areas:
Water quality engineering; air quality engineering; fate and transport of contaminants in the environment; environmental biotechnology and nanotechnology; waste management; sustainability and ecological engineering; surface water hydrology and hydraulics; groundwater hydrology; water reuse; green engineering; renewable energy; fate of emerging contaminants; and humanitarian engineering with a focus on the developing world.

The environmental engineering laboratories provide state-of-the-art analytical and experimental equipment for chemical and biological research. Equipment includes an ion chromatograph, atomic absorption spectrophotometer, several gas chromatrographs (including with mass spectometry), HPLC, TOC machine, and environmental chambers. Field research sites are available locally and in several international settings that include developing world communities.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Undergraduate GPA greater than 3.3 preferred;
- GRE with preferred minimum scores of V (45th percentile), Q (75th percentile) AW (55th percentile)
- Resume provided at the time of application
- Three (3) letters of reference provided at the time of application
- Statement of Purpose provided at the time of application
- Intake form https://docs.google.com/forms/d/e/1FAIpQLSeN_MdTzEBtvJAUMLwOz8WRF1be-bUMg-pzot1FPJRS_b9PIA/viewform
- Exceptions made on a case-by-case basis where warranted.

Curriculum Requirements

Total Hours:
78 hours minimum post-bachelors
48 hours minimum post-masters

Core course requirements - 9 credit hours
Other required courses - 5 credit hours
Concentration (if any) - 9 credit hours
Electives - 27 credit hours minimum
Dissertation - 20 credit hours minimum
Other requirements - 8 credit hours minimum

Coursework Requirements (50 Credit Hours Minimum)

Core Course requirements (9 Credit Hours)

- ENV 6002 Physical and Chemical Principles in Environmental Engineering **Credit Hours: 3**
- EES 6107 Biological Principles of Environmental Engineering **Credit Hours: 3**
- ENV 6666 Aquatic Chemistry **Credit Hours: 3**

Other required courses (5 Credit Hours)

- CGN 6945 Graduate Research Methods in Civil & Environmental Engineering **Credit Hours: 2**

1 course (3 credits) from the following list of sustainability courses:

- ENV 6617 Green Engineering for Sustainability **Credit Hours: 3**
- ENV 6510 Sustainable Development Engineering **Credit Hours: 3**
- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4**

Resilient Infrastructure for Sustainable Communities (3 Credit Hours)
ENVISION Sustainable Communities (3 Credit Hours)

Concentration Requirements (9 Credit Hours Minimum)

Students may opt to complete the concentration or an additional 9 hours of coursework as noted below.

Engineering for International Development (EFD) (9 Credit Hours)

This Concentration acknowledges coursework and international field experience in the area of engineering for international development that considers issues of sustainable development, water, sanitation, and health (WaSH), gender, and society. This graduate concentration requires: 1) coursework in global health, applied anthropology (medical, environmental, and development), and Water, Sanitation, Hygiene (WaSH) engineering, 2) a development-focused research component, and 3) a long-term overseas field experience in sustainable development as a WaSH engineer, which in most cases will form part of the basis of the student's dissertation. The international field experience allows a student to remain enrolled as a full-time student (with zero tuition/fees) and gain development experience serving with Peace Corps and Nongovernmental Development Organizations. Graduates are competitive for employment in the global WaSH development field.

Students engaged in full-time global training and/or service as part of the EFD Concentration (e.g., in the U.S. Peace Corps, with a nongovernmental organization, UNESCO-IHE, or equivalent) may register for CST 6990 for 0 credit hours while in their country of service/research.

- ENV 6510 Sustainable Development Engineering **Credit Hours: 3**

A minimum of 1 course from the following applied anthropology courses: (3 Credit Hours)

- ANG 6766 Research Methods in Applied Anthropology **Credit Hours: 3**
- ANG 6730 Socio Cultural Aspects of HIV/AIDS **Credit Hours: 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3** *Health, Illness and Culture (3 Credit Hours)*

A minimum of 1 course from the following global public health courses: (3 Credit Hours)

- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**

Electives (27 Credit Hours Minimum)

Students complete an additional 27 credits of coursework if in the Concentration, or an additional 36 credits of coursework if not in the Concentration, in Environmental Engineering or related areas, of which at least 3 credits must be structured coursework in Environmental Engineering specifically. These credits may include up to 9 credits of Independent Study and/or 6 units of Master's Thesis, pending the approval of the Department, the College, and the Office of Graduate Studies. Directed research and/or dissertation credits may not be counted towards this coursework requirement.

Qualifying Exam

Doctoral students are expected to pass a qualifying examination no later than the semester following the completion of 48 credits of coursework beyond a bachelor's degree. At minimum, the Exam will include a written dissertation proposal and oral defense by the Dissertation Committee. A written exam in the area of concentration may also be required. Poor performance on the Qualifying Exam based on the judgment of the Committee may result in the student failing the exam. If a student does not pass on the first attempt, he/she may request in writing to repeat the Exam. Students who fail the Qualifying Examination the second time will be dismissed by the Major.

Dissertation Requirements (20 Credit Hours Minimum)

A minimum of 20 credits of dissertation hours, an approved Ph.D. dissertation, and a dissertation defense are required. Students may not sign up for dissertation credits until they have defended their proposal and advanced to candidacy (see Qualifying Exam, above). For EFD Concentration, at least one chapter of the dissertation should be on the international fieldwork.

- CGN 7980 Dissertation Doctoral **Credit Hours: 2-19 (20 credits for this program)**

Other Requirements (8 Credit Hours Minimum)

Eight (8) credits of additional coursework, dissertation, or directed research are required.

Students must have at least one paper accepted to a peer-reviewed journal or peer-reviewed conference based on their research carried out during their doctoral studies at USF.

Department of Computer Science and Engineering

Computer Engineering, M.S.C.P.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30 thesis; 30 non-thesis
Level: Masters
CIP Code: 14.0901
Dept. Code: ESB
Major/College Codes: ECP EN
Approved: 1960

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Computer Science and Engineering

Contact Information: www.grad.usf.edu

The Department of Computer Science and Engineering offers both a thesis and non-thesis option for the degree of Master of Science in Computer Engineering (M.S.C.P.). The thesis option requires students to pursue a more concentrated range of topics, while the non-thesis option allows students to explore various areas of computer engineering. There is considerable freedom in the choice of the courses.

The breadth of subjects that comprise computer engineering together with the immense diversity of its applications, make it imperative that students in the Master's major maintain close contact with the Graduate Director, or, if choosing the thesis option, with their major professor to achieve a coherent plan of study directed towards a specific goal. In particular, selection of courses should only be made with prior consultation and approval of the major professor or the Graduate Director.

Major Research Areas:
An excellent selection of courses and laboratories support graduate studies in algorithms, artificial intelligence, machine learning, data mining, computer architecture, graphics, networks, computer vision, distributed systems, embedded systems, expert systems, formal verification, image processing, pattern recognition, robotics, databases, software engineering, computer security, compilers, programming languages, and VLSI design and CAD.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- The GRE is required for all Ph.D. and M.S. applicants. The median GRE scores of recently admitted students include 770 on the Quantitative portion and a Verbal Total of 450. For GRE tests taken after August 1, we require a minimum of 161 on the Quantitative portion (81st percentile) and a minimum of 150 (44th percentile) on the Verbal. If a candidate is admitted to the M.S. major and later decides to apply to the Ph.D. major, the GRE requirement must be met by the candidate as part of the application process. The GRE will be waived for M.S. degree applicants with an undergraduate degree from an ABET-accredited United States university.

- Three letters of recommendation
- Statement of purpose
- The applicant must also have mathematical preparation equivalent to that obtained from courses in Calculus through Differential Equations; knowledge of computer science and computer engineering, including logic design, computer architecture, data structure, operating systems and analysis of algorithms. The majority of students accepted to the major possess an undergraduate degree in Computer Science, Computer Engineering, Electrical Engineering, or Mathematics; however, students who hold an undergraduate degree in a related field are encouraged to apply.

Curriculum Requirements

Total Minimum Hours: 30 hours

Core Requirements: (9 Credit Hours)

Successful completion of three core graduate-level courses is required:

- EEL 6764 Principles of Computer Architecture **Credit Hours: 3**
- COP 6611 Operating Systems **Credit Hours: 3**
- COT 6405 Introduction to the Theory of Algorithms **Credit Hours: 3**

Electives:

With prior permission from the Graduate Director, students can take a maximum of 3 hours of Independent Study or Internship, a maximum of 3 hours of one-hour seminar courses, and up to one graduate level course (3 credit hours) outside the department.

Thesis option students must select at least 15 hours and non-thesis students must select at least 21 hours from the list of available graduate elective courses below in consultation with the Graduate Director of individual advisor. Non-thesis students need to take a minimum of 6 credits from the list of electives that are hardware related:

- CAP 5400 Digital Image Processing **Credit Hours: 3**
- CDA 5416 Computer System Verification **Credit Hours: 3**
- CAP 5625 Introduction to Artificial Intelligence **Credit Hours: 3**
- CAP 5771 Data Mining **Credit Hours: 3**
- EEL 5771 Introduction to Computer Graphics I **Credit Hours: 3**
- CNT 6215 Computer Networks **Credit Hours: 3**
- CAP 6415 Computer Vision **Credit Hours: 3**
- CAP 6455 Advanced Robotic Systems **Credit Hours: 3**
- CAP 6615 Neural Networks **Credit Hours: 3**
- COP 6621 Programming Languages and Translation **Credit Hours: 3**
- EEL 6706 Testing and Fault Tolerance in Digital Systems **Credit Hours: 3**
- CAP 6736 Geometric Modeling **Credit Hours: 3**
- CIS 6900 Independent Study **Credit Hours: 1-19**
- CIS 6930 Special Topics **Credit Hours: 1-5**
- CIS 6940 Graduate Instruction Methods **Credit Hours: 1-4**
- CIS 6946 Internships/Practicums/Clinical Practice **Credit Hours: 0-3**
- CIS 6971 Thesis: Master's **Credit Hours: 2-19**

Thesis Option:

The thesis option requires completion of 24 credit hours of CSE graduate-level courses (9 credit hours core and 15 hours of electives) and 6 credit hours of thesis in computer engineering related problems, as determined by the Major Professor and documented in the Plan of Work. At least 16 credit hours must be at the 6000 level.

- CIS 6971 Thesis: Master's **Credit Hours: 2-19**

Non-Thesis Option:

The non-thesis option requires 30 credit hours, with 9 credit hours of core courses and 21 hours of graduate level electives. At least 16 credit hours must be at the 6000 level. At least 6 hours of electives should be taken from the list of electives that are hardware related in the following topic areas: CMOS VLSI Design, Digital Circuit Synthesis, Formal Verification, Testing and Fault Tolerance, Low-Power VLSI, Robotics, or Computer Networks, as determined by the Graduate Coordinator and documented in the Plan of Work.

Comprehensive Exam

For students taking the thesis option, the requirement for a comprehensive exam is satisfied by the successful completion of the thesis. For non-thesis option students, the requirement for a comprehensive exam is satisfied by the success completion of comprehensive exam that students will take in the semester prior to the semester in which the student intends to graduate.

Graduation Requirements:

For the thesis option, students must defend and pass the thesis and have a GPA of 3.0 or better. Non-Thesis Option students must pass the Comprehensive Exam, obtain a letter "B" or better in the core graduate courses and have a GPA of 3.0 or better. No grade below "C" will be accepted in a graduate major. If a student's average falls below 3.00, the student will be placed on probation.

Accelerated Major

Also available as an Accelerated Majors

Computer Science and Engineering, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours:
72 post-bachelors
42 post-master's
Level: Doctoral
CIP Code: 14.0901
Dept. Code: ESB
Major/College Codes: CSE EN
Approved: 1984

Contact Information

College: Engineering
Department: Computer Science and Engineering

Contact Information: http://www.grad.usf.edu/majors

The degree of Doctor of Philosophy is conferred in recognition of a candidate's highest level of scholarly competence and demonstrated capability to independently conduct and report significant research in computer science and engineering. This achievement requires more than an accumulation of course credits over a stated period of residence. Scholarly competence is achieved through systematic study and investigation in the chosen discipline at an advanced level. The major professor and at least two committee members will be from the Computer Science and Engineering department. Research capability is developed during the course of study and is achieved through the completion of significant and independent research. The results of this research must be formally presented in a written dissertation and successfully defended before an examining committee. The dissertation must demonstrate the significance of the research as well as the candidate's ability to organize and present her/his results in a professional manner.

Major Research Areas:
An excellent selection of courses and laboratories support graduate studies in algorithms, artificial intelligence, machine learning, data mining, computer architecture, graphics, networks, computer vision, distributed systems, embedded systems, expert systems, formal verification, image processing, pattern recognition, robotics, databases, software engineering, computer security, compilers, programming languages, VLSI design, and CAD.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- The GRE is required for all Ph.D. applicants. The median GRE scores of recently admitted students include 770 on the Quantitative portion and a Verbal Total of 450.For GRE tests taken after August 1, we require a minimum of 161 on the Quantitative portion (81 percentile) and a minimum of 150 (44 percentile) on the Verbal.
- If consideration of an assistantship is desired, the speaking score component of the TOEFL must be 26 or above
- Three letters of recommendation
- Statement of purpose

- The applicant must also have mathematical preparation equivalent to that obtained from courses in Calculus through Differential Equations; knowledge of computer science and computer engineering, including logic design, computer architecture, data structures, operating systems, and analysis of algorithms. Students are assumed to have good programming skills. The majority of students accepted to the major possess an undergraduate degree in Computer Science, Computer Engineering, Electrical Engineering, or Mathematics; however, students who hold an undergraduate degree in a related field are encouraged to apply.

Curriculum Requirements

Total Program hours:
72 minimum (post-bachelor's)
42 minimum (post-master's)

A minimum of 72 semester hours including dissertation hours beyond the baccalaureate degree are required of all Ph.D. students

Post-Bachelor's: 72 hours minimum
Core – 9 credit hours
Coursework – 24 credit hours
Independent Study/Dir Research – Up to 15 hours
Dissertation – At least 20 credit hours

Post-Master's: 42 hours minimum
Core – 9 credit hours
Independent Study/Dir Research – Up to 15 hours
Dissertation – At least 20 credit hours

Core Requirements (9 Credit Hours)

- COP 6611 Operating Systems **Credit Hours: 3**
- EEL 6764 Principles of Computer Architecture **Credit Hours: 3**
- COT 6405 Introduction to the Theory of Algorithms **Credit Hours: 3**

Coursework (33 Credit Hours)

At least 33 credit hours in coursework excluding independent study and directed research. The exact distribution of these hours in the Computer Science and Engineering discipline will be determined by the student and the supervisory committee to provide the student with a stimulating educational experience.

Departmental Course Options

(examples)

- CAP 5400 Digital Image Processing **Credit Hours: 3**
- CAP 5625 Introduction to Artificial Intelligence **Credit Hours: 3**
- CAP 5771 Data Mining **Credit Hours: 3**
- CAP 6415 Computer Vision **Credit Hours: 3**
- CAP 6455 Advanced Robotic Systems **Credit Hours: 3**
- CAP 6615 Neural Networks **Credit Hours: 3**
- CAP 6736 Geometric Modeling **Credit Hours: 3**
- CDA 5416 Computer System Verification **Credit Hours: 3**

- CNT 6215 Computer Networks **Credit Hours: 3**
- COP 6621 Programming Languages and Translation **Credit Hours: 3**
- EEL 5771 Introduction to Computer Graphics I **Credit Hours: 3**
- EEL 6706 Testing and Fault Tolerance in Digital Systems **Credit Hours: 3**
- CIS 6900 Independent Study **Credit Hours: 1-19**
- CIS 6930 Special Topics **Credit Hours: 1-5**
- CIS 6940 Graduate Instruction Methods **Credit Hours: 1-4**
- CIS 6946 Internships/Practicums/Clinical Practice **Credit Hours: 0-3**
- CIS 6971 Thesis: Master's **Credit Hours: 2-19**

Independent Study/Directed Research (1-15 Credit Hours)

Up to 15 credit hours of independent study/directed research.

- CIS 6900 Independent Study **Credit Hours: 1-19 (1-15 credits for this program)**
- CIS 7910 Directed Research **Credit Hours: 1-19 (1-15 credits for this program)**

Qualifying Examination

Students must pass the Ph.D. Qualifying examinations in Computer Architecture, Operating Systems, and Theory of Algorithms. The qualifying examination is a two-step process. First, students must get a GPA of 3.60 or better in these three courses within one year of enrollment, otherwise they will have to re-take only the necessary course(s) and get a GPA of 3.60 or better using the best three grades If a student does not meet these requirements by the end of the second year, he or she will be withdrawn from the Ph.D. program. Second, students must take the qualifying exam and pass it. Students are required to take the exam as soon as they meet the requirements of the first step.

Major Research-Area Paper and Future Research Directions

To fulfil this milestone, students are required to write a survey or research paper on his/her area of research as the lead author. A journal or conference paper already published will count towards this requirement. The student is then required to give an oral presentation on the subject to his/her major professor and a doctoral evaluating committee. The oral presentation must also contain a section on future research directions, a draft plan of research activities towards graduation. The presentation will be open to the public. The paper and presentation is to be completed within one year of passing the Qualifying Examinations and will have to be formally approved by his/her major professor the doctoral evaluating committee before applying for Candidacy.

Admission to Candidacy

A student will not be admitted to candidacy until a Doctoral committee has been appointed, and the committee has certified that the student has successfully completed the qualifying examination and the Major Research Area Paper and Future Research Directions presentation, and demonstrated the qualifications necessary to successfully complete the requirements for the degree. The admission to Candidacy form must be approved by the Dean of the college and forwarded to the Dean of Graduate Studies for final approval. The student may elect to enroll in dissertation credits in the semester following approval of the Admission to Candidacy form by Graduate Studies.

The student's progress in the program is monitored by a supervisory doctoral committee, which is usually appointed at an early stage in the student's major. This committee consists of at least five members, one of whom is outside the College of Engineering. The Major Professor will be a member of the Computer Science and Engineering Department. Normally, two more Computer Science and Engineering faculty serve on the committee with a member in another department in the college.

The student must conduct research of sufficient quality that demonstrates an independent and original contribution to the field of computer science and engineering. Students must take at least 20 semester hours of doctoral dissertation credits;the exact number of credits is determined by the candidate's supervisory committee. It is strongly recommended that doctoral students submit journal articles for publication relevant to dissertation research.

Dissertation Hours (At Least 20 Credit Hours)

Student are required to take at least 20 hours of dissertation hours until they accumulate a minimum number of 72 hours in the major.

- CIS 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Dissertation Defense

A doctoral candidate must defend her/his research before her/his committee. The defense is usually open to the university community and conducted in accordance with the university's general rules and regulations. The defense involves a formal presentation of the dissertation followed by a critical exchange between the candidate and the committee. The committee chairman moderates the proceedings and determines procedure, originality of the research, and contributions made by the candidate.

Computer Science, M.S.C.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30 thesis; 30 non-thesis
Level: Masters
CIP Code: 11.0701
Dept. Code: ESB
Major/College Codes: ECC EN
Approved: 1960

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Computer Science and Engineering

Contact Information: http://www.grad.usf.edu/majors

The Department of Computer Science and Engineering offers a thesis and non-thesis option for the degree of Master of Science in Computer Science (M.S.C.S.) The thesis option requires students to pursue a more concentrated range of topics. The non-thesis option offers students some experience in many areas of computer science. There is considerable freedom in the choice of the courses.

The breadth of subjects which are part of computer science together with the immense diversity of its applications, make it imperative that students in the Master's major maintain close contact with the Graduate Director, or, if choosing the thesis option, with their major professor in order to achieve a coherent plan of study directed towards a specific goal. In particular, election of courses should only be made with prior consultation and approval of the Major Professor or the Graduate Director.

Major Research Areas:
An excellent selection of courses and laboratories support graduate studies in algorithms, artificial intelligence, machine learning, data mining, computer architecture, graphics, networks, computer vision, distributed systems, embedded systems, expert systems, formal verification, image processing, pattern recognition, robotics, databases, software engineering, computer security, compilers, programming languages, and VLSI design and CAD.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- The GRE is required for all Ph.D. and M.S. applicants. The median GRE scores of recently admitted students include 770 on the Quantitative portion and a Verbal Total of 450.For GRE tests taken after August 1, we require a minimum of 161 on the Quantitative portion (81st percentile) and a minimum of 150 (44th percentile) on the Verbal. If a candidate is admitted to the M.S. major and later decides to join the Ph.D. major, the GRE requirement must be met by the candidate as part of the application process. The GRE will be waived for M.S. degree applicants with an undergraduate degree from an ABET-accredited United States university.

- Three letters of recommendation.
- Statement of purpose.
- The applicant must also have mathematical preparation equivalent to that obtained from courses in Calculus through Differential Equations; knowledge of computer science and computer engineering, including logic design, computer architecture, data structure, operating systems and algorithms. The majority of students accepted to the Major possess an undergraduate degree in Computer Science, Computer Engineering, Electrical Engineering, or Mathematics. However, students who hold an undergraduate degree in a related field are encouraged to apply.

Curriculum Requirements

Total Minimum hours: 30 hours

Core Requirements: (9 Credit Hours)

Successful completion of three core graduate-level courses is required.

- COP 6611 Operating Systems **Credit Hours: 3**
- EEL 6764 Principles of Computer Architecture **Credit Hours: 3**
- COT 6405 Introduction to the Theory of Algorithms **Credit Hours: 3**

Electives:

With prior permission from the Graduate Director, students can take a maximum of 3 hours of Independent Study or Internship, a maximum of 3 hours of one-hour seminar courses, and up to one graduate level course (3 credit hours) outside of the department.

Thesis option students must select at least 15 hours and non-thesis option students must select at least 21 hours from the list of available graduate elective courses below in consultation with the Graduate Director or individual advisor. . Non-thesis students need to take a minimum of 6a credits from the list of electives that are software related:

- CAP 5400 Digital Image Processing **Credit Hours: 3**
- CDA 5416 Computer System Verification **Credit Hours: 3**
- CAP 5625 Introduction to Artificial Intelligence **Credit Hours: 3**
- CAP 5771 Data Mining **Credit Hours: 3**
- EEL 5771 Introduction to Computer Graphics I **Credit Hours: 3**
- CNT 6215 Computer Networks **Credit Hours: 3**
- CAP 6415 Computer Vision **Credit Hours: 3**
- CAP 6455 Advanced Robotic Systems **Credit Hours: 3**
- CAP 6615 Neural Networks **Credit Hours: 3**
- COP 6621 Programming Languages and Translation **Credit Hours: 3**
- EEL 6706 Testing and Fault Tolerance in Digital Systems **Credit Hours: 3**
- CAP 6736 Geometric Modeling **Credit Hours: 3**
- CIS 6930 Special Topics **Credit Hours: 1-5**
- CIS 6940 Graduate Instruction Methods **Credit Hours: 1-4**
- CIS 6946 Internships/Practicums/Clinical Practice **Credit Hours: 0-3**

Thesis Option:

The thesis option requires the completion of 24 credit hours of CSE graduate-level courses (9 credit hours of core courses and 15 hours of electives) and 6 credit hours of thesis in computer science related problems, as determined by the Major Professor and documented in the Plan of Work. At least 16 credit hours must be at the 6000 level.

- CIS 6971 Thesis: Master's **Credit Hours: 2-19**

Non-Thesis Option:

The non-thesis option requires 30 credit hours, with 9 credit hours of core courses and 21 hours of graduate level electives. At least 16 credit hours must be at the 6000 level. At least 6 hours of electives should be taken from the list of electives that are software related in the following topic areas: advanced algorithms, compilers, databases, parallel computing and distributed systems, computer security, data mining, machine learning, programming languages, or software engineering, as determined by the Graduate Director and documented in the Plan of Work.

Comprehensive Exam

For students taking the thesis option, the requirement for a comprehensive exam is satisfied by the successful completion of the thesis. For non-thesis option students, the requirement for a comprehensive exam is satisfied by the successful completion of a comprehensive exam that students will take in the semester prior to the semester in which the students ntends to graduate.

Graduation Requirements:

For the thesis option, students must defend and pass the thesis and have a GPA of 3.00 or better. Non-Thesis Option students must pass the Comprehensive Exam, obtain a letter "B" or better in the core graduate courses and have a GPA of 3.00 or better. No Grade below "C" will be accepted in a graduate major. If a student's average falls below 3.00, the student will be placed on probation.

Accelerated Major

Also available as an Accelerated Majors

Information Technology, M.S.I.T.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30 (non-thesis)
Level: Masters
CIP Code: 11.0103
Dept Code: EIT
Major/College Codes: ITC / EN
Approved: Spring 2014

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Computer Science and Engineering

Contact Information: http://www.grad.usf.edu/majors

The Department of Computer Science and Engineering offers a non-thesis option for the degree of Master of Science in Information Technology (M.S.I.T). The MSIT graduate will demonstrate strong information technology skills as well as problem solving skills needed for the deployment of technology solutions to achieve business and organizational goals. The degree is available in an hybrid mode (online and face to face), and provides students with a broad and integrative understanding of both technology and operational and strategic business and organizational applications. There is considerable freedom in the choice of the courses.

The breadth of subjects which are part of information technology together with the immense diversity of its applications, make it imperative that students in the Master's major maintain close contact with the Graduate Director, in order to achieve a coherent plan of study directed towards a specific goal. In particular, election of courses should only be made with prior consultation and approval of the Major Professor or the Graduate Director.

Admissions Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- The GRE is required for all MSIT applicants. We require a minimum of (81 percentile) on the Quantitative portion and a minimum of (44 percentile) on the Verbal. The GRE will be waived for M.S. degree applicants with an undergraduate degree from an ABET-accredited United States university or for those applicants that show a minimum of 3 years of relevant and recent full-time professional experience in the U.S.
- Minimum grade point average (GPA) of "B" (or equivalent) for all coursework completed during the last two years of undergraduate major.
- If consideration of an assistantship is desired, the speaking score component of the TOEFL must be 26 or above.
- Three letters of recommendation.
- Statement of purpose.
- Bachelor's Degree in Information Technology, Computer Science, or a closely related field; or a bachelor's degree in another field, plus satisfactory completion of the courses listed below under "Undergraduate Prerequisites."

- Evidence of completion of a defined subset of the required core courses found in the University of South Florida's Bachelor of Science in Information Technology degree program or their equivalent (see "Undergraduate Prerequisites" below).

Undergraduate Prerequisites

To be successful in this major, an applicant should have certain base knowledge in the discipline demonstrated from undergraduate-level pre-requisite courses including:

- COP 2513 - Object-Oriented Programming for Information Technology
- COP 2512 - Programming Fundamentals for Information Technology
- COP 3515 - Programming Design for Information Technology
- CEN 4031 - Software Engineering Concepts for Information Technology
- COP 4703 - Database Systems for Information Technology
- EEL 4854/4935 - Selected Topics: IT Data Structures & Algorithms for Information Technology

The student should have taken these courses or their equivalent prior to beginning graduate coursework. All prerequisite courses are available online. Professional experience in information technology is typically focused on specific projects or systems, and is not as broad as the treatment of a topic one receives in a course. Therefore, except in unusual circumstances, professional experience cannot substitute for any of the above prerequisite courses.

Curriculum Requirements

Total Minimum Hours: 30 hours

Core - 6 hours

Additional Required Course - 3 hours

Electives - 21 hours

Core Requirements (6 Credit Hours)

- ISM 6218 Advanced Database Management **Credit Hours: 3**
- CEN 6084 Advances in Object Oriented Programming for IT **Credit Hours: 3**

Additional Required Course (3 Credit Hours)

- CIS 6930 Special Topics **Credit Hours: 1-5**

Penetration Testing for IT (Proposed Course) (3 Credit Hours)

Elective Courses (21 Credit Hours)

With prior permission from the Graduate Director, students can take a maximum of 3 hours of Independent Study or Internship and up to twelve credit hours outside of the major, as follows: three credit hours from the MSCS/MSCE majors; three credit hours outside of the department (e.g. EE, IE, Math); three credit hours on business practice, project management, leadership, entrepreneurship, or simliar; three credit hours on big data, data analytics, data mining or similar.

Note: ISM prefix courses are offered by the Department of Information Systems / Decision Sciences (College of Business). They are considered outside the MSIT major.

Select six of the following courses, or other graduate courses as approved by the Graduate Director:

- CIS 6930 Special Topics **Credit Hours: 1-5 (3 credits for this program)** (Human Computer Interaction)
- CTS 6716 Network Programming for IT **Credit Hours: 3**
- CIS 6930 Special Topics **Credit(s): 1-5 (3 credits for this program)** (Cloud Computing for Information Technology)
- CIS 6930 Special Topics **Credit(s): 1-5 (3 credits for this program)** (Practical Cybersecurity)
- CIS 6930 Special Topics **Credit(s): 1-5 (3 credits for this program)** (Networks II)
- CIS 6930 Special Topics **Credit(s): 1-5 (3 credits for this program)** (Introduction to Hadoop and Big Data)
- CIS 6930 Special Topics **Credit(s): 1-5 (3 credits for this program)** (Softare Development for Mobile Devices)
- ISM 6136 Data Mining **Credit Hours: 3**
- ISM 6137 Statistical Data Mining **Credit Hours: 3**
- ISM 6145 Seminar on Software Testing **Credit Hours: 3**
- ISM 6155 Enterprise Information Systems Management **Credit Hours: 3**
- ISM 6266 Software Architecture **Credit Hours: 3**
- CAP 6663 IT Robotics Application **Credit Hours: 3**
- CGS 6842 IT and Systems for E-Business **Credit Hours: 3**
- CIS 6900 Independent Study **Credit Hours: 1-19**
- CIS 6946 Internships/Practicums/Clinical Practice **Credit Hours: 0-3**

Comprehensive Exam

The requirement for a comprehensive exam is satisfied by the successful completion of the comprehensive exam, an exam that students will take in the semester prior to the semester in which they intend to graduate.

Thesis / Non-Thesis

This is a non-thesis major.

Graduation Requirements

Students must obtain a letter "B' or better in the core graduate courses, have a GPA of 3.00 or better, and pass the comprehensive exam.

Accelerated Major

Also available as an Accelerated Majors

Department of Electrical Engineering

Electrical Engineering, M.S.E.E.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 14.1001
Dept. Code: EGE
Major/College Codes: EEL EN
Approved: 1981

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Electrical Engineering

Contact Information: http://www.grad.usf.edu/majors

The Department of Electrical Engineering offers both doctoral and masters level degrees. The major areas of research and instruction in the Department are: semiconductor materials, microelectronic manufacturing, MEMS, nanotechnology, VLSI design, digital signal processing, communication theory, wireless communications, microwave engineering, power systems and controls, and biomedical materials and imaging. The Department's research efforts are supported by well-equipped laboratories in the areas of silicon processing, compound semiconductors, electro-optics, IC design, thin dielectric films, communications and signal processing, power systems, nanotechnology, MEMS, micro/millimeter waves, biomedical materials and imaging, and bioengineering.

Current and previous Ph.D. dissertations explored the areas of microelectronics (materials and devices of elemental and compound semiconductors, circuit design, modeling, testing, and reliability); communications and signal processing (communication networks, packet switching, satellite communications, communications software, and VLSI for signal processing); systems and controls; solid state material and device processing and characterization; electro-optics, electromagnetic, microwave and millimeter-wave engineering (antennas, devices, systems); and biomedical engineering. Master's majors include options in semiconductor materials and processes, VLSI design, communications and signal processing, power systems and controls, microwave and millimeter-wave engineering, and biomedical engineering.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- Minimum 3.00 GPA
- Three Letters of Recommendation
- Resume
- Statement of Purpose

Curriculum Requirements

Thesis Option – 30 hours total

Required Courses (24) hours
Include Major Core below, 18 hours including 6 hours of depth or capstone coursework, and 6 hours of electrive coursework

Required Thesis Hours (6 hours)

Course work only – 30 hours total
Required Courses (30 hours)
Include Major Core below, 18 hours including 6 hours of depth or capstone coursework, and 12 hours of elective coursework.

Major Core: (18 Credit Hours)

Students must take two of the following

Students must take two of the following applied mathematics courses as part of the degree program:

- EGN 5421 Engineering Applications for Vector Analysis **Credit Hours: 3**
- EGN 5422 Engineering Applications of Partial Differential Equations **Credit Hours: 3**
- EGN 5423 Neural Networks and Mathematics for Communication **Credit Hours: 3**
- EGN 5424 Engineering Applications of Complex Analysis **Credit Hours: 3**
- EGN 5425 - Matrix Theory **Credit(s): 3**
- EEL 6542 - Random Processes **Credit(s): 3**
- PHC 6050 Biostatistics I **Credit Hours: 3**

Students must take two of the following

Students must take two of the following approved in depth sequences as part of their degree program:

*Other sequence must be approved by the Graduate Director

- EEL 6426 RF and Microwave Circuits I **Credit Hours: 3 and**
- EEL 6427 RF and Microwave Circuits II **Credit Hours: 3**

- EEL 6486C - EM Field Theory **and**
- EEL 6487 - Adv. EM Field Theory

or

- EEL 6481 - Num. Techniques in Electromagnetics

- EEL 5462 Antenna Theory **Credit Hours: 3 and**
- EEL 6463 Advanced Antenna Theory **Credit Hours: 3**

or

- EEL 6481 - Num. Techniques in Electromagnetics

- EEL 6935 Selected Electrical Topics **Credit Hours: 1-3** (Monolithic MW Circuits) **and**
- EEL 6936 Special Topics **Credit Hours: 1-3** (Adv. Monolithic MW Circuits)

- EEL 6534 Digital Communication Systems **Credit Hours: 3 and**
- EEL 6509 - Satellite Comm.

or

- EEL 6593 Mobile and Personal Communication **Credit Hours: 3**

- BME 6000 Biomedical Engineering **Credit Hours: 3 and**
- GM 7930 - Anatomy for Bio Engineers

or

- EEL 6936 Special Topics **Credit(s): 1-3** (Bio Image Processing)

- EEL 6935 Selected Electrical Topics **Credit(s): 1-3** (Bioelectricity) **and**
- EEE 6273 Chemical/Biological Sensors and Microfabrication **Credit Hours: 3**

- EEL 6502 - DSP-I **and**
- EEL 6752 Digital Signal Processing II **Credit Hours: 3**

or

- EEL 6586 - Speech Signal Processing

- EEL 6597 Wireless Network Architecture and Protocols **Credit Hours: 3 and**
- EEL 6936 Special Topics **Credit(s): 1-3** (Adv. Topics in Wireless Comm.)

- EEE 5344 - Digital CMOS VLSI Design **and**
- EEE 6936 - VHDL

or

- EEE 6936 - Low Power VLSI Design

- EEE 5382 Physical Basis of Microelectronics **Credit Hours: 3 and**
- EEE 6353 Semiconductor Device Theory I **Credit Hours: 3**

- EEE 6353 Semiconductor Device Theory I **Credit(s): 3 and**
- EEE 6358 Semiconductor Device Theory II **Credit Hours: 3**

- EEE 6355 Compound Semiconductor Technology **Credit Hours: 3 and**
- EEE 6318 Characterization of Semiconductors **Credit Hours: 3**

- EEL 5631 - Digital Control Systems **and**
- EEL 6613 - Modern Control Theory

- EEE 6936 - VHDL **and**
- EEL 6936 Special Topics **Credit(s): 1-3** (Rapid System Prototyping)

- EEL 5250 Power System Analysis **Credit Hours: 3 and**
- EEL 6935 Selected Electrical Topics **Credit(s): 1-3** (Electric Power Systems II)

- EEL 6935 Selected Electrical Topics **Credit(s): 1-3** (Industrial Power Distribution I) **and**
- EEL 6936 Special Topics **Credit(s): 1-3** (Industrial Power Distribution II)

- EEL 5935 Special Electrical Engineering Topics I **Credit Hours: 1-3** (Utility Power Distribution I) **and**
- EEL 6935 Selected Electrical Topics **Credit(s): 1-3** (Utility Power Distribution II)

- EEL 6935 Selected Electrical Topics **Credit(s): 1-3** (Electric Machines and Drives) **and**
- EEL 6936 Special Topics **Credit(s): 1-3** (Power Electronics)

- EEL 6425 RF and Microwave Measurements **Credit Hours: 2 and**
- EEL 6936 Special Topics **Credit(s): 1-3** (Nanotechnology II)

- EEL 6935 Selected Electrical Topics **Credit(s): 1-3** (Micro Electro Mechanical Systems I) **and**
- EEL 6936 Special Topics **Credit(s): 1-3** (Micro Electro Mechanical Systems II)

Electives:

Minimum elective hours:

Thesis – 6 hours
Coursework only – 12 hours

Students may adopt suggested electives from the Department Graduate Handbook, by track or emphasis area of their choice. All courses must be graduate level. Students should refer to university requirements when choosing courses bearing in mind allowed quantities of 5000 and 6000 level coursework. Special selections must be approved by the Coordinator.

Comprehensive Exam

The University requires all Master's students to be assessed by a comprehensive examination. The Department maintains two versions of this exam according to the student pathway to degree, i.e. Thesis or Non-Thesis as follows:

Thesis students:

Student's written thesis and Public Defense of same constitute the comprehensive exam. Student is provided a rubric that they will be assessed by relative to their written document and presentation. The Committee reports this assessment to the Department for final approval.

Non-Thesis Students:

In lieu of the Comprehensive Exam, a portfolio addressing the content from a capstone course in the primary area of study, content from a course in a secondary area of study, and content from a core mathematics course will be submitted upon graduation. The graduate coordinator, chair of the department, and the vice chair of the department will evaluate the submissions according to the overall quality of the writing, the clarity of the explanation of how the outcomes were achieved, and the quality of the examples that are included.

Thesis (6 Credit Hours)

- EEL 6971 Thesis: Master's **Credit Hours: 2-19 (6 credits for this program)**

Accelerated Major

Also available as an Accelerated Majors

Electrical Engineering, Ph.D.

Degree Information

Priority Admission Application Deadlines:

Fall: February 15
Spring: October 15
Summer: February 15

International applicant deadlines:
http://www.grad.usf.edu/majors

Minimum Total Hours:
72 (Post-bacc)
42 (post-master's)
Level: Doctoral
CIP Code: 14.1001
Dept. Code: EGE
Major/College Codes: EEL EN
Approved: 1982

Contact Information

College: Engineering
Department: Electrical Engineering

Contact Information: www.grad.usf.edu

The Department of Electrical Engineering offers both doctoral and masters level degrees. The major areas of research and instruction in the Department are: semiconductor materials, microelectronic manufacturing, MEMS, nanotechnology, VLSI design, digital signal processing, communication theory, wireless communications, microwave engineering, power systems and controls, and biomedical materials and imaging. The Department's research efforts are supported by well-equipped laboratories in the areas of silicon processing, compound semiconductors, electro-optics, IC design, thin dielectric films, communications and signal processing, power systems, nanotechnology, MEMS, micro/millimeter waves, biomedical materials and imaging, and bioengineering.

Current and previous Ph.D. dissertations explored the areas of microelectronics (materials and devices of elemental and compound semiconductors, circuit design, modeling, testing, and reliability); communications and signal processing (communication networks, packet switching, satellite communications, communications software, and VLSI for signal processing); systems and controls; solid state material and device processing and characterization; electro-optics, electromagnetic, microwave and millimeter-wave engineering (antennas, devices, systems); and biomedical engineering. Master's majors include options in semiconductor materials and processes, VLSI design, communications and signal processing, power systems and controls, microwave and millimeter-wave engineering, and biomedical engineering.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE (with preferred minimum scores of Q> 155 (61%) , V>146 (28%))
- Three (3) Letters of Reference
- Statement of Purpose

Curriculum Requirements

Total Minimum Hours:
72 post-bacc
42 post-masters

Note: Students entering the doctoral major with an earned master's degree from another institution, other than USF, must take at least nine (9) credit hours of 6000 level EE courses at USF. The student's supervisory committee is responsible for evaluating his/her overall transcript to ensure that the distributional requirements are met.

Please contact Electrical Engineering for additional information

The student's supervisory committee is responsible for evaluating his/her overall transcript to ensure that the following distributional requirements are met:

Program of Study

Core Requirements (30 Credit Hours)

Minimum 30 hours formal regularly scheduled graduate course work in the engineering area of study, or other graduate courses associated with electrical engineering as approved by the Graduate Director. (not necessarily electrical engineering courses)

Mathematics and Statistics (9 Credit Hours)

Minimum 9 hours in graduate level mathematics or statistics courses (not necessarily math department courses).

Electives/Directed Research/Independent Study (13 Credit Hours)

Dissertation (20 Credit Hours Minimum)

Each Professor will have his/her own section for dissertation hours.

- EEL 7980 Dissertation: Doctoral **Credit Hours: 2-19**

Materials Science and Engineering Graduate Certificate

Certificate Code: XMT
Approved 200301
The purpose of the Materials Working Group is to bring together all research activities at the University of South Florida related to materials research. Since many departments, colleges, and institutes are conducting materials research, this group facilities the transfer of new ideas and permits the maximum utilization of shared resources. This home page serves the important function of helping interested parties in materials related research activities locate expertise at USF, via links to both researcher and research group home pages. In addition, a link indicating some of the capital equipments located on-campus to support these graduate research activities is provided.

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Five years

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

GROUP A - Select one from below:

- PHY 6436 Applied Materials Physics **Credit Hours: 3**
- ECH 6931 Special Problems II **Credit Hours: 1-3**

Materials Engineering (3 Credit Hours)

GROUP B - select two courses from the list below (contact dept for additional offerings):

- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4**

Corrosion of Engineering Materials
Durability Issues in Cementitious Materials

- EML 6232 Composite Laminated Materials **Credit Hours: 3**
- BME 6108 Biomaterials II Biocompatibility **Credit Hours: 3**
- CES 5105C Advanced Mechanics of Materials I **Credit Hours: 3**
- PHA 6146 Introduction to Nanotechnology **Credit Hours: 3**
- EMA 5326 Corrosion Control **Credit Hours: 3**
- CHM 5452 Polymer Chemistry **Credit Hours: 3**
- PHZ 5405 Solid State Physics I **Credit Hours: 3**
- PHZ 6426 Solid State Physics II **Credit Hours: 3**
- EEE 6355 Compound Semiconductor Technology **Credit Hours: 3**
- EEL 6935 Selected Electrical Topics **Credit Hours: 1-3**

Wide Band Gap Semiconductor Technology I (3 Credit Hours)

GROUP C - Select two from the list below (contact dept for additional offerings)

- ECH 5931 Special Topics IV **Credit Hours: 1-4**
- EEE 5356 Integrated Circuit Technology **Credit Hours: 3**
- EML 6930 Special Problems I **Credit Hours: 1-3**

Special Problems 1: Electronic Manufacturing

- EEL 6357 Analog CMOS/VLSI Design **Credit Hours: 3**

Characterization of Defects in Electronic Materials

- EEE 6318 Characterization of Semiconductors **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Industrial and Management Systems Engineering

Engineering Management, M.S.E.M.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 15.1501
Dept. Code: EGS
Major/College Codes: EMA EN
Approved: 1982

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Industrial & Management Systems Engineering

Contact Information: http://www.grad.usf.edu/majors

This major is designed to prepare engineers from various disciplines to make the transition to technical management. Courses in the major involve concepts in engineering management, resource management, strategic planning, and productivity. They combine qualitative approaches with quantitative techniques. Courses are available on campus or through distance learning.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- BS in Engineering or equivalent.
- GRE may be required
- Letter of recommendation.
- Resume
- Two years professional experience or internship may be required as part of the major

Curriculum Requirements

A minimum of 30 credits of approved graduate level coursework beyond the bachelor level is required, 18 credits of core work and 12 credits of electives. Up to 6 hours of advanced courses in the student's area of specialty may be taken as electives. A thesis option is available to M.S.E.M. students who are interested in applied research. In the thesis option, 18 credits of core work, 6 credits of electives, and 6 credits of thesis are the minimum required.

The required 18 credits of core work are divided into three components: 12 credits in the general core area, 3 credits in the quantitative core area, and 3 credits in the job design core area. An undergraduate statistics course with a grade of C or higher is a prerequisite for the quantitative core area. Otherwise students must additionally take EGN 3443 Probability & Statistics for Engineers as a prerequisite.

General Core Area: (12 Credits Hours)

- EIN 5182 Principles of Engineering Management **Credit Hours: 3**
- EIN 6386 Management of Technological Change **Credit Hours: 3**
- EIN 5350 Technology and Finance **Credit Hours: 3**
- EIN 6183 Engineering Management Policy and Strategy **Credit Hours: 3** (Capstone: must be taken after all core work requirements have been fulfilled)

Quantitative Core Area:

3 credits must be selected from the following options, as approved by advisor. The other courses may be taken as electives.

- ESI 5306 Operations Research for Engineering Management **Credit Hours: 3**
- ESI 5219 Statistical Methods for Engineering Managers **Credit Hours: 3**
- ESI 6247 Statistical Design Models **Credit Hours: 3**

Job Design Core Area:

3 credits must be selected from the following options, as approved by advisor. The other course may be taken as an elective.

- EIN 6108 EM-Human Relations **Credit Hours: 3**
- EIN 6319 Work Design and Productivity Engineering **Credit Hours: 3**

Electives:

12 credits minimum must be selected from the following options, as approved by advisor. (Other Graduate Courses may be taken, with approval of the Graduate Director.)

- EIN 6179 Advanced TQM Methods: Six Sigma **Credit Hours: 3**
- EIN 6936 Special Industrial Topics III **Credit Hours: 1-3** (Benchmarking)
- ESI 5522 Computer Simulation **Credit Hours: 3**
- EIN 6217 Construction Safety Engineering **Credit Hours: 3**
- EIN 5201 Creativity in Technology **Credit Hours: 3**
- EIN 6275 - Design Controls for Medical Devices
- EIN 5452 Engineering a Lean Enterprise **Credit Hours: 3**
- EIN 6215 Engineering System Safety **Credit Hours: 3**
- ESI 6605 Engineering Data Mining **Credit Hours: 3**
- EIN 6324 - Engineering the Supply Chain
- EIN 6936 Special Industrial Topics III **Credit(s): 1-3** (Graduate Research Seminar)
- EIN 6433 Human Factors Engineering in Medical Devices **Credit Hours: 3**
- EIN 6112 Information Systems Design for Engineers **Credit Hours: 3**
- ESI 6448 Integer Programming **Credit Hours: 3**

- EIN 6434 Design Controls for Medical Devices **Credit Hours: 3**
- EIN 6435 International Regulations for Medical Devices **Credit Hours: 3**
- EIN 6178 ISO 9000/14000 **Credit Hours: 3**
- ESI 6491 Linear Programming and Network Optimization **Credit Hours: 3**
- EIN 5510 Manufacturing Systems Analysis **Credit Hours: 3**
- EIN 6392 New Product Development **Credit Hours: 3**
- EIN 6420 - Non-Linear Programming
- EIN 6216 Occupational Safety Engineering **Credit Hours: 3**
- EIN 6430 Overview of Regulated Industries **Credit Hours: 3**
- EIN 6336 Production Control Systems **Credit Hours: 3**
- EIN 6145 Project Management **Credit Hours: 3**
- EIN 6431 Regulated Quality Systems and Control **Credit Hours: 3**
- EIN 6432 Regulated Product Approval Process **Credit Hours: 3**
- ESI 5236 Reliability Engineering **Credit Hours: 3**
- EIN 6935 Special Industrial Topics II **Credit Hours: 1-3** (Strategic Marketing Assessment)
- EIN 6936 Special Industrial Topics III **Credit(s): 1-3** (Strategies in Technical Entrepreneurship)
- ESI 6213 Stochastic Decision Models I **Credit Hours: 3**
- EIN 6934 Special Industrial Topics I **Credit Hours: 1-3** (Tech Venture Strategy)
- EIN 6145 Project Management **Credit(s): 3** (Technical Entrepreneurship)
- EIN 6106 Technology and Law **Credit Hours: 3**
- EIN 6121 Technology and Markets **Credit Hours: 3**
- EIN 5174 Total Quality Management Concepts **Credit Hours: 3**
- EIN 6225 - Total Quality Management (TQM) Seminar
- EIN 6936 Special Industrial Topics III **Credit(s): 1-3** (Venture Capital & Private Equity)
- EIN 5275 Work Physiology and Biomechanics **Credit Hours: 3**

Comprehensive Exam

Accelerated Major

Also available as an Accelerated Majors

Industrial Engineering, M.S.I.E.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 14.3501
Dept. Code: EGX
Major/College Codes: EVE EN
Approved: 1981

Contact Information

College: Engineering
Department: Industrial and Management Systems Engineering

Contact Information: http://www.grad.usf.edu/majors

The department participates in the College's M.S.E. majors. The department offers advanced degrees in areas of study pertinent to the design, evaluation, and operation of a variety of industrial systems, ranging from the analysis of public systems, to the service industry, to the operation of manufacturing concerns. Course topics and research opportunities include engineering analytics, production planning, production control, facilities design, applied engineering statistics, quality control and reliability, operations research, engineering economic analysis, human factors engineering, productivity analysis, manufacturing systems, robotics, automation, and computer applications.The department has advanced laboratory facilities that support class projects and research in microcomputer applications, computer-aided design and manufacturing, flexible automation, quality control, and applications in robotics.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- An undergraduate degree in Industrial Engineering or a related field with a strong background in mathematics with a 3.00/4.00 GPA; non engineering degrees will be required to take supplemental undergraduate courses
- GRE Required
- Three letters of reference
- Statement of purpose including evidence of research potential

Curriculum Requirements

Total Minimum Hours: 30 credit hours

Thesis option: minimum of 24 credit hours of approved course work, including three core courses and five IE elective courses, and six credit hours of thesis.

Non-thesis option: minimum of 30 credit hours of approved course work, including three core courses, five IE elective courses, and two general elective courses.

Required Core Courses (9 Credit Hours)

- ESI 6410 Optimization in Operations Research **Credit Hours: 3**
- ESI 6247 Statistical Design Models **Credit Hours: 3**
- ESI 6340 Probabilistic Systems Analysis **Credit Hours: 3**

IE Elective Courses (15 Credit Hours)

- ESI 4333 - Production Control **Credit(s): 3**
- ESI 4221 - Industrial Statistics & Quality Control **Credit(s): 3**
- EIN 4364 - Facilities Design **Credit(s): 3**
- EIN 5350 Technology and Finance **Credit Hours: 3**
- ESI 5522 Computer Simulation **Credit Hours: 3**
- ESI 5236 Reliability Engineering **Credit Hours: 3**
- ESI 5306 Operations Research for Engineering Management **Credit Hours: 3**
- EIN 6145 Project Management **Credit Hours: 3**
- EIN 6935 Special Industrial Topics II **Credit Hours: 1-3 (3 credits for this program)** (Lean Six Sigma)
- ESI 6324 Engineering the Supply Chain **Credit Hours: 3**
- EIN 6336 Production Control Systems **Credit Hours: 3**
- ESI 6448 Integer Programming **Credit Hours: 3**
- EIN 6936 Special Industrial Topics III **Credit Hours: 1-3 (3 credits for this program)** (Nonlinear Programming)
- ESI 6447 Large-scale and Computational Optimization **Credit Hours: 3**
- EIN 6319 Work Design and Productivity Engineering **Credit Hours: 3**
- EIN 6112 Information Systems Design for Engineers **Credit Hours: 3**
- EIN 6934 Special Industrial Topics I **Credit Hours: 1-3 (3 credits for this program)** (Engineering Analytics I)
- EIN 6934 Special Industrial Topics I **Credit(s): 1-3 (3 credits for this program)** (Engineering Analytics II)
- EIN 6608 - Advanced Analytics I **Credit(s): 3**
- EIN 6609 - Advanced Analytics II **Credit(s): 3**

General Elective Courses

In addition, students can choose electives fromother department and/or non-departmental courses, with the approval of major advisor or graduate director.Contact the department for information.Also visit http://imse.eng.usf.edu

Any College of Engineering 5000+ level course, including IMSE courses, except for the courses listed as IE elective courses above. Examples include:

- EIN 5182 Principles of Engineering Management **Credit Hours: 3**
- EIN 6386 Management of Technological Change **Credit Hours: 3**
- EIN 6934 Special Industrial Topics I **Credit Hours: 1-3 (3 credits for this program)** (Systems Integration)
- EIN 6936 Special Industrial Topics III **Credit Hours: 1-3 (3 credits for this program)** (Advanced Lean Six Sigma)
- EIN 6178 ISO 9000/14000 **Credit Hours: 3**
- EIN 6179 Advanced TQM Methods: Six Sigma **Credit Hours: 3**

Comprehensive Exam

Thesis (6 Credit Hours)

Industrial Engineering, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90
Level: Doctoral
CIP Code: 14.3501
Dept. Code: EGS
Major/College Codes: EIE EN
Approved: 1983

Contact Information

College: Engineering
Department: Industrial and Management Systems Engineering

Contact Information: http://www.grad.usf.edu/majors

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Although USF only requires Ph.D. students to complete two consecutive semesters as full-time students, the IMSE Dept. policy is for Ph.D. students to complete their total doctoral major as full-time Tampa campus students. Other requirements include:

- GRE Required
- Three letters of reference
- Statement of Purpose including evidence of research potential

Curriculum Requirements

Total Minimum Hours 90 hours post bachelor's

Minimum of 90 credit hours beyond BS degree. Minimum of 60 credit hours of approved course work and 20 credit hours of dissertation research. Total hours of credit must equal or exceed 90 hours. Contact the department for additional information.

Must have 2 (at least one accepted, the other submitted) referred journal publications before graduation.

In addition, students may choose electives from other department and/or non-departmental courses, with the approval of major advisor or graduate director. Contact the department for information. Also visit http://imse.eng.usf.edu

Required Core Courses (12 Credit Hours Minimum)

In addition a minimum of 8 hours of mathematics or statistics is required (the choice of such courses must be approved by the student's doctoral committee). Further requirements may be imposed by the candidate's committee.

Must take the following 4 core courses:

- ESI 6213 Stochastic Decision Models I **Credit Hours: 3**
- EIN 6935 Special Industrial Topics II **Credit Hours: 1-3 (3 credits for this program)** (Systems Modeling and Performance Analysis)
- ESI 6245 - Advanced Statistical Design Models **Credit(s): 3**
- ESI 6491 Linear Programming and Network Optimization **Credit Hours: 3**

Elective Courses (40 Credit Hours Minimum)

- ESI 5522 Computer Simulation **Credit Hours: 3**
- EIN 6119 - Decision Support Systems **Credit(s): 3**
- ESI 6324 Engineering the Supply Chain **Credit Hours: 3**
- EIN 6433 Human Factors Engineering in Medical Devices **Credit Hours: 3**
- EIN 6112 Information Systems Design for Engineers **Credit Hours: 3**
- ESI 6448 Integer Programming **Credit Hours: 3**
- EIN 6435 International Regulations for Medical Devices **Credit Hours: 3**
- EIN 6386 Management of Technological Change **Credit Hours: 3**
- EIN 6420 - Non-Linear Programming **Credit(s): 3**
- EIN 6336 Production Control Systems **Credit Hours: 3**
- EIN 6145 Project Management **Credit Hours: 3**
- ESI 5236 Reliability Engineering **Credit Hours: 3**
- EIN 6319 Work Design and Productivity Engineering **Credit Hours: 3**
- EIN 6608 - Advanced Analytics I **Credit(s): 3**
- EIN 6609 - Advanced Analytics II **Credit(s): 3**

Directed Research (9 Credit Hours)

Dissertation (11 Credit Hours)

Technology Management Graduate Certificate

This program is offered fully online.

Certificate Code: XTM
Approved 200401
The Industrial & Management Systems Engineering department at USF offers a fully online certificate in Technology Management for individuals with technical backgrounds who desire to move into management. This certificate program teaches students how to combine qualitative approaches with quantitative methods resulting in a strengthening of engineering credentials and the development of managerial competency.

Location/Delivery

The Certificate is offered at the Tampa and Sarasota campuses and fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

No more than 12 credits may be applied; however, students must receive prior approval from the department for certificate classes to be applied toward a graduate degree program. Prospective MSEM students must meet all entrance requirements for the MSEM program before the course(s) will be transferred. Additionally, no class will be considered unless at least a "B" grade was obtained.

Time Limit / Average time to Completion

The department will determine the time limit, up to the five years established by University policy.

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

This certificate requires completion of five (5) courses for a total of 15 semester hours. The student must obtain a grade of "C" or better in each class for it to be applied toward the Certificate. Students pursuing a graduate certificate will be required to meet the same academic requirements as those defined for degree-seeking students to remain in "good academic standing."

- EIN 5182 Principles of Engineering Management **Credit Hours: 3**
- EIN 6386 Management of Technological Change **Credit Hours: 3**

And select three courses from the following:

- ESI 5306 Operations Research for Engineering Management **Credit Hours: 3**
- EIN 5350 Technology and Finance **Credit Hours: 3**

- EIN 6108 EM-Human Relations **Credit Hours: 3**
- EIN 6319 Work Design and Productivity Engineering **Credit Hours: 3**
- EIN 6336 Production Control Systems **Credit Hours: 3**
- EIN 5174 Total Quality Management Concepts **Credit Hours: 3**
- EIN 6145 Project Management **Credit Hours: 3**
- EIN 6121 Technology and Markets **Credit Hours: 3**
- EIN 6106 Technology and Law **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Transportation System Analysis Graduate Certificate

This program is offered fully online.

Certificate Code: XTS
Approved 200508
The curriculum for the Transportation Systems Analysis graduate certificate provides an opportunity to advance one's credentials and knowledge in the field of transportation engineering. It includes extended knowledge in such areas as planning, analysis and design, all vital to transportation planners. Course offerings from Civil and Industrial Engineering provide a range of contemporary materials. Four courses (12 credits) are required to complete the certificate. The courses are offered on campus and via APEX distance learning.

Location/Delivery

The Certificate is offered at the Tampa campus and fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

There is a three (3) year time limit for completion of this certificate.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

- TTE 5501 Transportation Planning and Economics **Credit Hours: 3**

And select three courses from the following:

- TTE 5205 Traffic Systems Engineering **Credit Hours: 3**

- TTE 6315 Transportation Safety **Credit Hours: 3**
- TTE 6270 Intelligent Transportation Systems **Credit Hours: 3**
- TTE 6507 Travel Demand Modeling **Credit Hours: 3**
- TTE 6651 Public Transportation **Credit Hours: 3**
- TTE 6835 Pavement Design **Credit Hours: 3**
- EIN 6145 Project Management **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Mechanical Engineering

Mechanical Engineering, M.S.M.E.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 14.1901
Dept. Code: EGR
Major/College Codes: EME EN
Approved: 1981

Also offered as an Accelerated Major

Contact Information

College: Engineering
Department: Mechanical Engineering

Contact Information: http://www.grad.usf.edu/majors

The Department offers graduate majors leading to the M.S.M.E. and Ph.D. in Mechanical Engineering. Research opportunities are available in the following areas: Mechanism Design, Kinematics, System Dynamics and Vibrations, Mechanical Controls, Tribology, Mechanical Design, Robotics, Rehabilitation Engineering, Composite Materials, Solid Mechanics, Fluid Dynamics, Thermal Energy Systems, Microelectronic Device Thermal Management, Clean and Renewable Energy Systems, Micro and Nano scale materials and systems, MEMS, Biosensors, Biofluids, Biomedical Engineering, and Engineering Education Cellular Mechanotransduction and Biomaterials, Autonomy, Control, Information, and Systems.

Department facilities include the following laboratories: Computational Fluid Dynamics, Computational Solid Mechanics, Computer-Aided Design, Dynamic Systems, Hydraulics, Rehabilitation Engineering, Robotics, Biofuel cells and Biomimetics, Nanomaterials and Thin Films, Advanced Materials Processing and Characterization, Biofluids and Biosensors, Microelectronic Thermal Management and Heat Transfer, and Compliant Mechanisms.

Accreditation:

The department is ABET accredited.

Major Research areas:

Robotics, Rehabilitation Engineering, Controls, Solid Mechanics, Fluid Dynamics, Micro and Nano scale materials and systems Biomedical Engineering, and Engineering Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- B.S. in Mechanical Engineering or a closely related field from an accredited engineering program required.

- GRE required, with minimum percentile rank of 50% on the quantitative portion and a minimum average percentile rank of 50% in verbal and quantitative.
- A minimum grade point average (GPA) of 3.00/4.00 for the last two years of coursework from an ABET accredited engineering major for admission. Graduates of non-ABET accredited majors are evaluated on a case-by-case basis.
- Minimum of two recommendation letters is required.
- A one-page Statement of Purpose/Research Interest must also be included in the application package.
- The following prerequisite courses must be successfully completed before admission to the Ph.D. Program: Calculus I, II, III, Differential Equations, Thermodynamics, Fluid Mechanics, Solid Mechanics, and Machine Design.

Curriculum Requirements

Total Minimum Hours: 30 credit hours

Core - 6 credit hours

Other required courses - 6 hours

Electives - 12 credit hours

Thesis/non-thesis - 6 credit hours

Core Requirements (6 Credit Hours)

- EML 6105 Advanced Thermodynamics and Statistical Mechanics **Credit Hours: 3**
- EML 6653 Applied Elasticity **Credit Hours: 3**

Other required courses (6 Credit Hours)

All Master's Major students must complete a total of 9 core credit hours from two categories. Students should choose 3 credit hours of course work from each of the following specialization areas:

- EML 6069 Advanced Mathematics for Mechanical Engineers **Credit Hours: 3**
- EML 6930 Special Problems I **Credit Hours: 1-3**

Advanced Engineering Math II (3 Credit hours)

Must successfully complete one out of the following four courses:

- EML 6273 Advanced Dynamics of Machinery **Credit Hours: 3**
- EML 6223 Synthesis of Vibrating Systems **Credit Hours: 3**
- EML 6801 Robotic Systems **Credit Hours: 3**
- EML 6931 Special Problems II **Credit Hours: 1-3**

Advanced Controls (3 Credit Hours)

Electives (12 Credit Hours)

Minimum of 12 hours of elective coursework at the 6000 level. Out of these 12 hours, minimum of six credit hours of additional coursework is to be chosen from any EML class offered by the department. Independent Study is not considered regular class and is not included in this group.

Comprehensive Exam

For the thesis option, the successful defense of the thesis satisfies the comprehensive exam requirement.

For the non-thesis option, in lieu of the comprehensive exam, a portfolio containing project reports submitted as part of the coursework requirement for two out of three specialization areas (Fluid and Thermal Science; Mechanics, Manufacturing, and Materials; Dynamical Systems and Controls) will be submitted to the Department upon application of graduation. The Graduate Coordinator and Graduate Committee members of the Department will evaluate and approve the portfolio. The portfolio must be successfully completed and approved to satisfy the comprehensive exam requirement for graduation.

Non-thesis / Thesis Option (6 Credit Hours)

Non-thesis – 6 credit hours

Students in the non-thesis option complete an additional six hours of electives, selected in consultation with the Graduate Director.

Thesis Option- 6 credit hours

- EML 6971 Thesis: Master's **Credit Hours: 2-6**

Thesis option M.S.M.E. degree requires a minimum of 6 thesis hours. Thesis option MSME students must present a typed final draft to the Supervisory Committee and Graduate Advisor one week before the final oral examination.

Accelerated Major

Also available as an Accelerated Majors

Mechanical Engineering, Ph. D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 72 post bachelor's
48 post master's
Level: Doctoral
CIP Code: 14.1901
Dept. Code: EGR
Major/College Codes: EME EN
Approved: 1982

Contact Information

College: Engineering
Department: Mechanical Engineering

Contact Information: http://www.grad.usf.edu/majors

The Department offers graduate majors leading to the M.S. and Ph.D. in Mechanical Engineering.

Research opportunities are available in the following areas: Mechanism Design, Kinematics, System Dynamics and Vibrations, Mechanical Controls, Tribology, Mechanical Design, Robotics, Rehabilitation Engineering, Composite Materials, Solid Mechanics, Fluid Dynamics, Thermal Energy Systems, Microelectronic Device Thermal Management, Clean and Renewable Energy Systems, Micro and Nano scale materials and systems, MEMS, Biosensors, Biofluids, Biomedical Engineering, Engineering Education, Mechanotransduction and Biomaterials, Autonomy, Control, Information, and Systems.

Department facilities include the following laboratories: Computational Fluid Dynamics, Computational Solid Mechanics, Computer-Aided Design, Dynamic Systems, Hydraulics, Rehabilitation Engineering, Robotics, Biofuel cells and Biomimetics, Nanomaterials and Thin Films, Advanced Materials Processing and Characterization, Biofluids and Biosensors, Microelectronic Thermal Management and Heat Transfer, and Compliant Mechanisms.

Accreditation
The department is ABET accredited.

Major Research Areas
Robotics, Rehabilitation Engineering, Controls, Solid Mechanics, Fluid Dynamics, Micro, and Nanoscale materials and systems Biomedical Engineering, and Engineering Education.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- M.S. in Mechanical Engineering or a closely related field preferred.
- Students without a M.S. or with an M.S. in another field may also be admitted on a case-by-case basis.

- GRE required, with minimum percentile rank of 60% on the quantitative portion and a minimum average percentile rank of 60% in verbal and quantitative.
- A minimum grade point average (GPA) of 3.00/4.00 for the last two years of coursework from an ABET accredited engineering major for admission. Graduates of non-ABET accredited majors are evaluated on a case-by-case basis.
- A minimuim of three recommendation letters is required.
- A one-page Statement of Purpose/Research Interest must also be included in the application package.
- The following prerequisite courses must be successfully completed before admission to the Ph.D. Program: Calculus I, II, III, Differential Equations, Thermodynamics, Fluid Mechanics, Solid Mechanics, and Machine Design.

Curriculum Requirements

Total Minimum Hours:
72 credit hours (post-bacc)
48 credit hours (post-masters)

Courses completed for a Master's degree from another institution may count towards a maximum of 24 credit hours of coursework for the Ph.D. degree only if the transcript shows that the degree requirements were similar to USF and the student did not already get credit for the identical courses at USF.

Core – 6 credit hours
Other required courses – 9 credit hours
Electives – 21 credit hours
Dissertation – 20 credit hours
Additional coursework or dissertation – 16 credit hours

Core Requirements (6 Credit Hours)

- EML 6105 Advanced Thermodynamics and Statistical Mechanics **Credit Hours: 3**
- EML 6653 Applied Elasticity **Credit Hours: 3**

Other required courses (9 Credit Hours)

- EML 6069 Advanced Mathematics for Mechanical Engineers **Credit Hours: 3**
- EML 6930 Special Problems I **Credit Hours: 1-3**

Advanced Engineering Math II (3 Credit hours)

Must select one out of the following four courses:

- EML 6273 Advanced Dynamics of Machinery **Credit Hours: 3**
- EML 6223 Synthesis of Vibrating Systems **Credit Hours: 3**
- EML 6801 Robotic Systems **Credit Hours: 3**
- EML 6931 Special Problems II **Credit Hours: 1-3**

Advanced Controls (3 Credit Hours)

Electives (21 Credit Hours Minimum)

Minimum of 21 hours of elective coursework at the 6000 level without counting Independent Study or Directed Research or Dissertation Hours.

Qualifying Examination

Students must apply to take the qualifying examination no later than the fourth semester after admission into the doctoral program. In order to take the qualifying examination a doctoral student must satisfy the following requirements:

Satisfactorily complete (C or better) in departmental coursework on Mathematics and two other areas of specialization (1 major and 1 minor) as described below.

- Mathematics:
  - EML 6069 Advanced Mathematics for Mechanical Engineers
  - EML 6930 Special Problems I (Advanced Mathematics II)
- Heat Transfer:
  - EML 6154 Advanced Conduction Analysis
  - EML 6930 Special Problems I (Convection Heat Transfer)
- Fluid Mechanics:
  - EML 6713 Advanced Fluid Mechanics
- Thermodynamics:
  - EML 6105 Advanced Thermodynamics and Statistical Mechanics
- Dynamics:

1. EML 6273 Advanced Dynamics of Machinery
2. EML 6223 Synthesis of Vibrating Systems

- Solid Mechanics:

1. EML 6653 Applied Elasticity

- Materials:

1. EML 6930 Special Problems I (Advanced Materials)

- Controls:

1. EML 6930 Special Problems I (Advanced Controls)

No student will be allowed to take the examination if the cumulative GPA of all courses taken at USF is below 3.00, have not chosen a major professor and formed a supervisory committee, or is holding conditional or provisional admission status in the major.

Examinations will be given on Mathematics, and student's chosen major and minor areas of specialization. A student is required to pass the written examination in all three (3) areas (Mathematics, major area of specialization, minor area of specialization) for advancement to candidacy. Students will be given a maximum of two attempts to pass the qualifying examination. Failure in the second year will result in being dropped from the doctoral program.

Dissertation (20 Credit Hours Minimum)

- EML 7980 Dissertation: Doctoral **Credit Hours: 2-12**

20 credit hours minimum

Additional Coursework or Dissertation (16 Credit Hours)

Students will select additional coursework or Dissertation hours to complete the remaining 16 credit hours.

Graduate Handbook

https://www.usf.edu/engineering/me/graduate/index.aspx

Department of Medical Engineering

Biomedical Engineering, M.S.B.E.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 14.0501
Dept. Code: DEA
Major/College Codes: EBI EN
Approved: 1999

Concentrations:

Pharmacy (PRMY)

Also offered as an Accelerated Major
Also offered as a Concurrent Degree

Contact Information

College: Engineering
Department: Medical Engineering

Contact Information: http://www.grad.usf.edu/majors

Biomedical Engineering is a highly interdisciplinary Major that combines engineering and the medical sciences. The student works with an advisor to develop a graduate Major that draws on courses from engineering, medicine, public health, and the life sciences. Current active areas of research include: biomechanics, biomaterials, medical imaging, neuroengineering, tissue engineering, sensors, cellular-level drug delivery, and rehabilitation engineering. In addition to USF Health, participating institutions include the James Haley Veterans Administration Hospital, Florida Orthopedics Institute, and Tampa General Hospital. For more information, please contact the BME Major Advisor.

Major Research Areas: Biomechanics, Biomaterials, Neuroengineering, Photo Sensors, Cellular-level drug discovery and Tissue Engineering

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

- GRE with preferred Minimum scores of Quantitative >75%and Analytical Writing 4 or >;
- An undergraduate Bachelor's degree in Engineering or Science;
- Two (2) letters of recommendation; and
- A statement of purpose
- CV

Note: Exceptionally qualified students with bachelor's degrees in other disciplines may be admitted into the BME M.S. Major on a case-by-case evaluation of their credentials.

Curriculum Requirements

Total Minimum Hours: 30 credit hours

Both the thesis and non-thesis options are available at the M.S. level.

Core Requirements

Currently there are five (5) required courses:

- GMS 6440 Basic Medical Physiology **Credit Hours: 3**

or

- BME 6410 Engineering Physiology **Credit Hours: 3**

- GMS 6605 Basic Medical Anatomy **Credit Hours: 3**
- PHC 6051 Biostatistics II **Credit Hours: 3**
- BME 6000 Biomedical Engineering **Credit Hours: 3**
- BME 6931 Selected Topics in Biomedical Engineering **Credit Hours: 1-3 (3 credits for this program)** (II)

General Track Electives (15 Credit Hours)

Students may either opt for the General Track of the Concentration in Pharmacy, completing 15 hours as noted:

Students select from additional approved courses to complete the 30 hour requirement. A minimum of 16 hours must be at the 6000 level. In addition, all of the elective courses must consist of engineering-prefix courses, although the Thesis Committee (thesis option) or the BME Major Advisor (non-thesis option) may approve courses in relevant areas such as chemistry, physics, pharmacy, communications sciences & disorders, public health or medicine, in their place .

Concentration in Pharmacy (PRMY) (15 Credit Hours)

Students may select from the following options, or other pharmacy courses, as approved by their Pharmacy and BME Advisors:

- PHA 6140 - Introduction to Nanotechnology **Credit(s): 3** (Online)
- PHA 6116 - Micro-Nano Drug Delivery Systems **Credit(s): 3** (Online)
- PHA 6118 Nanomaterials, BioMEMS, and Nanodevices in Medicine **Credit Hours: 3** (Online)
- PHA 6147 Nanotechnology and Risk Management **Credit Hours: 3** (Online)
- PHA 6148 Nanoformulations and Nanopharmaceuticals **Credit Hours: 3** (Online)
- PHA 6xxx - Selected Topics: Introduction to Personalized medicine **Credit(s): 3** (Online)

Thesis Option

Thesis option students can count up to six hours of thesis research towards the elective requirements

Comprehensive Exam

Students in the non-thesis track will complete a comprehensive exam. For students in the thesis track, the thesis and oral defense serve as the comprehensive exam.

Accelerated Major

Also available as an Accelerated Majors

Concurrent Degree

Also available as a Concurrent Degrees

Biomedical Engineering, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 60 post-master's 90 post-bachelor's
Level: Doctoral
CIP Code: 14.0501
Dept. Code: ECH
Major/College Codes: EBI EN
Approved: 2005

Also offered as a Concurrent Degree

Contact Information

College: Engineering
Department: Medical Engineering

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. in Biomedical Engineering at the University of South Florida prepares individuals to contribute in this highly interdisciplinary field both as individuals and as members of interdisciplinary teams. Graduates are prepared to solve complex problems in areas such as diagnostic instrumentation, artificial organs, prosthetic devices, rehabilitation, and health care system design and operations, biomechanics, biomaterials, imaging, neuroengineering, tissue engineering, sensors, cellular-level drug delivery. The doctoral major capitalizes on USF's strong programs in Engineering and in the Health Sciences as well as the contiguously located H. Lee. Moffitt Cancer Center and Research Institute, and the James Haley Veterans Administration Hospital.

Students in the Major may choose to concentrate in one of several nationally recognized areas of Biomedical Engineering strength at USF including:

- Medical Imaging
- Rehabilitation Engineering
- Biomechanics and Biomaterials
- Molecular, Cellular and Tissue Engineering
- Drug and Gene Delivery
- Neuroengineering
- Photonics and Diagnostic Engineering

The Biomedical Engineering Program at USF provides students with an integrated knowledge of engineering, biomedical science and other appropriate disciplines to allow participation in and advancement of the interdisciplinary field of Biomedical Engineering. The major also facilitates biomedical engineering research at USF through interactions with USF faculty and with industry and other health care institutions and catalyzes the growth of biomedical product companies throughout the region by the development, dissemination, and commercialization of new biomedical technologies. Overall, the major strives to develop and promote technologies and processes that will lead to better health care and improved quality of life.

Major Research Areas: Neuroengineering, biomechanics, biomaterials, medical imaging, sensors, cellular-level drug delivery, and rehabilitation engineering and tissue engineering

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Successful applicants to the Ph.D. degree program in biomedical engineering will typically have presented the following preferred qualifications:

- GRE required with preferred scores: Verbal >50% percentile and Quantitative > 75th percentile and Analytical Writing > 4.0.
- An undergraduate GPA of >3.50 (out of a possible 4.00) based on official transcripts.
- Completion of a Master's degree in biomedical engineering or a related field.
- Evidence of sustained interest in biomedical engineering.
- A statement of purpose and CV.
- Three (3) Letters of recommendation.

Note: Admissions decisions will be made using multiple measures indicated above. We strongly encourage applicants to contact specific faculty conducting research related to the student's interests. Such direct contact with individual faculty members can greatly strengthen an application.

Curriculum Requirements

Total Minimum Hours: 90 hours
For students with an *approved* master's degree 60 hours minimum post-master's
For students without a master's degree 90 hours minimum post-bachelor's

Core courses – 15 hours
Specialization courses – 15 hours
Additional Electives or Directed Research for students without a master's degree – 30 hours
Dissertation – 30 hours

Core Courses:

A minimum of 15 credits including:

- GMS 6440 Basic Medical Physiology **Credit Hours: 3**

or

- BME 6410 Engineering Physiology **Credit Hours: 3**

- GMS 6605 Basic Medical Anatomy **Credit Hours: 3**
- PHC 6051 Biostatistics II **Credit Hours: 3**
- BME 6000 Biomedical Engineering **Credit Hours: 3**
- BME 6931 Selected Topics in Biomedical Engineering **Credit Hours: 1-3 (3 credits in this program)** (Biomedical Engineering II)

Specialization Courses:

A minimum of 15 graduate credit hours selected from one of these areas of specialization. Directed Research courses in these areas can count as a part of these credits:

- *Medical Imaging*
- *Rehabilitation Engineering*
- *Biomechanics and Biomaterials*

- *Cardiovascular Engineering*
- *Neuroengineering*
- *Tissue Engineering*

Qualifying Exam

Ph.D. Qualifying Examination, preferably to be completed by the end of the second year of study. The dissertation committee will evaluate a written dissertation proposal and an oral defense. Poor performance on the qualifying exam based on the judgment of the Committee may result in the student failing the exam. If a student does not pass on the first attempt, he/she may request in writing to repeat the Exam. Students who fail the Qualifying Examination the second time will be dismissed by the Major.

Dissertation (30 Credit Hours)

30 credits of dissertation research are required. 6 hours of Directed Research may be substituted for 6 Dissertation hours. As with other engineering Ph.D. degrees, evidence of the significance of the conducted research is provided by publication in appropriate refereed journals; with a minimum of 1 publication in a peer-reviewed journal, with the student as primary author. The expectation is that Ph.D. students will have 3 or more publications. The required journal publication must be based on your Dissertation research. Presentation at a conference or publication in a proceeding (even if refereed) is not sufficient.

- BME 7980 Ph.D. Dissertation **Credit Hours: 2-19**

Other Information

Graduate Assistantships and Fellowships

Financially competitive teaching and research graduate assistantships and fellowships will be offered to incoming students. Of special importance are the research opportunities and support available through affiliated institutions including the H. Lee Moffitt Cancer Center and Research Institute, the James Haley VA Hospital. In addition, particularly outstanding applicants will be nominated for university fellowships including Presidential Fellowships which provide competitive stipends plus tuition, fees and Health Insurance renewable for five years.

Results

Doctoral graduates of this major have been prepared for and are successfully engaged in research careers in Government, Corporate, and University Laboratories. In addition, since much of Biomedical Engineering research translates directly into biomedical devices, drugs, and instrumentation, graduates have also been directly involved in technology transfer, including the establishment of new Biomedical Engineering related businesses.

Concurrent Degree

Also available as a Concurrent Degrees

GS - Updates for 2019-2020

There were no curriculum updates for 2019-2020

College of Graduate Studies

GS - Updates for 2019-2020

GS - Programs

University of South Florida
Office of Graduate Studies (College of Graduate Studies)
4202 E. Fowler Ave ALN226
Tampa, FL 33620

Web address: http://www.grad.usf.edu/
Phone: 813-974-2846
Fax: 813-974-5762

College Dean: Dwayne Smith, Ph.D.
Associate Dean: Ruth Bahr, Ph.D.

Mission Statement:

The University of South Florida Office of Graduate Studies serves as the University hub of leadership for graduate education producing global leaders, one scholar at a time.

College Information:

The College of Graduate Studies is housed in the Office of Graduate Studies and serves as the College for newly developed interdisciplinary programs. In the past programs have included the Applied Behavior Analysis (MA), Cancer Biology (Ph.D.), Entrepreneurship in Applied Technologies (MS), and Global Sustainability (MA), which are now housed in other colleges.

Cybersecurity, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30*
Level: Masters
CIP Code: 43.0303
Dept Code: ---
Major/College Codes: CYS / GS
Effective: Fall 2014

Concentrations

Digital Forensics (CYC)
Computer Security Fundamentals (CYF)
Cyber Intelligence (CYI)*
Information Assurance (CIA)
**Cyber Intelligence requires 33 minimum total hours*

Contact Information

College: Graduate Studies
Department: Cyber Florida
Contact Information: http://www.grad.usf.edu/majors

The Master of Science in Cybersecurity is an interdisciplinary major that utilizes talent across the Colleges of Business, Engineering, Arts & Sciences, and Behavioral and Community Sciences. The major prepares students for leadership, managerial and domain-specific roles in Cybersecurity and for employment in managerial and operational positions that require quick analytical thinking, decision-making under uncertainty regarding critical resources, and domain-specific technical skills for managing secure operations. Specifically, based on the design of the concentrations and the core of this major, the major is also expected to prepare students for

1. intelligence positions that require innovative, analytical, decision-making, and technical skills for providing cybersecurity intelligence,
2. information assurance positions that require secure management of information and data transferred, used, stored, and processed in information systems,
3. law enforcement positions that are required to deal more and more with cyber-crimes, and
4. cybersecurity positions that require deep technical skills in the security domain.

Because this is a graduate-level major, to ensure that students possess the foundational knowledge for academic success, students admitted to this major are most likely to be successful if they have academic or work experience in the areas of C/C++ programming, computer networks, operating-system design, algorithms, data structures, and computer organization. An undergraduate degree in computer science, computer engineering, MIS, or IT is recommended for admission. Note: For the Information Assurance Concentration it is recommended that students have a background in accounting information systems, database management, and systems analysis and design.

Major Research Areas:

Cyber, Cybersecurity, Cyber Security, Information Assurance, Secure Software, Information, Analytics, Intelligence, Computer, Network, IT, Software, Testing, Security, Analytic Communication, Data Communications, Cryptography, Information Security, Risk Management, Business Continuity, Disaster Recovery, Digital Forensics, National Security

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Applicants also must submit the following with their application:

- A 250-500 word essay in which the student describes her or his academic and professional background, reasons for pursuing this degree, and professional goals pertaining to cybersecurity
- Two letters of recommendation, at least one of which should come from a faculty member familiar with the applicant's academic performance and potential. If the applicant is unable to provide the letter from a former professor, with approval from the program's admission coordinator, letters from other professional sources will be accepted
- Current Resume or CV
- Scores from the GRE General Test. Applicants with degrees from regionally-accredited U.S. universities, however, may request a waiver of the GRE requirement.

The graduate admissions committee may request a video or phone admission interview or additional documentation, if necessary.

Curriculum Requirements

Total Minimum Hours: 30 credit hours

Core Requirements – 12 hours
Concentrations – 15-18 hours
Practicum – 3 hours

Core Requirements (12 Credit Hours)

- EEL 6787 Data Network, Systems, and Security **Credit Hours: 3**
- MAT 5932 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Applied Cryptography)
- ISM 6328 Information Security & Risk Management **Credit Hours: 3**
- ISM 6930 Selected Topics in MIS **Credit Hours: 1-6 (3 credits for this program)** (Decision Processes for Business Continuity and Disaster Recovery)

Concentration Requirements (15-18 Credit Hours)

Students must select from the following concentrations:

Digital Forensics (15 Credit Hours)

Area of emphasis on forensics following attacks on critical infrastructure systems.

- CJE 6688 Cybercrime and Criminal Justice **Credit Hours: 3**
- CJE 6627 Digital Evidence Recognition and Collection **Credit Hours: 3**
- CJE 6624 Introduction to Digital Evidence **Credit Hours: 3**

- CJE 6625 Network Forensic Criminal Investigations **Credit Hours: 3**
- CJE 6626 - Digital Forensic Criminal Investigations **Credit(s): 3**

Computer Security Fundamentals (15 Credit Hours)

Area of emphasis in operating secure critical infrastructure systems.

Students select from the following options to complete the 12 hour requirement:

- EEL 6764 Principles of Computer Architecture **Credit Hours: 3**
- COP 6611 Operating Systems **Credit Hours: 3**
- COT 6405 Introduction to the Theory of Algorithms **Credit Hours: 3**
- CIS 6930 Special Topics **Credit Hours: 1-5 (3 credits for this program)** (Computer Systems Security) (New Course Number Pending)

For the remaining 3 hours students may select a course from the other concentrations.

Cyber Intelligence (18 Credit Hours)

Area of emphasis in methodologies for analyzing threats against critical systems

Note – this concentration requires a minimum of 33 total program hours.

- LIS 6107 Advanced Professional & Technical Communication for Analysts **Credit Hours: 3**
- LIS 6700 Information Strategy and Decision-Making **Credit Hours: 3**
- LIS 6703 Core Concepts in Intelligence **Credit Hours: 3**
- LIS 6702 Advanced Intelligence Analytic Methods **Credit Hours: 3**
- LIS 6709 Cyber Intelligence **Credit Hours: 3**
- LIS 6670 Advanced Cyber Intelligence **Credit Hours: 3**

Information Assurance (15 Credit Hours)

Area of emphasis in securing critical information and systems. The concentration requires students to take five out of the following six courses:

- ISM 6124 Advanced Systems Analysis and Design **Credit Hours: 3**
- ISM 6145 Seminar on Software Testing **Credit Hours: 3**
- ISM 6218 Advanced Database Management **Credit Hours: 3**
- ISM 6316 Project Management **Credit Hours: 3**
- BUL 5842 Risk Management and Legal Compliance **Credit Hours: 3**
- ACG 6457 Accounting Systems Audit, Control, and Security **Credit Hours: 3**

Or any other elective pre-approved by the Muma College of Business Information Assurance Concentration Director.
The information below applies to all concentrations in the major:

Comprehensive Exam

During the semester in which the student is scheduled to graduate, the student will be required to submit an electronic portfolio demonstrating completion of core major competencies in cybersecurity and in the area of concentration. This competency-based portfolio will substitute for the written comprehensive exam because the portfolio permits the capstone assessment to align exactly with the degree program's objectives. Each objective in the portfolio is reviewed and

rated by graduate faculty for Content (demonstrating knowledge of accepted practices, procedures, and trends in the field) and Critical Thinking (ability the student's ability to analyze a problem, organize a response, synthesize perspectives, and draw practical, testable conclusions)

Non-Thesis

Because the primary aim of the M.S. in Cybersecurity is to train highly skilled practitioners for the workforce, the Degree does not include a research thesis requirement.

Practicum (3 Credit Hours)

Satisfactory completion of a three (3) credit hour applied learning experience (practicum) is a core degree requirement for all students pursuing the M.S. in Cybersecurity. The practicum experience is arranged and managed through the coordinator for the student's concentration area. The student will register for practicum credit in her concentration area's home department.

Until each department receives final approval for a "practicum" or "field work" course number, some departments will develop a learning plan with the student for the practicum and use the "Independent Study" course mechanism.

- For Information Assurance: ISM 6905 Independent Study
- For Computer Security Fundamentals: CAP 6940 IT Graduate Practicum
- For Digital Forensics: CCJ 6905 Directed Independent Study
- For Cyber Intelligence: LIS 6946 Supervised Field Work

MS - Updates for 2019-2020

There were no curricular changes for 2019-2020.

College of Marine Science

MS - Updates for 2019-2020

MS - Programs

University of South Florida
College of Marine Science
140 7th Avenue S, MSL119
St. Petersburg, FL 33701

Web address: http://www.marine.usf.edu/
Email: marinescience@usf.edu
Phone: 727-553-1130
Fax: 727-553-1189

College Dean: Jacqueline E. Dixon, Ph.D.
Associate Dean: Gary Mitchum, Ph.D.
Associate Dean of Academic Affairs: David F. Naar, Ph.D.

College Structure and Location:

The College of Marine Science (CMS) was formed during 2000 from the previous Department of Marine Science, initiated in 1967 with three founding faculty members. The Florida Board of Regents declared it a University Center of Excellence in 1978 and approved the Marine Science Ph.D. degree program in 1982. The CMS at the University of South Florida is constituted as a graduate-level research major that forms the basis for educational opportunities at the Ph.D. and M.S. degree levels and for public service to the State of Florida.

Located on the beautiful waterfront of Tampa Bay adjacent to the USF St. Petersburg campus, CMS is administratively part of the USF Tampa campus and reports to the Provost of USF. The College is focused on interdisciplinary research in marine science. Our ranked faculty, support personnel, and graduate students work together toward a vision of understanding the unified global ocean system. The College seeks to build new interdisciplinary research teams in collaboration with our local marine science research partners, including the Florida Fish and Wildlife Research Institute, the U.S. Geological Survery, NOAA, SRI St. Petersburg, and Mote Marine Lab.

Mission Statement:

The primary mission of the College is to conduct basic and applied research in ocean science. Here, ocean science is defined by application of the traditional fields of science to the biology, chemistry, geology, and physics of the marine environment and the interactions between the marine environment and the adjoining atmosphere and land systems – presently and throughout earth's history. Included in the primary ocean science mission is the development of new technologies and tools for exploring the coupled ocean-atmosphere-land systems. The College expects its faculty to develop research majors of outstanding caliber and to fully engage the national and international scientific communities, through the reporting of research results in the most respected oral and written venues, and by professional service. Integral to the ocean science research mission is the education of graduate students.

The College recruits, trains, and graduates productive, creative scientists at the Ph.D. and M.S. levels that are prepared to make independent contributions to ocean science. The faculty are expected to develop outstanding graduate education programs that will afford students the opportunity to participate in all aspects of research. The College recognizes that graduate education requires strong mentoring along with traditional classroom instruction. An ancillary but

important mission of the College is education outreach for students at all levels and for the public at large. Our outreach programs have significantly expanded our educational responsibilities, and they are intended to motivate all generations to become scientifically literate citizens and to understand the environment in which they live. The College pursues innovative avenues for educational outreach. Efforts are made to attract more junior and senior level undergraduates into both the ocean science core courses and into advanced courses for which they have pre-requisites. Historically, this is a way in which students have made career decisions to engage in ocean science. In this manner the College maintains close ties with the student body in other University of South Florida colleges and campuses.

Research Facilities:

The College facilities include specilaized laboratories equipped for studies in: Scanning and transmission electron microscopy; Trace metal analysis; Water quality; Organic and isotope geochemistry, Physical chemistry, Optical oceanography, Satellite imagery; Sedimentology; Geophysics; PhysicalCceanography; Micropaleontology; Physiology; Benthic Ecology; Microbiology; Planktology; and Ichthyology. Additionally, the complex includes the Center for Ocean Technology, which provides instrumental manufacturing and prototyping support to the faculty and students.

The College's students and faculty have conducted research in the Antarctic, Arctic, Atlantic, Indian, and Pacific Oceans, as well as the Bering, Mediterranean, and Caribbean Seas. The College has access to 5 research vessels in conjunction with the Florida Institute of Oceanography (FIO) and the U.S. geological Survey: The RV Weatherbird II (115 ft), the RV Bellows (71 ft), the RV Gilbert (42 ft), the RV Fish Hawk (38 ft), and the RV Price (24 ft). Ship time on other vessels in the U.S. fleet of oceanographic vessels, as well as foreign research vessels, is generally obtained through federal funding.

Major Research Areas:

Faculty major research areas as listed at: https://www.marine.usf.edu/about-us/directory/faculty-directory/

Marine Science, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 32
Level: Masters
CIP Code: 40.0607
Dept Code: MSC
Major/College Codes: MSC MS
Approved: 1976

Concentrations:

Biological Oceanography (BOC)
Chemical Oceanography (COG)
Geological Oceanography (GOG)
Interdisciplinary (IDY)
Marine Resource Assessment (MRA)
Physical Oceanography (POG)

Contact Information

College: Marine Science
Contact Information: http://www.grad.usf.edu/majors
Website: http://www.marine.usf.edu/
Email: Marinescience@usf.edu

The College of Marine Science (CMS) offers M.S. and Ph.D. degrees in Marine Science. This research-based major has a low student-to-faculty ratio, with an average of 100 graduate students under the direction of ~ 30 fill-time faculty. Students in the Marine Science major may elect a concentration in biological, chemical, geological, or physical oceanography, or Marine Resource Assessment through course work and thesis research. CMS graduates are well prepared for positions in academia, industry, government agencies, and non-governmental organizations at local to international levels.

Biological Oceanography

Biological Oceanographers seek to understand the life histories and population dynamics of marine organisms and how they interact with their environment over space and time. Scientists in the College of Marine Science study the full breadth of biological oceanography including microbiology, phytoplankton, zooplankton, benthos, coral reefs, fishes, and marine mammals. Our biological oceanographers utilize a variety of techniques including SCUBA, shipboard samplers, acoustics, molecular biology, and mathematical modeling to understand the oceans and their inhabitants. Scientists in our college also use the latest in remote sensing technology to study vast regions of the Earth's oceans, and have developed new technology, capable of identifying and quantifying harmful algal blooms and related processes.

Chemical Oceanography

Chemical oceanographers seek to understand the ways in which various chemical forms are cycled within the oceans, and the reactions that influence biogeochemical cycles. Ocean chemists improve our understanding of the basic conditions under which ocean life thrives in seawater, and help predict the effects of anthropogenic and natural climate change on ocean composition. Research programs in the College of Marine Science include wide ranging topics such as the role and variability of nutrients in seawater, the distribution and cycling of both biologically-essential and toxic trace metals, the oceans' CO2 system, dissolved organic matter, molecular organic compounds, radionuclides and stable isotopes, and the distribution of chemical pollutants and their interactions with marine organisms and ecosystems. Faculty and students utilize a wide variety of state-of-the-art instrumentation and technology for conducting this research.

Geological Oceanography

Geological oceanographers in the College of Marine Science conduct research from the continental margins to the deep-ocean seafloor. Their work extends from modern environments to millions of years before present to understand and predict Earth surface and interior processes. Primary research themes include: (1) paleoceanography and paleoclimatology; (2) coastline and continental shelf development and processes including effects of storms and sea-level fluctuations; (3) the health of modern coral reefs; (4) carbonate depositional processes; (5) anthropogenic influences on estuaries; (6) mathematical descriptions of geologic phenomena; and (7) plate tectonics. Our geological oceanography group has a variety of modern well-equipped laboratories and field equipment, including one of the best seafloor mapping capabilities in the US. Fully integrated with these field instruments is the computational capability to generate state-of-the-art data depictions and imagery. Our group also works closely with scientists from the US Geological Survey's Center for Coastal and Marine Science Center, a major federal laboratory located nearby.

Physical Oceanography

Physical oceanography involves the study of water movement in the ocean. Energy is introduced to the ocean through wind and solar heating, and these combine with the rotation of the Earth and gravitational effects to drive ocean circulation, tides, and waves. Our physical oceanographers also investigate how the Earth's oceans are directly coupled with the atmosphere, from local weather patterns to the global climate system. Physical oceanographers in the CMS carry out research on a variety of topics using the latest technology. Computer models, real time data, satellite remote sensing, and in situ data from moored arrays, coastal tide gauges, and research cruises are used to study a wide range of research problems. Topics include tide and current prediction in Tampa Bay, circulation on the West Florida Shelf and in the Gulf of Mexico, El Niño phenomena, and the potential for global climate change.

Marine Resource Assessment

The College of Marine Science offers an interdisciplinary concentration in Marine Resource Assessment (MRA) as part of its M.S. and Ph.D. majors. This concentration provides training in the emerging field of ecosystem-based management. Its mission is to train a new generation of scientists that can effectively address issues concerning the sustainability of the world's living natural resources. The MRA concentration addresses the national shortage of graduates possessing the skills required for managing living marine resources by teaching a quantitative approach to ecosystem analysis and living resource assessment. The MRA concentration is designed to produce resource assessment scientists who can introduce relevant ecosystem-level variables into the traditional, single-species assessment process, complementing and enhancing the development of science-based management policies that protect living marine resources.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Meeting these criteria shall not be the only basis for admission. Complete and up-to-date application instructions can be found at http://www.marine.usf.edu/students/how-to-apply

- Bachelor's degree or equivalent from a regionally accredited university (Preferable majors include biology, chemistry, geology, physics, and math).

- Have completed all of the coursework listed on our website (http://www.marine.usf.edu) under "Undergraduate Preparation".
- Have taken the Graduate Record Examination (GRE) within 5 years preceding the application. Preferred minimum scores are as follows: Verbal = 153 (59th percentile), Quantitative = 148 (32nd percentile). Preferred minimum scores for Marine Resource Assessment concentration are: Verbal = 156(71st percentile), Quantitative = 155 (60th percentile).
- Have the commitment of a Marine Science faculty member to serve as advisor during the student's graduate studies.

Required Application Materials

- research interest essay (use template from Marine Science website) -
- a resume or curriculum vitae
- three letters of recommendation
- official transcripts of grades
- GRE exam scores

Curriculum Requirements

A committee, consisting of a major advisor and at least 2 other members of the graduate faculty, will be appointed to supervise and guide the major of each student.

Total Minimum Hours - 32 hours

Students must complete a minimum of 32 credit hours within the following areas:

Core Requirements (12 Credit Hours)

Core courses completed with a grade of "B" or better:

- OCB 6050 Biological Oceanography **Credit Hours: 3**
- OCC 6050 Chemical Oceanography **Credit Hours: 3**
- OCG 6051 Geological Oceanography **Credit Hours: 3**
- OCP 6050 Physical Oceanography **Credit Hours: 3**

Concentration Requirements (14 Credit Hours)

Students select one of the following concentrations and complete 14 hours of electives within the concentration subject area (or other courses as approved by the Graduate Director). Note: At least 8 of these credit hours must be in formal courses to satisfy the USF requirement of 20 hours of formal coursework.

Biological Oceanography (BOC)
Chemical Oceanography (COG)
Geological Oceanography (GOG)
Interdisciplinary (IDY)
Marine Resource Assessment (MRA)*
Physical Oceanography (POG)

*Students in Marine Resource Assessment Concentration

* Students in Marine Resource Assessment Concentration area are required to take 3 courses from the following list (totaling 9 credit hours) as part of their concentration requirements:

- Population Dynamics **Credit(s): 3**
- Fish Biology **Credit(s): 3**
- Dynamics of Marine Ecosystems **Credit(s): 3**
- Applied Multivariate Statistics **Credit(s): 3**

Elective Requirements

Electives are taken within each concentration area (see above)

Comprehensive Exam Requirements

In lieu of a standard Comprehensive Exam, M.S. students must only pass their thesis defense. M.S. students planning to remain in CMS and enter the Ph.D. after completion of their M.S. are invited and encouraged to take the Integrated Marine Science Exam (IMSE) after their first or second year in the M.S. Or they can wait until they are in the Ph.D.

Thesis Requirements (6 Credit Hours)

- A minimum of 6 credits of OCE 6971 (Thesis credit hours)
- A written thesis
- A successful thesis defense examination

Other Requirements

- Other coursework as required by thesis advisory committee

Marine Science, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90
Level: Doctoral
CIP Code: 40.0607
Dept Code: MSC
Major/College Codes: MSC MS
Approved: 2000

Concentrations:

Biological Oceanography (BOC)
Chemical Oceanography (COG)
Geological Oceanography (GOG)
Interdisciplinary (IDY)
Marine Resource Assessment (MRA)
Physical Oceanography (POG)

Contact Information

College: Marine Science
Contact Information: http://www.grad.usf.edu/majors
Website: http://www.marine.usf.edu/
Email: Marinescience@usf.edu

The College of Marine Science (CMS) offers M.S. and Ph.D. degrees in Marine Science. This research based major has a low student-to-faculty ratio, with an average of 100 graduate students under the direction of ~ 30 full-time faculty. Students in the Master's major may elect a concentration in biological, chemical, geological, or physical oceanography, or Marine Resource Assessment through course work and thesis research. CMS graduates are well prepared for positions in academia, industry, government agencies, and non-governmental organizations at local to international levels.

Biological Oceanography

Biological oceanography seeks to understand the life histories and population dynamics of marine organisms and how they interact with their environment over space and time. Scientists in the College of Marine Science study the full breadth of biological oceanography including microbiology, phytoplankton, zooplankton, benthos, coral reefs, fishes, and marine mammals. Our biological oceanographers utilize a variety of techniques including SCUBA, shipboard samplers, acoustics, molecular biology, and mathematical modeling to understand the oceans and their inhabitants. Scientists in our college also use the latest in remote sensing technology to study vast regions of the Earth's oceans, and have also developed new technology, such as genosensor capable for identifying and quantifying harmful algal blooms and related processes on unprecedented scales.

Chemical Oceanography

Chemical oceanographers seek to understand the ways in which various elements are cycled within the oceans, and the reactions that influence biogeochemical cycles. Ocean chemists improve our understanding of the basic conditions under which ocean life thrives in seawater, and help predict the effects of anthropogenic and natural climate change on ocean composition. Research programs in the College of Marine Science include such wide ranging topics as the role and variability of nutrients in seawater, the distribution and cycling of both biologically-essential and toxic metals, the oceans' CO2 system, dissolved organic matter, molecular organic compounds, radionuclides and stable isotopes and the distribution of chemical pollutants and their interactions with marine organisms and ecosystems. Faculty and students utilize a wide variety of state-of-the art instrumentation and technology for conducting this research. .

Geological Oceanography

Geological oceanographers in the College of Marine Science conduct research from the continental margins to the deep-ocean seafloor. Their work extends from modern environments to millions of years present to understand and predict Earth surface and interior processes. Primary research themes include: (1) paleoceanography and paleoclimatology; (2) coastline and continental shelf development and processes including effects of storms and sea-level fluctuations; (3) the health of modern coral reefs(4) carbonate depositional processes; (5) anthropogenic influences on estuaries; (6) mathematical descriptions of geologic phenomena; and (7) plate tectonics. Our geological oceanography group has a variety of modern well-equipped laboratories and field equipment, including one of the best seafloor mapping capabilities in the US. Fully integrated with these field instruments is the computational capability to generate state-of-the art data depictions and imagery. Our group also works closely with scientists from the US Geological Survey's Center for Coastal and Marine Science Center, a major federal laboratory located nearby.

Physical Oceanography

Physical oceanography involves the study of water movement in the ocean. Energy is introduced to the ocean through wind and solar heating, and these combine with the rotation of the Earth and gravitational effects to drive ocean circulation, tides, and waves. Our physical oceanographers also investigate how the Earth's oceans are directly coupled with the atmosphere, from local weather patterns to the global climate system. Physical oceanographers in the CMS carry out research on a variety of topics using the latest technology. Computer models, real time data, satellite remote sensing, and in situ data from moored arrays, coastal tide gauges, and research cruises are used to study a wide range of research problems. Topics include tide and current prediction in Tampa Bay, circulation on the West Florida Shelf and in the Gulf of Mexico, El Niño phenomena, and the potential for global climate change.

Marine Resource Assessment

The College of Marine Science offers an interdisciplinary concentration in Marine Resource Assessment (MRA) as part of its M.S. and Ph.D. majors. This concentration provides training in the emerging field of ecosystem-based management. Its mission is to train a new generation of scientists that can effectively address issues concerning the sustainability of the world's living natural resources. The MRA concentration addresses the national shortage of graduates possessing the skills required for managing living marine resources by teaching a quantitative approach to ecosystem analysis and living resource assessment. The MRA concentration is designed to produce resource assessment scientists who can introduce relevant ecosystem-level variables into the traditional, single-species assessment process, complementing and enhancing the development of the science-based management policies that protect living marine resources.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

Meeting these criteria per se shall not be the only basis for admission. Complete application instructions can be found on the college website: http://www.marine.usf.edu/students/how-to-apply

- Bachelor's degree or equivalent from a regionally accredited university (Preferable majors include biology, chemistry, geology, physics or math)
- Have completed all of the coursework listed on our website (http://www.marine.usf.edu) under "Undergraduate Preparation"

- Have taken the Graduate Record Examination (GRE) within 5 years preceding application. Preferred minimum scores are as follows: Verbal = 135 (59th percentile), Quantitative = 148 (32nd percentile). Preferred minimum scores for Marine Resource Assessment concentration are: Verbal = 156 (71st percentile), Quantitative = 155 (60th percentile).
- Have the commitment of a Marine Science faculty member to serve as advisor during the student's graduate studies.

Required Application Materials

- research interest statement (use template from Marine Science website)
- a resume or curriculum vitae
- three letters of recommendation
- official transcripts of grades
- GRE exam scores

Curriculum Requirements

A committee, consisting of a major advisor and at least four other members of the graduate faculty, is appointed to supervise and guide the major of the candidate. One member shall be from a department outside of the College of Marine Science.

Total Minimum Hours Required: 90 hours beyond the Bachelor's

Students must complete a minimum of 90 credit hours beyond the Bachelor's degree, (12 hours of core requirements, 16 hours of dissertation, and 62 hours split between courswork and research as determined by the committee) and must complete the following:

Core Requirements (12 Credit Hours)

Core courses completed with a grade of "B" or better

- OCB 6050 Biological Oceanography **Credit Hours: 3**
- OCC 6050 Chemical Oceanography **Credit Hours: 3**
- OCG 6051 Geological Oceanography **Credit Hours: 3**
- OCP 6050 Physical Oceanography **Credit Hours: 3**

Concentration Requirements

Students select one of the following concentrations. There is no minimum credit requirement except for the Marine Resource Assessment Concentration:

Biological Oceanography (BOC)
Chemical Oceanography (COG)
Geological Oceanography (GOG)
Interdisciplinary (IDY)
Marine Resource Assessment (MRA)*
Physical Oceanography (POG)

*Students in the Marine Resource Assessment Concentration

*Students in the Marine Resource Assessment Concentration area are required to take three courses from the following list (totaling nine credit hours) as part of their concentration requirements:

- Population Dynamics **Credit(s): 3**
- Fish Biology **Credit(s): 3**
- Dynamics of Marine Ecosystems **Credit(s): 3**
- Applied Multivariate Statistics **Credit(s): 3**

Elective Requirements

Electives are taken within each concentration area (see above)

Comprehensive Qualifying Exam Requirements

There will be an Integrated Marine Science Exam (IMSE) administered early each Fall semester. The exam aims to judge a student's ability, upon successful completion of the four core classes (B- or better), to integrate the concepts covered in these classes. All students will take the same exam, at the same time, and questions will be determined by a committee to be appointed by the Dean. All Ph.D. students are expected to take this exam no later than the beginning of their third year (to allow for students who take 2 years to finish the core classes because of other course requirements or if they do not start in the fall term). M.S. students who anticipate continuing in the major to obtain their Ph.D. are encouraged to take this exam, which will fulfill this requirement as long as they enter the Ph.D. major within 7 years of successfully completing the exam. The IMSE is a written exam, followed by optional oral exam if the student does not perform satisfactorily on the written exam. If the student fails the exam, he/she has a second chance to pass the exam in the following year. If a student fails the exam twice, he/she may not proceed in the Ph.D. major.

After passing the IMSE, students are expected to form their dissertation committee, have their research proposal approved by the committee, and to take and pass a Ph.D. Candidacy Exam (PCE) administered by the dissertation committee. The qualifying exam is meant to test the students' in-depth knowledge in their area of concentration and/or dissertation research. The PCE must consist of a 2-4 hour oral exam, with an optional written exam (which could be prior to or after the oral exam) at the discretion of the student's major advisor. The student is expected to take and pass the PCE no later than the start of their fourth year. A student has two chances to pass the PCE in order to become a Ph.D. candidate and must do so prior to beginning their fifth year. Students failing the first time must take the exam again within one year of the first try. If a student fails the exam twice, he/she may not proceed in the Ph.D. major.

Dissertation Requirements (16 Credit Hours)

- A minimum of 16 credits of OCE 7980 (Dissertation credit hours). Following admission to candidacy, the student must enroll in OCE 7980 when engaged in research, data collection, or writing activities relevant to the dissertation. The student is required to accumulate a minimum of 6 credits during each previous 12 month period (previous 3 terms, e.g., Fall, Spring, Summer) until the degree is granted.
- A written dissertation
- A successful dissertation defense examination

Other Requirements

Other coursework as required by dissertation advisory committee

Teaching & Communicating Ocean Sciences Broader Impacts Graduate Certificate

This program is offered partially online.

Curriculum Code: **XOS**

Description

The Teaching and Communicating Ocean Sciences Broader Impacts Graduate Certificate program is intended to develop, practice and advance students skill set to lead broader impact activities and compare for competitive grant writing. Course activities will include practice in outdoor natural environments, labs and classrooms. Students will develop syllabus and practice teaching a component of an undergraduate STEM course, and a pre-college STEM program.

Course Location/Delivery

Partial, Campus (St. Pete)

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- OCE 6940C Experiential Learning in Marine Science **Credit Hours: 1-4 (3 credits for this program)**
- OCE 6948 - Scientist in the Classroom **Credit(s): 3**
- OCE 6949C Developing and Teaching a STEM Course **Credit Hours: 1-4 (3 credits for this program)**

Choose one the following (3 Credit Hours)

*Other courses as approved by Certificate Director

Electives

- OCE 6950 Teaching the Broader Impacts of Ocean Sciences **Credit Hours: 1-4 (3 credits for this program)**

- OCE 6921 Professional Development I **Credit Hours: 2**

Time Limit

5 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

NR - Updates for 2019-2020

The USF Graduate Council approved the following on the dates noted.

Major Terminations

Nurse Anesthesia	M.S.	Terminate Degree Program	10/1/18

Majors

Nurse Anesthesia	D.N.P.	Non-substantive changes	3/4/19
Nursing	M.S.	Change curriculum for compliance; terminate NCL, NOA Concentrations and NAS Major code (Accelerated)	4/1/19
Nursing	D.N.P.	Change curriculum for compliance	4/1/19
Nursing Science	Ph.D.	Change curriculum for compliance	4/1/19

Concurrent Degrees

Nursing (MS) and Public Health (MPH)	Non-substantive edits	3/4/19

Graduate Certificate

Simulation Based Academic Fellowship in Advanced Pain Management	Change title to "Advanced Pain Management Fellowship" and add course	11/4/18

College of Nursing

NR - Updates for 2019-2020

NR - Programs

University of South Florida
College of Nursing
12901 Bruce B. Downs Blvd. MDC22
Tampa, FL 33612

Web address: https://health.usf.edu/nursing
Email: nurstudent@health.usf.edu
Phone: 813-974-2191
Fax: 813-974-5418

Dean Victoria Rich, Ph.D., RN, FAAN
Vice Dean, Graduate Programs Denise Maguire, Ph.D., R.N., C.N.L., F.A.A.N
Associate Dean Graduate Clinical Programs Tracey Taylor, D.N.P., ACNP-BC, RN
Associate Dean, Ph.D. Program Theresa Beckie, Ph.D., M.N., R.N., F.A.H.A., F.A.A.N.
Director, Student Affairs Brocdyl Joseph Porta, Ed.D.

Accreditation:

The baccalaureate, master's, and DNP programs at the USF College of Nursing are accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791. In addition, the Nurse Anesthesia program is accredited by the Council of Accreditation of Nurse Anesthesia Educational Programs, 222 South Prospect Avenue, Suite 304, Park Ridge, IL 60068-4041. (847) 692-7050.

Mission Statement:

USF College of Nursing provides innovation and leadership in preparing 21st-century nurses to demonstrate excellence in research, education, and clinical care while promoting health and wellness in our community and around the world.

Major Research Areas:

Consistent with its mission of preparing 21st-century nurses to improve health care throughout the world, the College of Nursing faculty and students pursue scientific inquiry across a wide range of topics. Faculty and students are challenged to analyze problems, discover new findings, as well as develop and test models for implementing evidence-based guidelines. Research is conducted collaboratively with colleagues throughout USF Health and other USF colleges such as Engineering, Computer Sciences, etc., to study cutting-edge questions related to: biobehavioral mechanisms of health; caregiver support; chronic illnesses such as cardiovascular health, cancer prevention and management, COPD complementary therapies to manage health and illness; digital solutions for health promotion and symptom management; precision health; and veterans' health. The College of Nursing also houses a biobehavioral lab with 2,000 dedicated square feet of space. It contains state-of-the art equipment for conducting assays, such as inflammatory markers, stress hormones, proteomics, microbiome, and genetics.

College Requirements

For specific degree requirements for the M.S.,CRNA, D.N.P., and Ph.D., degree programs in Nursing, refer to the individual listings in the Catalog. The GRE is required only for the M.S. and D.N.P. in Nurse Anesthesia, and for the Ph.D. in Nursing, degree programs.

Progression Policy

1. All graduate students with the exception of Ph.D. students:

1.1. Graduate students must earn the grade of 'B' or higher in each required course in their respective nursing major. An unsatisfactory ('U') or any grade below a 'B' is not acceptable.

1.2. Graduate students must also maintain an overall grade point average of 3.00 in order to be considered in academic "good standing". Students also must meet any special conditions of their admissions. All grades will be counted in computing the overall grade point average. Students must have an overall GPA of 3.00 at the completion of their respective major, or they will not be awarded a degree from the University of South Florida.

1.3. If a student earns a grade below a 'B' or receives a 'U' in a required course, she/he must repeat the course. The course must be taken in the next semester that it is offered and the student must earn a 'B' or higher. Any student, who earns below a 'B' (or 'U') in two or more required courses or earns below a 'B' (or 'U') in a required course twice, will be dismissed from the College. The Dean of the College of Nursing, or designee (Vice Dean of Graduate Programs), will notify students who are dismissed in writing. Students may apply for re-admission pending approval of their respective Concentration Director. The admission application would be processed through admission per standard re-admission policy.

2. Ph.D. students only:

2.1. All Ph.D. students must earn the grade of 'B-' or higher in each required course in their respective nursing major. An unsatisfactory ('U') or any grade below a 'B minus" is not acceptable.

2.2. Ph.D. students must also maintain an overall grade point average of 3.00 in order to be considered in academic "good standing". Students also must meet any special conditions of their admissions. No grade below 'B-' will be accepted toward a Ph.D. graduate degree. All grades will be counted in computing the overall grade point average. Students must have an overall GPA of 3.00 at the completion of their respective major, or they will not be awarded a degree from the University of South Florida. Unsuccessful course attempts include any withdrawal from a course or cancellation for financial reasons, except for approved "withdrawals with cause" will count toward progression policy.

2.3. If a student earns a grade below a 'B-' or receives a 'U' in a required course, she/he must repeat the course. The course must be taken in the next semester that it is offered and the student must earn a 'B' or higher. Any student, who earns below a 'B-' (or 'U') in two or more required courses or earns below a 'B-' (or 'U') in a required course twice, will be dismissed from the College. Unsuccessful course attempts, including situations where a student participates through the Withdrawal deadline and does not pay for the courses (aka: Cancelled for Financial Reasons), will count toward the progression policy. The Dean of the College of Nursing, or designee, will notify students who are dismissed in writing. Students may petition for re-admission pending approval of their respective Concentration Director. A petition must be submitted to the Vice Dean of Graduate Programs.

The Dean of the College of Nursing, or her designee (Associate Dean of Research), will notify students who are dismissed, in writing. Students may petition for re-admission pending approval of their respective Director of their concentration. A petition must be submitted to the Associate Dean of Research and the Chairperson of the Student Affairs Committee.

Clinical Performance

Patient safety and welfare are the most critical criteria of the clinical rotation. If at any time during the clinical rotation the student places the patient in an actual or potentially hazardous or unsafe situation or the faculty judges the student to be deficient in clinical competence for patient care responsibility, the student will fail the course regardless of previous clinical performance. Students who receive an unsatisfactory grade for their clinical performance may be dismissed from the major, regardless of academic standing in other classes. (enacted Fall 2004)

Human Research Conduct

The protection of the rights of human subjects is the most critical criteria of any research study involving human subjects. If at any time during the conduction of a human subject study, a student violates the rights of the participants, the study will be stopped. Permission to continue with the study will be dependent upon an investigation by the University of South Florida Institutional Review Board, the student's research advisor and the

Dean of the College of Nursing. (enacted Fall 2004)

Withdrawal Policy Withdrawals are limited to 1 per course, with a limit of 2 per undergraduate or graduate major. Withdrawals are defined as officially withdrawing from any class after the drop/add period and before the final withdrawal date as outlined in the Academic Calendar. Any student withdrawing in excess of the stated policy may be dismissed from the College of Nursing unless the College has pre-approved a documented medical and/or emergent situation.

Grading Scale

Grading scale effective spring 2014 for all nursing courses (*note – this does not change the University grading scale referenced in the Academic Policy Section of the Catalog*):

98-100=A+
94-97=A
90-93=A-
87-89=B+
84-86=B
80-83=B-
77-79=C+
74-76=C
70-73=C-
67-69=D+
64-66=D
60-63=D-
Below 60=F

Nurse Anesthesia, D.N.P.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 94
Program Level: Doctoral
CIP Code: 51.3818
Dept. Code: NUR
Program (Major/College): NRA
Effective: 201808

This major shares core requirements with the D.N.P. in Nursing.

Contact Information

College: Nursing

Contact Information: http://www.grad.usf.edu/majors

The major in nursing leading to a Doctor of Nursing Practice degree prepares its graduates for careers as nurse Anesthetists. Successful completion of the Doctor of Nursing Practice's Nurse Anesthesia degree program qualifies students to take appropriate national certification examinations and apply for state licensure.

Graduate Major Objectives:

1. Develop, implement and evaluate new evidence based practice approaches to caring for patients in the peri-anesthetic environment.
2. Ensure accountability for quality care and patient safety for varied patient populations, displaying sensitivity tovarious cultural norms in the application of scientific principles of care.
3. Demonstrate the ability to apply appropriate analytics for the evaluation and application of scientific evidence toinform clinical practice.
4. Utilize technological information systems to evaluate outcomes of care, healthcare delivery and qualityimprovement
5. Provided the leadership necessary to develop health care policy in order to improve patient safety, improve health care financing, reducing the barriers to pain management and improving patient access to care.
6. Develop trans-disciplinary teams who collaboratively address the health care needs of individuals and populations.
7. Analyze epidemiological, bio-statistical, environmental and occupational data for the development,implementation and evaluation of programs of population health.
8. Provide clinical practice incorporating bio/psycho/social, cultural, economic, ethical and scientific principles.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major and requirements listed in the introductory portion of the college catalog section.

- Recommended science GPA of 3.00.

- Required Undergraduate Coursework includes: Pathophysiology (3 credits), Pharmacology (3 credits), Anatomy and Physiology (6 credits), Health Assessment (3 credits), Chemistry (3 credits), Statistics (3 credits) – with a grade of B or Better. If prerequisite science coursework is greater than ten years old, repeating or supplementing with a refresher course at the undergraduate level is highly recommended.
- Competitive score (performance score at or above the 50th percentile on each of the three sub tests) on Graduate Record Examination (GRE), taken within five years of application
- Current license as registered nurse
- Three letters of recommendation, indicating potential for graduate study, from persons who can attest to the applicant's academic ability, clinical competence, and commitment. (Optimally, these letters will be from nursing professors, or clinical supervisors.)
- Personal statement of goals
- Current resume or curriculum vitae
- A minimum of two current years of experience as an RN in an aggressive adult and/or pediatric Intensive Care Unit (ICU) must be completed prior to matriculation into the program.
- Current Basic Life support (BLS), Advanced Cardiac Life Support (ACLS) certifications are required.
- Critical Care Registered Nurse (CCRN) Certification is highly recommended.

"A critical care area is defined as one where, on a routine basis, the registered professional nurse manages one or more of the following: invasive hemodynamic monitors (such as pulmonary artery catheter, CVP, arterial); cardiac assist devices; mechanical ventilation; and vasoactive infusions. Examples of critical care units may include but are not limited to: Surgical Intensive Care, Cardiothoracic Intensive care, Coronary Intensive Care, Medical Intensive Care, Pediatric Intensive Care, and Neonatal Intensive Care. Those who have experiences in other areas may be considered provided they can demonstrate competence with managing unstable patients, invasive monitoring, ventilators, and critical care pharmacology."
- Council on Accreditation of Nurse Anesthesia Programs.

- Current Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life support (PALS) Certifications must be maintained while in program.
- A personal interview with the CRNA Program Panel is required
- Statement of good physical, mental and emotional health to be verbally provided during interview.

Curriculum Requirements

The D.N.P. in Nurse Anesthesia requires completion of the credit hours required by the major. Sequencing of courses is particularly important and academic advisors work with students to design full-time program plans in the major. The classes contain the principles and practices in all applications of anesthesia. The Nurse Anesthesia major is independent of the USF academic calendar. During certain rotations in the clinical phase, weekends, nights, and 24-hour rotations will be expected.

Total Minimum Hours - 94 Credit Hours Post-bachelors

Shared Core Requirements - 94 Credit Hours

Shared Core Requirements (94 hours)

- NGR 7892 Health Care Policy and Clinical Prevention for Improving Population Health **Credit Hours: 3**
- NGR 7874 Informatics and Patient Care Technology **Credit Hours: 3**
- NGR 7766 Health Systems Leadership and Interprofessional Practice **Credit Hours: 3**
- NGR 6404C Advanced Anatomy and Physiology for Nurse Anesthetists **Credit Hours: 4**
- NGR 6157 Advanced Physiology and Pharmacology for Nurse Anesthetists **Credit Hours: 4**
- NGR 6002C Advanced Health Assessment Across the Lifespan **Credit Hours: 4**
- NGR 6400 Chemistry, Biochemistry and Physics for Nurse Anesthesia **Credit Hours: 3**

- NGR 6152 Advanced Physiology and Pathophysiology **Credit Hours: 4**
- NGR 6460 Nurse Anesthesia Pharmacology **Credit Hours: 3**
- NGR 6420 Foundations & Methods of Nurse Anesthesia Practice **Credit Hours: 4**
- NGR 6440L Nurse Anesthesia Simulation Lab I: Introduction to Clinical Practicum **Credit Hours: 2**
- NGR 6492 Nurse Anesthesia Role: Practice Management, Quality Improvement, and Patient Safety **Credit Hours: 3**
- NGR 6422 Principles of Nurse Anesthesia through the Lifespan **Credit Hours: 3**
- NGR 6423 Theoretical Foundations of Nurse Anesthesia: Advanced Principles I **Credit Hours: 3**
- NGR 6441L Nurse Anesthesia Simulation Lab II **Credit Hours: 2**
- NGR 6431 Nurse Anesthesia Clinical Residency I **Credit Hours: 4**
- NGR 6673 Epidemiology for Advanced Nursing **Credit Hours: 3**
- NGR 6424 Theoretical Foundations: Anesthesia Advanced Practice II **Credit Hours: 3**
- NGR 6442L Nurse Anesthesia Simulation Lab III **Credit Hours: 2**
- NGR 7848 Fundamentals of Statistics for Clinicians **Credit Hours: 3**
- NGR 6432 Nurse Anesthesia Clinical Residency II **Credit Hours: 2**
- NGR 6803 Research and Evidence-Based Practice **Credit Hours: 3**
- NGR 6471 Concepts of Pain Pathophysiology **Credit Hours: 3**
- NGR 7974 Doctor of Nursing Practice Project **Credit Hours: 1-3 (2 credits for this program)**
- NGR 6433 Nurse Anesthesia Clinical Residency III **Credit Hours: 4**
- NGR 6472 Pharmacology of Pain Management **Credit Hours: 3**
- NGR 7974 Doctor of Nursing Practice Project **Credit(s): 1-3 (2 credits for this program)**
- NGR 6434 Nurse Anesthesia Clinical Residency IV **Credit Hours: 4**
- NGR 6491 Nurse Anesthesia Practice Comprehensive **Credit Hours: 2** *(taken twice for 4 credits total)*
- NGR 7945 Doctor of Nursing Practice Practicum **Credit Hours: 1-7 (1 credit for this program)**
- NGR 6436 Nurse Anesthesia Clinical Residency VI **Credit Hours: 4**

Comprehensive Examination

Comprehensive competency testing is done through two mechanisms. Currently this requirement is typically fulfilled during the final semester of study and consists of:

- One is a comprehensive oral boards examination which is evaluated by a faculty panel.
- The other mechanism is through the Self-Evaluation Exam (SEE) which is created by the NBCRNA for Nurse Anesthetists who oversees national certification and professional licensure. The SEE is required twice during the major.

Dissertation

This is a clinical program; no dissertation is required

Nursing Science, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 87 post-bachelors, 57 post-master's, 45 post clinical doctorate (DNP)
Level: Doctoral
CIP Code: 51. 3808
Dept Code: NUR
Major/College Codes: NUS NR
Approved: 2003

Contact Information

College: Nursing

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. prepares scholars to

- Conduct original research that informs practice and health policy;
- Apply professional and research ethics and judgment in the conduct of research;
- Disseminate research findings to lay and professional audiences and identify implications for policy, nursing practice and the profession;
- Use innovative approaches to advance nursing science;
- Enact the evolving roles and responsibilities of a nurse scientist;
- Contribute to team science and interdisciplinary collaborations;
- Provide leadership to community, professional, and scientific organizations; and
- Contribute to a global, inter-professional or interdisciplinary community of scholars.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- B.S. in Nursing from a regionally accredited program (for post-baccalaureate program)*
- M.S. in Nursing from a regionally accredited program (for post-masters program)*
- Clinical doctorate from a regionally accredited program (for post-clinical doctorate program)*
- Clear potential for research contributions
- Curriculum Vitae
- Demonstrated commitment to doctoral study and scholarly productivity
- Evidence of potential for leadership in nursing profession
- GRE

- Licensure as a registered nurse if performing clinical work (Current unencumbered license as a registered nurse in the United States upon matriculation. A current licence as a registered nurse in the state of Florida before the first clinical course.)
- Three letters of recommendation
- Written Statement of professional goals
- Prerequisite NGR 7848 or equivalent prior to full-time enrollment
- Applicants to the Ph.D. program are required to complete both a NursingCAS appliation and a USF Graduate Studies Application.

**Applicants with degrees in other fields may also be considered*

Curriculum Requirements

There are three points of entry to the Ph.D. in Nursing Science: post-bachelor's (B.S-Ph.D); post master's (M.S.-Ph.D.), and Clinical Doctorate (DNP-Ph.D.)

For students entering with a baccalaureate degreee, the majority of work can be completed in four to five years by full-time students. For students entering with a master's degree, the majority of work can be completed in three to four years by full-time students. Students entering with a clinical doctoral degree can complete the majority of work in two to three years by full-time students. Specific requirements are determined on an individual basis by the student's supervisory committee. NOTE: Students are to meet with curriculum advisor for individual program planning.

Total Minimum Program Hours:

87 credit hours (post- baccalaureate)

57 credit hours (post master's)

45 credit hours (post clinical doctorate)

Core – 33 hours
Content area and additional coursework – 30 hours*
Advanced Directed Research – 3 hours **
Cognate – 9 hours **
Dissertion – 12 hours

**Post- bachelor's requirement only*
*** Post- bachelor's and post-master's requirement only*

Core Requirements (33 credit hours)

- NGR 7111 Disciplinary Perspectives in Nursing Science **Credit Hours: 3**
- NGR 7125 Model Development for Nursing **Credit Hours: 3**
- NGR 7810 Design, Measurement, and Analysis in Nursing Research I **Credit Hours: 3**
- NGR 7812 Design, Measurement, and Analysis in Nursing Research II **Credit Hours: 3**
- NGR 7813 Design, Measurement, and Analysis in Nursing Research III **Credit Hours: 3**
- NGR 7814 Design, Measurement, and Analysis in Nursing Research IV **Credit Hours: 3**
- NGR 7881 Responsible Conduct of Nursing Research **Credit Hours: 2**
- NGR 7930 Scientific Inquiry Forum **Credit Hours: 1**

Required each semester prior to candidacy (4 credit hours minimum)

- NGR 7837 Innovative Programs in Biobehavioral Research **Credit Hours: 3**
- NGR 7838 Innovative Programs in Symptom Management Research **Credit Hours: 3**
- NGR 7954 Communicating Nursing Science **Credit Hours: 3**

Satisfactory completion of the Knowledge Building Core required courses prepares students to successfully complete the dissertation research.

Content Area and Additional Coursework (30 credit hours) *(Post-Bachelor's only)

For students entering with a baccalaureate degree, a minimum of 30 hours of graduate coursework is required in addition to the core Ph.D. requirements. The additional coursework must be a 6000 or 7000 level course and approved by the student's supervising committee. These 30 hours should provide students with the foundational knowledge to conduct their proposed research.

Advanced Directed Research (3 Credit Hours Minimum) **(Post-Bachelor's and Post-Master's only)

Specialized individual participation in research activity, including but not limited to pilot studies and other investigative activities.

Cognate (9 Credit Hours)**(Post-Bachelor's and Post-Master's Only)

Students select a cognate area to further support the student's area of expertise in nursing and the research problem that will be addressed by the dissertation research. Examples of appropriate areas of study for the cognate might be organizational administration, health policy, physiology, cognitive psychology, organizational psychology, gerontology, epidemiology, biostatistics, informatics, , entrepreneurship, applied anthropology, or educational measurement.

Qualifying Examinations

The qualifying examination is to be completed as soon as the majority of core and minor coursework is completed The purpose of the qualifying examination is to assess the student's level of scholarship and research skills and to determine if the student possesses the critical and analytical skills necessary to undertake the dissertation research. The qualifying examination consists of a written exam covering core and specialty content.

Dissertation (12 Credit Hours)

Students must complete and successfully defend a dissertation.

- NGR 7980 Dissertation: Doctoral **Credit Hours: 2-12**

Nursing, D.N.P.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 75 hours post-bachelor's, 30 hours post masters
Level: Doctoral
CIP Code: 51.3818
Dept Code: NUR
Major/College Codes: NRS NR
Approved: 2006

Concentrations

Adult-Gerontology Acute Care Nursing (NAG)
Adult-Gerontology Primary Care Nursing (NPG)
Adult-Gerontology Primary Care/Oncology (NOA)
Adult-Gerontology Primary Care/Occupational Health (NOC)
Family Health Nursing (NFH)
Pediatric Health Nursing (NPH)

Available as a Concurrent Degree

This major shares core requirements with the D.N.P. in Nurse Anesthesia.

Contact Information

College: Nursing

Contact Information: http://www.grad.usf.edu/majors

The Nursing major prepares graduates for advanced independent clinical practice. Nursing practice, as defined by the American Association of Colleges of Nursing (AACN [2004]), refers to any nursing intervention that influences health care outcomes for individuals or populations. Objectives for the major are based upon recommendations for essential curriculum elements as identified by the AACN and the National Organization of Nurse Practitioner Faculties (NONPF).

D.N.P. Major Goals:

Prepare graduates:

- for practice at the most advanced level in a focused area of nursing practice
- to use information systems and technology to optimize the delivery of health care
- to apply knowledge of the cultural and socioeconomic dimensions of health to prevent disease and promote health for individuals, families, and populations
- to lead sustainable organizational and health system level changes to improve health care delivery and health outcomes

- to direct and develop new and innovative strategies to address current and evolving practice issues in an increasingly complex health care environment
- to critically appraise, synthesize, apply, and translate the knowledge created by researchers and theoretical scholars to improve health care quality and safety
- to use practice information systems and databases to support and inform decision making, improvement efforts, and the evaluation of health outcomes for individuals, families and populations

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below. Please note before stating the application process, international students may have additional restrictions stipulating course delivery format for their program of choice. Please refer to USF World for further information on these requirements.

All applicants must have the following:

1. Submission of the following documents:
1. Three letters of recommendation, indicating potential for graduate study, from persons who can attest to the applicant's academic ability, clinical competence, and commitment. (Optimally, these letters will be from a nursing faculty or clinical supervisor.)
2. Personal statement of goals
3. Current resume or curriculum vitae
4. Sealed official transcripts from *all institutions of higher education* attended
2. A personal interview with a designated faculty member may also be required.

3. The equivalent bachelors and/or graduate degrees in nursing from a foreign institution.

4. Current unencumbered license as a registered nurse and/or advanced practice nurse in the United States upon matriculation. Current license as a registered nurse and/or advanced practice nurse in the state of Florida before the first clinical course

5. Applicants to the Nursing Major are required to complete both a NursingCAS application and a USF Graduate Studies Application.

6. Applicants interested in to the Adult Gerontology Acute Care concentration are strongly encouraged tomust have at least one year of ICU/acute care experience prior to matriculation to meet professional practice requirements for clinical placements.

7. Applicants interested in to the Oncology/Adult Gerontology Primary Care concentration are strongly encouraged to have at least one year of previous and/or current oncology-specific experience prior to matriculation to meet professional practice requirements for clinical placements.

Post-Bachelor's Applicants with a B.S. (in Nursing) applying to the D.N.P. must also have:

1. A bachelor's degree in nursing from a CCNE or ACEN and regionally accredited institution and satisfying at least one of the following criteria:
- "B" average or better in all work attempted while registered as an undergraduate student work for a degree, or:
- "B" average or better in all work attempted while registered as an upper division undergraduate student working for a baccalaureate degree.
2. Completion of a 3 credit hour or equivalent length undergraduate level statistics course with a grade of B or better.

Post-Master's Applicants with a M.S. (in Nursing) applying to the D.N.P. must also have:

1. A Master's degree in nursing from a CCNE or ACEN and regionally accredited institution.
2. Minimum 3.00 GPA at the graduate level
3. Licensure as an Advanced Practice Nurse

4. National certification in area of advanced practice

*It is recommended, but not required, to submit competitive GRE scores.

Curriculum Requirements

Total Minimum Hours: 30 credit hours post masters, 75 credit hours post-bacc

The post-masters major of 30 hours minimum can be completed in one year by full-time students and two to three years for part-time students. The post-baccaluareate major of 75 hours minimum can be completed in three to four years by full-time students and five or more years for part-time students.

Post-Master's – 30 hours minimum:
Shared Core Requirements – 30 Credit Hours

Post-Bachelor's – 75 hours minimum:
Shared Core Requirements - 30 Credit Hours
Additonal Required Courses – 27 Credit Hours
Concentrations – 18 Credit Hours minimum

Shared Core Requirements (30 Credit Hours Minimum)

Additional coursework may be determined through individual student evaluation.

- NGR 6673 Epidemiology for Advanced Nursing **Credit Hours: 3**
- NGR 7767 Practice Management, Quality Improvement, and Patient Safety **Credit Hours: 3**
- NGR 7848 Fundamentals of Statistics for Clinicians **Credit Hours: 3**
- NGR 7874 Informatics and Patient Care Technology **Credit Hours: 3**
- NGR 7766 Health Systems Leadership and Interprofessional Practice **Credit Hours: 3**
- NGR 7892 Health Care Policy and Clinical Prevention for Improving Population Health **Credit Hours: 3**
- NGR 7974 Doctor of Nursing Practice Project **Credit Hours: 1-3 (4 credits for this program)**
- NGR 7945 Doctor of Nursing Practice Practicum **Credit Hours: 1-7 (8 credits for this program)** *

**D.N.P. students must have a minimum of 1,000 post-baccalaureate supervised clinical hours at the time of graduation. The practicum and project are done over a minimum of two semesters.*

Post-Bachelor's:

In addition to the Core Requirements, Post-Bachelor's students (B.S.-D.N.P.) must also complete the following:

- Additional Required Courses
- Concentration

Additional Required Courses (27 credit hours)

Sequencing of courses is particularly important and core requirement courses noted with an asterisk below(*) must be successfully completed prior to beginning clinical coursework. All foundational level clinical courses in the advanced practice nursing tracks must be completed in sequence per an approved program plan unless otherwise approved by faculty. Academic advisors work with students to design both full-time and part-time program plans in the specialty areas.

Students select one of the following concentrations:

- NGR 6002C Advanced Health Assessment Across the Lifespan **Credit Hours: 4**
- NGR 6152 Advanced Physiology and Pathophysiology **Credit Hours: 4**
- NGR 6733 Organizational and Systems Leadership and Quality Improvement for Advanced Practice Nurses **Credit Hours: 3**
- NGR 6803 Research and Evidence-Based Practice **Credit Hours: 3**
- NGR 6064C Advanced Diagnostics & Procedures **Credit Hours: 3**
- NGR 6172 Pharmacotherapeutics for Advanced Practice Nursing **Credit Hours: 4**
- NGR 6638 Health Promotion, Clinical Prevention, and Population Health for Advanced Practice Nurses **Credit Hours: 3**
- NGR 6893 Systems and Populations in Healthcare **Credit Hours: 3**

Adult-Gerontology Acute Care (NAG) (21 Credit Hours)

- NGR 6210C Clinical Management of the Acutely Ill Adult **Credit Hours: 7** (180 Clinical Hours)
- NGR 6211C Acute Care of Adults and Older Adults: Special Topics **Credit Hours: 7** (180 Clinical Hours)
- NGR 6232C Selected Concepts in the Acutely Ill Adult **Credit Hours: 7** (180 Clinical Hours)

Adult-Gerontology Primary Care Nursing (NPG) (18 Credit Hours)

- NGR 6207C Health Management of Adults and Older Adults I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6244C Health Management of Adults and Older Adults II **Credit Hours: 6** (180 Clinical Hours)
- NGR 6291C Health Management of Adults and Older Adults: Special Topics **Credit Hours: 6** (180 Clinical Hours)

Adult-Gerontology Primary Care /Occupational Health (NOC) (34 Credit Hours)

- NGR 6207C Health Management of Adults and Older Adults I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6244C Health Management of Adults and Older Adults II **Credit Hours: 6** (180 Clinical Hours)
- NGR 6291C Health Management of Adults and Older Adults: Special Topics **Credit Hours: 6** (180 Clinical Hours)
- NGR 6650 Occupational Health Nursing I **Credit Hours: 2**
- NGR 6651 Occupational Health Nursing II **Credit Hours: 2**
- PHC 6360 Safety Management Principles and Practices **Credit Hours: 2**
- PHC 6364 Industrial Hygiene Aspects of Plant Operations **Credit Hours: 2**
- PHC 6356 Industrial Hygiene **Credit Hours: 2**
- PHC 6351 Occupational Medicine for Health Professionals **Credit Hours: 3**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**

Occupational Health and Safety Foundations (3 credit hours) (proposed PHC 6931)

Adult-Gerontology Primary Care / Oncology (NOA) (24 Credit Hours)

- NGR 6207C Health Management of Adults and Older Adults I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6244C Health Management of Adults and Older Adults II **Credit Hours: 6** (180 Clinical Hours)
- NGR 6291C Health Management of Adults and Older Adults: Special Topics **Credit Hours: 6** (180 Clinical Hours)
- NGR 6220 Pathobiology of Neoplasia **Credit Hours: 3**
- NGR 6221 Oncology Nursing Concepts **Credit Hours: 3**

Family Health (NFH) (25 Credit Hours)

- NGR 6207C Health Management of Adults and Older Adults I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6244C Health Management of Adults and Older Adults II **Credit Hours: 6** (180 Clinical Hours)
- NGR 6301C Primary Care of Children and Adolescents I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6342 Reproductive Health for the Young to Middle Aged Adult **Credit Hours: 1**
- NGR 6234 Reproductive Health for the Middle Aged to Older Adult **Credit Hours: 1**
- NGR 6613C Health Management of Families: Special Topics **Credit Hours: 5**

Pediatric Health (NPH) (18 Credit Hours)

- NGR 6301C Primary Care of Children and Adolescents I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6302C Primary Care of Children and Adolescents II **Credit Hours: 6** (180 Clinical Hours)
- NGR 6339C Primary Care of Children and Adolescents: Special Topics **Credit Hours: 6** (180 Clinical Hours)

Comprehensive Qualifying Exam

All D.N.P. students must satisfactorily complete a proposal, a scholarly report/manuscript, a poster presentation, and a portfolio. In addition, post bachelor's (B.S.-D.N.P.) students must take a comprehensive exam in their Special Topics course to prepare them for their NP licensure exam at the state level. Post Master's (M.S.-D.N.P.) students take their state NP licensure exam prior to matriculation.

Dissertation

This is a clinical degree that does not require a dissertation.

Concurrent Degree

Also available as a Concurrent Degrees

Nursing, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 40
Level: Masters
CIP Code: 51.3801
Dept Code: NUR
Major Codes: NUR (BS to MS); NBM (RN to MS)
College Code: NR
Approved: 1980

Concentrations:

Adult-Gerontology Acute Care Nursing (NAG)
Adult-Gerontology Primary Care Nursing (NPG)
Adult-Gerontology Primary Care / Occupational Health Nursing (NOC)
Family Health Nursing (NFH)
Nursing Education (NED)
Pediatric Health Nursing (NPH)
Psychiatric-Mental Health Nursing (NPM)

Also offered as a Concurrent Degree

Contact Information

College: Nursing

Contact Information: http://www.grad.usf.edu/majors

The major in Nursing leading to a Master of Science degree prepares its graduates for careers as nurse practitioners and nurse educators. Students choose from a variety of nursing specialty options in advanced practice roles and enroll in a prescribed set of core courses central to all specialty options as well as courses specific to their concentration. Successful completion of the master's practitioners program qualifies students to take appropriate national certification examinations and apply for licensure as an APRN in Florida and other states. Nurse Educator graduates are eligible for national certification from the National League of Nursing, and the American Association of the Colleges of Nursing.

Master's Program Goals

The Master's Program prepares graduates:

- for advanced practice with diverse populations at the individual, family and community level
- to use patient-care and communication technologies to enhance and coordinate the delivery of high quality, culturally appropriate care
- to translate research outcomes, resolve problems, and disseminate results in the educational and clinical practice settings

- to utilize organizational and systems leadership skills in the promotion of culturally responsive, high quality and safe patient care
- to analyze and intervene at the system level through the policy development process
- to understand health professions' scope of practice employing collaborative strategies to design, coordinate and evaluate care
- to develop a more extensive and in-depth understanding of current and evolving practice issues, interprofessional and collaborative practice models, innovative health care strategies, nursing, and the related sciences; and in turn how to integrate this knowledge into education and practice.
- to critique, advocate, and integrate the knowledge created by researchers, translationalists, and theoretical scholars
- to use data from technology systems to evaluate and enhance health care delivery.

Major Research Areas

Nursing, Health, Healthcare, Practice, Clinical Prevention, Health Assessment, Health Management, Acute Care, Nursing Education

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below. Certain concentrations are highly competitive. Admission criteria include:

- Bachelor's in Nursing or RN with Bachelors in relevant field.
- Current unencumbered license as a registered nurse in the United States upon matriculation. Current license as a registered nurse in the state of Florida before the first clinical course. Three letters of recommendation, indicating potential for graduate study, from persons who can attest to the applicant's academic ability, clinical competence, and commitment. (Optimally, these letters will be from nursing professors, or clinical supervisors.)
- Current resume or curriculum vita.
- A personal interview with a designated faculty member is required
- Applicants to the M.S. program are required to complete both a NursingCAS application and a USF Graduate Studies Application.
- It is recommended, but not required, to submit competitive GRE scores.
- Applicants interested in the Adult Gerontology Acute Care concentration must have at least one year of ICU /acute care work experience prior to matriculation to meet professional practice requirement for clinical placements.
- Registered nurses who have a bachelor's degree in another discipline will be required to complete the following bridge courses with a letter grade of "B/S" or greater and a GPA of 3.00 or better before progression:

- NUR 3078 - Information Technology Skills for Nurses **Credit(s): 1**
- NUR 3805 - Nursing as a Profession **Credit(s): 2**
- NUR 4169C - Evidence Based Practice for Baccalaureate Nurses **Credit(s): 3**
- NUR 4634C - Population Health **Credit(s): 3**
- NUR 4828C - Foundations of Nursing Leadership & Management **Credit(s): 3**
- NUR 4895 - Educational Role of Nurse in Healthcare **Credit(s): 3**

Please note before starting the application process, international students may have additional restrictions stipulating course delivery format for their program of choice. Please refer to USF World for further information on these requirements.

Curriculum Requirements

Total Minimum Credit Hours - 40

Core - 24 credit hours minimum

Concentration - 16 credit hours minimum

Students must complete the Major core requirements and then the requirements as specified for the Concentration. Concentration hours vary, so in some instances students will graduate with more than the 42 hour minimum for the major. Minimum hours required for the major and selected concentration must be satisifed for degree completion.

Sequencing of courses is particularly important and core requirement courses noted with an asterisk below(*) must be successfully completed prior to beginning clinical coursework. All foundational level clinical courses in the advanced practice nursing tracks must be completed in sequence per an approved program plan unless otherwise approved by faculty. Academic advisors work with students to design both full-time and part-time program plans in the specialty areas.

Core Requirement (24 Credit Hours)

- NGR 6803 Research and Evidence-Based Practice **Credit Hours: 3**
- NGR 6638 Health Promotion, Clinical Prevention, and Population Health for Advanced Practice Nurses **Credit Hours: 3**
- NGR 6733 Organizational and Systems Leadership and Quality Improvement for Advanced Practice Nurses **Credit Hours: 3**
- NGR 6893 Systems and Populations in Healthcare **Credit Hours: 3**
- NGR 6002C Advanced Health Assessment Across the Lifespan **Credit Hours: 4** *
- NGR 6152 Advanced Physiology and Pathophysiology **Credit Hours: 4** *
- NGR 6172 Pharmacotherapeutics for Advanced Practice Nursing **Credit Hours: 4** *

Concentrations:

Note: Courses with a "C" in the course number designate a combined didactic and clinical format.

Students can select from the following Concentrations:

Acute-Gerontology Acute Care Nursing (NAG) Concentration (24 credit hours)

- NGR 6064C Advanced Diagnostics & Procedures **Credit Hours: 3** *
- NGR 6210C Clinical Management of the Acutely Ill Adult **Credit Hours: 7** (180 Clinical Hours)
- NGR 6232C Selected Concepts in the Acutely Ill Adult **Credit Hours: 7** (180 Clinical Hours)
- NGR 6211C Acute Care of Adults and Older Adults: Special Topics **Credit Hours: 7** (180 Clinical Hours)

Adult-Gerontology Primary Care/Occupational Health Nursing (NOC) Concentration (34 credit hours)

- NGR 6207C Health Management of Adults and Older Adults I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6244C Health Management of Adults and Older Adults II **Credit Hours: 6** (180 Clinical Hours)
- NGR 6291C Health Management of Adults and Older Adults: Special Topics **Credit Hours: 6** (180 Clinical Hours)
- NGR 6650 Occupational Health Nursing I **Credit Hours: 2**
- NGR 6651 Occupational Health Nursing II **Credit Hours: 2**
- PHC 6360 Safety Management Principles and Practices **Credit Hours: 2**

- PHC 6364 Industrial Hygiene Aspects of Plant Operations **Credit Hours: 2**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**

Occupational Heatlh and Safety Foundations (3 credit hours)

- PHC 6356 Industrial Hygiene **Credit Hours: 2**
- PHC 6351 Occupational Medicine for Health Professionals **Credit Hours: 3**

Adult-Gerontology Primary Care Nursing (NPG) Concentration (21 credit hours)

- NGR 6064C Advanced Diagnostics & Procedures **Credit Hours: 3** *
- NGR 6207C Health Management of Adults and Older Adults I **Credit Hours: 6** *180 Clinical Hours*
- NGR 6244C Health Management of Adults and Older Adults II **Credit Hours: 6** *180 Clinical Hours*
- NGR 6291C Health Management of Adults and Older Adults: Special Topics **Credit Hours: 6** *180 Clinical Hours*

Family Health Nursing (NFH) Concentration (28 credit hours)

- NGR 6064C Advanced Diagnostics & Procedures **Credit Hours: 3** *
- NGR 6207C Health Management of Adults and Older Adults I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6244C Health Management of Adults and Older Adults II **Credit Hours: 6** (180 Clinical Hours)
- NGR 6301C Primary Care of Children and Adolescents I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6342 Reproductive Health for the Young to Middle Aged Adult **Credit Hours: 1**
- NGR 6234 Reproductive Health for the Middle Aged to Older Adult **Credit Hours: 1**
- NGR 6613C Health Management of Families: Special Topics **Credit Hours: 5** (180 Clinical Hours)

Nursing Education (NED) Concentration (16 credit hours)

- NGR 6713 Foundations of Nursing Education **Credit Hours: 3**
- NGR 6710 Teaching Strategies in Nursing Education **Credit Hours: 3**
- NGR 6718 Evaluation Strategies for Nursing Education **Credit Hours: 3**
- NGR 6947 Clinical Education/Clinical Practice Practicum in Nursing Education **Credit Hours: 2** *120 Practicum Hours*
- NGR 6940 Classroom/Online Teaching Practicum **Credit Hours: 2** *120 Practicum Hours*
- NGR 6719 Clinical Case Studies in Nursing Education **Credit Hours: 3**
- Cognate **Credit(s): 3**

Pediatric Health Nursing (NPH) Concentration (21 credit hours)

- NGR 6064C Advanced Diagnostics & Procedures **Credit Hours: 3** *
- NGR 6301C Primary Care of Children and Adolescents I **Credit Hours: 6** (180 Clinical Hours)
- NGR 6302C Primary Care of Children and Adolescents II **Credit Hours: 6** (180 Clinical Hours)
- NGR 6339C Primary Care of Children and Adolescents: Special Topics **Credit Hours: 6** (180 Clinical Hours)

Psychiatric/Mental Health (NPM) Concentration (26 credit hours)

- NGR 6240 Adult Health for Specialty Care Nursing **Credit Hours: 3**
- NGR 6500 Theoretical Foundations for Advanced Psychiatric Nursing **Credit Hours: 3**

- NGR 6501 Psychopathology for Advanced Psychiatric Nursing **Credit Hours: 3**
- NGR 6502 Treatment Modalities for Advanced Psychiatric Nursing **Credit Hours: 3**
- NGR 6500L Psychiatric APN Practicum: Psychiatric Care Outpatient **Credit Hours: 1-6**
- NGR 6501L Psychiatric APN Practicum: Psychiatric Care in the Inpatient Setting **Credit Hours: 1-4**
- NGR 6538 Psychopharmacology **Credit Hours: 3**
- NGR 6700C Advanced Practice Nurse Transitions **Credit Hours: 5**

Comprehensive Exam

Prior to clearance for the degree, candidates must perform satisfactorily on a comprehensive examination. Students must be enrolled for a minimum of two (2) hours of graduate credit during the semester when the comprehensive examination is taken. If the exam is taken between semesters, the student must be enrolled for a minimum of two (2) hours of graduate credit in the semester before or following the exam.

Comprehensive Exam for Nurse Practitioner Concentrations
Comprehensive exams are specific to each concentration and all students must pass their comprehensive exam in no more than three attempts to fulfil the MS degree requirements. For students who do not meet the three-attempt threshold, an additional comprehensive evaluation to determine student competency in the discipline will be applied.

Comprehensive Exam for Nursing Education Concentration
The comprehensive exam consists of three parts: a written take-home examination, a portfolio, and a self-evaluation based on the NLN Core Competencies found in the Scope of Practice for Academic Nurse Educators, 2012. Students unsuccessful on the written take home exam will be provided a second attempt. If unsuccessful after the retake, an oral exam will be scheduled.

Adherence to Degree/Program Plans

Admitted students are expected to meet with their academic advisor to determine the appropriate course sequence to meet the curriculum requirements. In some concentrations, the concentration director will develop the program plan with the student and forward the program plan to the academic advisor. Once a program plan is determined, students are expected to adhere to this plan unless special permission is obtained. As not all courses are offered each semester, a student who deviates from the program plan understands that delay in graduation can be expected Priority is given to students who maintain initial degree plans.

Clinical and/or site placements are based on preceptor and/or site availability. While every effort is made to assign students to preceptor/clinical sites near their residence, it is not always possible, and thus, students will need to be flexible. Students may find it useful to meet with the concentration director to understand speciality course focus and/or clinical course demands and plan accordingly.

Concurrent Degree

Also available as a Concurrent Degrees

Advanced Pain Management Fellowship Graduate Certificate

This program is offered partially online.

Curriculum Code: XAP

This partially on-line program consists of five courses to be delivered sequentially over a one-year period. The concepts presented in each course will establish a framework of knowledge intended to impart the certified registered nurse anesthetist with the necessary background to understand and treat pain utilizing effective and relevant evidence based guidelines.

Location/Delivery:

The Certificate is partially online with a required two day simulation/cadaver experience at USF CAMLS. This experience most often occurs in April every year.

Admission Requirements:

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

1. Masters or Doctoral degree from an accredited institution
2. Board Certified CRNA with an appropriate graduate degree from a regionally accredited university
3. Minimum GPA of 3.0 on all course work
4. Minimum of two years experience as a CRNA

Application Process

To learn about the application process, and to access the application, please review our application process.

In addition, to the application forms please submit:
1. A curriculum vitae
2. Transcripts from a graduate CRNA program
3. Copy of active NBCRNA card
4. Letter of Reference from a Clinical Colleague

*Note: Applications will be reviewed and students will be accepted until the maximum capacity for the graduate certificate program has been reached.

Credit Toward Graduate Degree

Credit hours from this Certificate may be eligible to apply toward a graduate degree. Check with the department for information.

Time Limit

Three semesters

Pre-Requisites (0 credit hours)

Board certified CRNA with an appropriate graduate degree from a regionally accredited university.

Curriculum Requirements (15 credit hours)

- NGR 6470 Assessment, Radiology, and Psychology of Pain **Credit Hours: 3**

Taught in the spring as part of the five-course sequence for the certificate. The course is presented in eight separate modules.

- NGR 6471 Concepts of Pain Pathophysiology **Credit Hours: 3**

Taught in the fall as part of the five-course sequence for the certificate. The course is presented in eight separate modules.

- NGR 6472 Pharmacology of Pain Management **Credit Hours: 3** (online)

Taught in the fall as part of the five course sequence for the certificate. The course is presented in eight separate modules.

- NGR 6473C Interventional Procedures/Simulations in Pain Management **Credit Hours: 3** (Partially online)

Students must come to campus for a weekend simulation activity at the Center for Advanced Medical Learning and Simulation - CAMLS.
Taught in the spring as part of the five-course sequence for the Certificate. The course is presented in eight modules. Students must have taken NGR 6470 and NGR 6471 before enrolling in this class.

Contact

Contact Information: http://www.grad.usf.edu/cert

Nursing Education (Post Master's) Graduate Certificate

Certificate Code: XNE
Approved 200408

The goal of this graduate certificate is to prepare nurses to teach in a variety of educational and health care settings: schools of nursing; staff development departments, and/or client education programs. Upon completion of the Post-Master's Nursing Education Graduate Certificate individuals are prepared to assume beginning faculty positions and/or assume education positions in health care institutions and/or the community.

Location/Delivery

The Certificate Program is coordinated through the Tampa campus. Didactic courses are offered online. Practicum experience locations vary.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. Applicant must have an M.S. in Nursing or Health related field from a regionally accredited university.

Application Process

To learn about the application process, and to access the application, please review our application process. In addition, to the application forms please submit:

- Official transcripts
- A resume
- Letter of Intent
- Three letters of recommendation

Note: Application deadline is summer for students to start in fall semester.

Credit Toward Graduate Degree

N/A

Time Limit / Average time to Completion

The approximate time to complete the Certificate is three years.

Pre-Requisites

Validation of coursework in Pathophysiology, Pharmacology, and Health Assessment

Curriculum Requirements (13 Credit Hours)

- NGR 6713 Foundations of Nursing Education **Credit Hours: 3**
- NGR 6710 Teaching Strategies in Nursing Education **Credit Hours: 3**
- NGR 6718 Evaluation Strategies for Nursing Education **Credit Hours: 3**
- NGR 6947 Clinical Education/Clinical Practice Practicum in Nursing Education **Credit Hours: 2**
- NGR 6940 Classroom/Online Teaching Practicum **Credit Hours: 2**

Contacts

Contact Information: http://www.grad.usf.edu/cert

RX - Updates for 2019-2020

The USF Graduate Council approved the following on the dates noted.

Majors

Pharmaceutical Nanotechnology	M.S.	Non-substantive changes	4/1/19
Pharmacy	Pharm.D.	Change curriculum for compliance	4/15/19

Concurrent Degrees

Pharmacy (PharmD) and Public Health (MPH)	Align with changes in MPH	4/15/19

College of Pharmacy

RX - Updates for 2019-2020

RX - Programs

University of South Florida
Taneja College of Pharmacy
12901 Bruce B. Downs Blvd.
Tampa, FL 33612

Web address: https://health.usf.edu/pharmacy
Phone: 813-974-5699
Fax: 813-905-9890

College Dean: Kevin Sneed, Pharm.D.
Associate Dean for Academic Affairs: Amy H. Schwartz, Pharm.D.
Associate Dean, Graduate Programs: Shyam Mohapatra, Ph.D., M.B.A.

Accreditation:

The Taneja College of Pharmacy (COP) is accredited by the Accreditation Council for Pharmacy Education (ACPE). Additional information can be found on the USF and COP websites.

Mission Statement:

The USF Taneja College of Pharmacy's mission is to Revolutionize Health by:

- Innovation of patient centered healthcare through education, research, and service
- Empowerment of students, professionals, and patients as catalysts for change at all levels of health.

Vision

By 2019, USF Taneja College of Pharmacy will achieve interprofessional excellence in:

- Geriatrics
- Personalized Medicine
- Informatics
- Leadership

Values

- Innovation

- Leadership
- Diversity
- Interprofessional collaboration
- Interdisciplinary research
- Evidence-based applications
- Teamwork
- Life-long learning

Research Facilities

The Taneja College of Pharmacy has established alliances and affiliations with a number of Centers and Institutes at USF in its efforts to:

1. Provide research and educational opportunities (faculty and students);
2. Foster and promote interdisciplinary research;
3. Advance research, innovation and academic entrepreneurship in emerging technologies.

The Centers with which the COP has established affiliations are as follows:

- Byrd Alzheimer's Institute
- Center for Advanced Medical Learning and Simulation (CAMLS)
- The Florida Center of Excellence for Drug Discovery and Innovation (CDDI)
- USF Nanomedicine Research Center

Major Research Areas

Faculty research areas are accessible through the following web link:
http://health.usf.edu/pharmacy/research/index.htm

College Information:

The USF Taneja College of Pharmacy (COP) was established in 2010 to offer the Doctor of Pharmacy (Pharm.D.) degree. The COP mission aligns with the USF Mission by:

1. providing a competitive professional program in pharmacy;
2. producing knowledge, promoting intellectual development, and certifying student success in a global environment; and
3. providing interdisciplinary education, research, and service through health-related disciplines.

The Doctor of Pharmacy didactic and experiential curriculum encompasses interprofessional, patient-centered pharmaceutical care, translational research opportunities, and community-focused service learning in an effort to produce competent pharmacy practitioners. The COP plans to maximize the advantages associated with being part of Florida's leading metropolitan research university through collaborations with other disciplines and programs across the USF campus.

COP founded its Office of Graduate Programs in 2013. The vision for graduate education at COP included developing cutting-edge research training and education including both didactic (on-line and in-class) in several areas of Pharmacy, creating a diverse learning environment for students and faculty and creating advanced learning opportunities using the emerging technologies.

Consistent with USF's mission, the strategic goals of OGP include:

1. to enhance domestic and international recruitment, enrollment, and retention of graduate students that reflects diversity,
2. to strive to enhance the academic experience of and the quality of life for graduate students,

3. to pursue research funding and conduct and publish research that leads to opportunities for graduate student success,
4. to partner with the other USF Colleges and SUS institutions to develop creative initiatives that promote graduate student research, and
5. to serve as a leader in promoting interdisciplinary graduate programs.

A Master of Science in Pharmaceutical Nanotechnology was approved and OGP plans to develop additional initiatives for Graduate Certificates and a Ph.D. degree program in addition to concurrent degree programs at the COP.

Pharmacy, Pharm.D.

Degree Information

Priority Admission Application Deadlines: https://www.grad.usf.edu/majors

Minimum Total Hours: 154 hours
Level Doctoral / Professional
CIP Code 51.2001
Dept Code PHA
Major/College Codes Rx / PRY
Approved Effective Fall 2016

Concentration:

Pharmacy and Health Education (RXHE)

Also offered as an Accelerated Major
Also offered as a Concurrent Degree

Contact Information

College: College of Pharmacy
Department: Department of Pharmacy

Contact information: https://www.grad.usf.edu/majors

The USF College of Pharmacy (COP) curriculum is very similar to that offered by other schools and colleges across the state of Florida and the country. This is purposeful as there are standards that must be upheld by all pharmacy programs to remain in accordance with national accreditation, financial aid and state regulatory requirements. The USF COP Mission, Vision and Goals serve to guide curricular content as well as other COP endeavors. The integration of technology, student engagement in the educational process, and interprofessional activities serve as the foundation for each course. The faculty will utilize a variety of instructional methods to foster student attainment of course objectives.

All students will be enrolled on a full-time basis. Several courses may be taught predominantly on-line, however the majority of courses will include classroom contact. Lectures will be limited so that peer and faculty interactions can be maximized. For many courses, students may be required to listen to lectures on-line, or complete activities and/or assignments in preparation for class. The emphasis of the USF COP is the comprehension and assimilation of knowledge, with subsequent demonstration of competency (skills and abilities).

Accreditation
Accredited by the Accreditation Council for Pharmacy Education (ACPE).

Major Research Areas
http://health.usf.edu/pharmacy/research/index.htm

Admission Information

All applications undergo a holistic review process whereby careful consideration is given to all the credentials presented by applicants. By utilizing this process, applicants' academic record along with experiences and attributes are assessed for potential academic and clinical success.

Must meet University Admission and English Proficiency requirements, as well as requirements for the major listed below:

- PharmCAS Application
- At least two letters of recommendation recommendation (it is recommended one letter be from a biological or physical science professor)
- US Citizen or US Permanent Resident
- ≥ 2.75 Overall GPA (preferred)
- Completion of prerequisite coursework
- Official College Transcripts
- PCAT is required. While 65th percentile composite PCAT score is preferred, we will consider applicants with lower scores that may have other strong academic indicators providing evidence of success. PCAT scores older than 3 years will NOT be accepted.
- College Interviews - offered on a rolling basis
- Criminal background check and drug screen

Curriculum Requirements:

Minimum Total Hours: 154 credit hours

Core Requirement: 101 credit hours
Concentration (Optional): 5 credit hours
Required Electives: 4 credit hours

Internship/Field Experience: 49 credit hours

Core Requirements - 101 Credit Hours

- PHA 6114C Drug Delivery Systems I **Credit Hours: 3** (with lab)
- PHA 6115C Drug Delivery Systems II **Credit Hours: 3** (with lab)
- PHA 6124 Principles of Pharmacokinetics and Pharmacodynamics I **Credit Hours: 3**
- PHA 6129 Clinical Pharmacokinetics and Pharmacodynamics **Credit Hours: 3**
- PHA 6130C Translational Pharmacogenomics - Principles and Clinical Applications **Credit Hours: 3**
- PHA 6233C Jurisprudence **Credit Hours: 3**
- PHA 6243 Medical Informatics and Technology **Credit Hours: 2**
- PHA 6261 Healthcare Administration and Economics **Credit Hours: 3**
- PHA 6270 Healthcare and Medication Safety **Credit Hours: 2**
- PHA 6451 Clinical Biochemistry **Credit Hours: 2**
- PHA 6562 Physiologic Basis of Disease **Credit Hours: 4**
- PHA 6575 Introduction to Principles of Drug Action **Credit Hours: 3**
- PHA 6577 Biochemical and Molecular Principles of Drug Action **Credit Hours: 4**
- PHA 6618C Principles of Geriatric Pharmacotherapy **Credit Hours: 3**
- PHA 6740 Grant Writing and Clinical Research **Credit Hours: 2**
- PHA 6755 Medical Microbiology and Immunology **Credit Hours: 2**
- PHA 6760 Non-Prescription and Herbal Therapies **Credit Hours: 3**

- PHA 6782C Pharmacotherapeutics I **Credit Hours: 5**
- PHA 6783C Pharmacotherapeutics II **Credit Hours: 5**
- PHA 6784C Pharmacotherapeutics III **Credit Hours: 5**
- PHA 6787C Pharmacotherapeutics IV **Credit Hours: 5**
- PHA 6792C Drug Information/Literature Evaluation **Credit Hours: 2**
- PHA 6795 Research Methods and Biostatistics **Credit Hours: 3**
- PHA 6804C Pharmaceutical Calculations **Credit Hours: 2**
- PHA 6870C Pharmaceutical Skills I **Credit Hours: 2**
- PHA 6871C Pharmaceutical Skills II **Credit Hours: 3**
- PHA 6872C Pharmaceutical Skills III **Credit Hours: 3**
- PHA 6873C Pharmaceutical Skills IV **Credit Hours: 3**
- PHA 6874C Pharmaceutical Skills V **Credit Hours: 3**
- PHA 6875C Pharmaceutical Skills VI **Credit Hours: 3**
- PHA 6898 Foundations of Public Health **Credit Hours: 3**
- PHA 6915C Pharmacy Longitudinal Research Project **Credit Hours: 1**
- PHA 7928 Professional Forum **Credit Hours: 1**

Concentration Option Requirements

Students have the option of completing the Concentration, and/or electives, as noted below:

Pharmacy and Health Education Concentration (RXHE) (5 Credit Hours Minimum)

Students in the concentration must also take the Academia section for PHA7684 in the Field Experience requirements.

- HSC 6261 Teaching Essentials **Credit Hours: 2**
- HSC 6261L Teaching Essentials Lab **Credit Hours: 1**

Required Student-Selected Course (pick on of the following):

- PHA 6877C Critical Care Pharmacotherapy **Credit Hours: 2**
- PHA 6780C Oncology Pharmacy Practice **Credit Hours: 2**
- PHA 6907 Directed Independent Study **Credit Hours: 2-3** *
- PHA 6935 Special Topics in Pharmacy **Credit Hours: 1-5** *
- PHA 6915 - Pharmacy Longitudinal Research Project **Credit(s): 4** *
- PHA 6707C Developing the Next Generation of Pharmacy Faculty **Credit Hours: 3**

or other graduate course approved by the concentration coordinator

Electives (4 Credit Hours Minimum)

Students complete at least 4 hours that must be taken from didactic courses, approved by the Curriculum Committee.

- PHA 6780C Oncology Pharmacy Practice **Credit Hours: 2** *
- PHA 6877C Critical Care Pharmacotherapy **Credit Hours: 2** *
- PHA 6916 Directed Independent Research **Credit Hours: 3 (2 credits for this program)** *

- PHA 6177C Advanced Compounding and Industrial Pharmacy **Credit Hours: 3**
- PHA 6185 Drug Discovery and Frontier **Credit Hours: 3**
- PHA 6221 Pharmacists' Role in Transitions of Care **Credit Hours: 2**
- PHA 6223C Pharmacy Leadership **Credit Hours: 2**
- PHA 6224 Pharmaceutical Debates on Recent Issues Affecting the Profession **Credit Hours: 2**
- PHA 6352 Herbal Medicines and Alternative Therapy **Credit Hours: 2**
- PHA 6428C Advanced Topics in Metabolic Syndrome Treatment **Credit Hours: 2**
- PHA 6531 Clinical Toxicology **Credit Hours: 2**
- PHA 6592C Advanced Cardiology Pharmacotherapy **Credit Hours: 2**
- PHA 6598 Current Perspectives in Mental Health **Credit Hours: 2**
- PHA 6602 Pediatric Pharmacotherapy **Credit Hours: 3**
- PHA 6615C Ambulatory Care Pharmacy Practice Elective **Credit Hours: 2**
- PHA 6628 Introduction to Post Graduate Residency Training **Credit Hours: 2**
- PHA 6730C Drugs of Abuse, Addiction, and Law Enforcement **Credit Hours: 2**
- PHA 6771C Clinical Nutrition in Pharmacy Practice **Credit Hours: 2**
- PHA 6786 Travel Medicine **Credit Hours: 3**
- PHA 6907 Directed Independent Study **Credit Hours: 2-3**
- PHA 6879 Death and Dying for Healthcare Professionals **Credit Hours: 2-3**
- PHA 6603C Internal Medicine Elective **Credit Hours: 3**
- PHA 6935 Special Topics in Pharmacy **Credit Hours: 1-5**

Internship/Field Experience

Introductory Pharmacy Practice Experiences (IPPE)(49 Hours Minimum)

- PHA 6940 Introductory Pharmacy Practice Experience I **Credit Hours: 1**
- PHA 6945 IPPE Community Pharmacy Practice I **Credit Hours: 1**
- PHA 6946 IPPE Community Pharmacy Practice II **Credit Hours: 1**
- PHA 6947 IPPE - Institutional Pharmacy Practice I **Credit Hours: 4**
- PHA 7626 Advanced Health-System Pharmacy Practice Experience **Credit Hours: 6**
- PHA 7627 Advanced Community Pharmacy Practice Experience **Credit Hours: 6**
- PHA 7644 Geriatrics Patient Care Pharmacy Practice Experience **Credit Hours: 6**
- PHA 7692 Advanced Ambulatory Pharmacy Practice Experience **Credit Hours: 6**
- PHA 7694 Advanced Adult Medicine Pharmacy Practice Experience **Credit Hours: 6**
- PHA 7684 Advanced Pharmacy Practice Experience Elective **Credit Hours: 6**

Comprehensive Qualifying Exam

Doctoral Candidacy:

In lieu of the comprehensive Qualifying Exam, students must satisfactorily complete the internship and field experience.

Other Requirements

End of Semester (EoS) Exams- At the end of each semester there is a cumulative computer-based exam of key concepts from that semester.

End of Year (EoY) Exam- during the Spring semester for each academic year Pharmaceutical Skills courses will hold a case based Objective Structured Clinical Exam (OSCE).

Co-curricular Activities- Students have requirements beyond the didactic and experiential coursework. These activities complement the coursework to meet accreditation requirements.

Graduation Requirements

A minimum cumulative grade point average (CGPA) of 2.50

- Successful completion of the following within 7 years from the original date of admission:
  - All Didactic
  - Attend all MPJE and NAPLEX reviews
  - All Experiential Education
  - Professionalism (proficiency in professionalism, clinical skills, effective judgment and decision making)
- Timely Submission of the application for graduation
  - Graduate application fee due at time of submission

Accelerated Major

Also available as an Accelerated Majors

Concurrent Degree

Also available as a Concurrent Degrees

Nanopharmaceutics Graduate Certificate

This program is offered fully online.

Certificate code: XNP
Approved 201408
The Graduate Certificate in NanoPharmaceutics (NP) is designed for students who are interested in Nanotechnology without having to fully commit to the Master's Degree offered in this field through the College of Pharmacy; or as a precursor to admission into the Master's Degree in Pharmaceutical Nanotechnology. This graduate certificate offers students the opportunity to study within technological advances in sciences at the nanoscale and how new nanomaterials and processes can be applied to drug delivery, diagnosis, treatment monitory, tissue regeneration, personalized medicine and more within this exciting and innovative field of study. This certificate can also provide a nice addition to other engineering, bioengineering, medicine, biomedicine, chemistry, biology or other sciences degree programs.

Location/Delivery

This certificate is offered at USF Tampa and fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Applicants must have an advanced degree from a regionally accredited institution, or a bachelor's degree from a regionally accredited institution and either be currently enrolled in the biomedical sciences (MD, DO, PhD, PharmD or equivalent, or have extensive clinical experience.

Application Process

To learn about the application process, and to access the application, please review our application process.

In addition, to the application forms please submit:

- Departmental Approval Form (Please print, sign, and submit this form with all other documents to our office).
- Official transcripts
- A resume
- Letter of Interest

GRE and PCAT scores can be used to demonstrate qualitative and quantitative skills.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years

Pre-Requisites

None

Curriculum Requirements (16 Credit Hours)

- PHA 6146 Introduction to Nanotechnology **Credit Hours: 3**
- PHA 6119 Micro-/Nanoscale Drug Delivery Systems **Credit Hours: 3**
- PHA 6118 Nanomaterials, BioMEMS, and Nanodevices in Medicine **Credit Hours: 3**
- PHA 6225 Invention, Innovation and Entrepreneurship **Credit Hours: 3**
- PHA 6147 Nanotechnology and Risk Management **Credit Hours: 3**
- PHA 6277 Ethics in Pharmaceutical Practice and Research **Credit Hours: 1**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Pharmacy Entrepreneurship, Leadership & Management Graduate Certificate

This program is offered fully online.

Curriculum Code: **XYE**

Description

Pharmacy Entrepreneurship, Leadership and Management is a necessary tenet for the success of future pharmacists, regardless of their professional environment, but specific to individuals interested in owning and/or operating their own pharmacy.This certificate provides a clear extension and continuation of the cross-disciplinary, integrated approach to learning and teaching undertaken in the PharmD and Master of Pharmacy programs offered at the College of Pharmacy. It is for pharmacists or future pharmacists who wish to develop exceptional entrepreneurial, leadership and management skills relevant to Pharmacy. This program provides students, interns or established pharmacists with an opportunity to build upon their existing study or professions to fast-track the completion of a Graduate Certificate in Entrepreneurship, Leadership and Management in Pharmacy. For registered pharmacists, who wish to update their pharmacy practice knowledge, and current PharmD students, the track consists of two compulsory units of study plus two elective subjects. The coursework that comprises this graduate certificate is designed to augment the students' foundation of knowledge in the field of Entrepreneurship, Leadership and Management in Pharmacy.

Course Location/Delivery

Online, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

GRE & PCAT scores can be used to demo qualitative & quantitative skills

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Yes

Requirements of this Certificate (12 Credit Hours)

- PHA 6222 Pharmacy Practice Management **Credit Hours: 3**
- PHA 6225 Invention, Innovation and Entrepreneurship **Credit Hours: 3**

Electives

- GMS 6010 Personalized Medicine **Credit Hours: 3**
- PHA 6449 Pharmacogenomics--Current and Future Prospects **Credit Hours: 3**
- PHA 6146 Introduction to Nanotechnology **Credit Hours: 3**
- PHA 6336 Tissue Engineering and Regenerative Medicine **Credit Hours: 3**
- PHA 7684 Advanced Pharmacy Practice Experience Elective **Credit Hours: 6**
- GMS 6183 Clinical Research Methods **Credit Hours: 3**
- PHA 6797 Scientific Writing and Communication **Credit Hours: 1**
- PHA 6277 Ethics in Pharmaceutical Practice and Research **Credit Hours: 1**

Time Limit

2 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Pharmacy Update & Practice Management Graduate Certificate

This program is offered fully online.

Curriculum Code: **XPR**

Description

There is burgeoning information on advances in pharmaceutical sciences, pharmacy practice and pharmacy management with changing health care emphasis and regulations. It is important that future Pharmacists be able to specifically deal with bureaucrats, healthcare professionals and the general public in implementing personalized medicine. The courses in the graduate certificate are structure to provide a review of the current literature and develop broad technical skills in addition to providing the organizational competencies required for success by graduates in the integrative pharmaceutical sciences. This graduate certificate is designed to complement the educational activities of the College of Pharmacy by expanding training in integrative pharmacy to a diverse array of healthcare professionals who are interested in advancing their understanding of the recent developments in pharmaceutical sciences and their impact on clinical practice and pharmacy management.

Course Location/Delivery

Online, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- PHA 6116
- PHA 6449 Pharmacogenomics--Current and Future Prospects **Credit Hours: 3**
- PHA 6222 Pharmacy Practice Management **Credit Hours: 3**
- GMS 6183 Clinical Research Methods **Credit Hours: 3**

Electives

none

Time Limit

2 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Pre-Professional Pharmacy Graduate Certificate

This program is offered fully online.

Certificate Code: XPA
Approved 200908

This graduate certificate is for post-bachelor pre-professional students, master's level science majors, and other advanced students who have an interest in attaining biomedical science foundations to gain additional perspective into the growing clinical nature of the pharmacy profession. Participants will extend their knowledge in the areas of biochemistry and intermediary metabolism, the physiology of the human body, microbiological and immunological activity, and the principles involved in drug action. Students that complete this graduate certificate shall be well prepared for the basic science coursework that they will encounter during their first year in a doctor of pharmacy curriculum.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Applicants must hold an earned bachelor's degree from a regionally accredited institution, preferably in any of the biological sciences or chemistry, with a minimum 3.0 GPA.

PCAT, GRE, and MCAT scores are not required for admission to the certificate program but can be submitted to demonstrate qualitative and quantitative skills. Test scores will be required for admission to the graduate program

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

TwoYears

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

At least THREE courses (9 Credits) from the following (or four totaling 12 or all five courses totalling 15 credits):

- GMS 6141 Basic Medical Immunology and Microbiology **Credit Hours: 3**
- GMS 6201 Basic Medical Biochemistry **Credit Hours: 3**
- GMS 6440 Basic Medical Physiology **Credit Hours: 3**
- GMS 6505 Basic Medical Pharmacology **Credit Hours: 3**
- GMS 6605 Basic Medical Anatomy **Credit Hours: 3**

If only three or four of the requirements are taken from the core listed above, you then must take ONE OR TWO (3-6 credits) respectively from the following list only to total 15 credit hours for Graduate Certificate Completion:

- PHA 6146 Introduction to Nanotechnology **Credit Hours: 3**
- PHA 6119 Micro-/Nanoscale Drug Delivery Systems **Credit Hours: 3**
- PHA 6449 Pharmacogenomics--Current and Future Prospects **Credit Hours: 3**
- GMS 6010 Personalized Medicine **Credit Hours: 3**
- GMS 6183 Clinical Research Methods **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Teaching in Pharmacy Graduate Certificate

This program is offered fully online.

Curriculum Code: **XTY**

Description

This Teaching In Pharmacy (TIP) Graduate Certificate is an effort to assist in the recruitment, motivation, and preparation of clinical educators who can inspire students to advance the profession of pharmacy. There is a difference between experts in a particular field of study; those who are well versed and able to function in their prospective field versus a teacher of that practiced knowledge. One expertise does not translate into the other field. There is a difference between adaptive experts, whose metacognitive skills allow the transfer of knowledge from one setting to another, and routine experts, whose expertise allows them to function well in standard settings but doesn't serve them well when conditions differ.This graduate certificate in Teaching in Pharmacy will aid PharmD, M.S. and Ph.D. students and current pharmacists seeking additional skills to advance themselves in teaching their expertise with the ability to adapt their knowledge into teaching materials and applications for students' dissemination. This Graduate Certificate will also provide specific instruction into the specialized field of Adult Education and college teaching.

Course Location/Delivery

Online, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

GRE & PCAT scores can be used to demo qualitative & quantitative skills

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Yes

Requirements of this Certificate (15 Credit Hours)

- ADE 6385 The Adult Learner **Credit Hours: 3**
- PHA 6797 Scientific Writing and Communication **Credit Hours: 1**
- ADE 6161 Curriculum Construction in Adult Education **Credit Hours: 4**
- PHA 6708 Teaching in Pharmacy **Credit Hours: 3**

Electives

Select 3-5 Crs:

- PHA 6132
- PHA 6198
- PHA 6277 Ethics in Pharmaceutical Practice and Research **Credit Hours: 1**
- GMS 6183 Clinical Research Methods **Credit Hours: 3**

Time Limit

2 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Pharmacy

Pharmaceutical Nanotechnology, M.S.

Degree Information

Priority Admission Application Deadlines: https://www.grad.usf.edu/majors

Minimum Total Hours: 32
Level: Masters
CIP Code: 51.2099
Dept Code: ---
Major/College Codes: PNT / RX
Effective: Spring 2016
Concentrations:

Biomedical Engineering PNB
Drug Discovery, Delivery, Development & Manufacturing DDD

Also offered as a Concurrent Degree

Contact Information

College: Pharmacy

Contact Information: https://www.grad.usf.edu/majors

The Master's of Science (M.S.) in Pharmaceutical Nanotechnology is designed to train students in the skills they will need to understand the burgeoning technological advances in science at the nanoscale and how new nanomaterials and processes can be applied to drug delivery, diagnosis, treatment monitoring, tissue regeneration, personalized medicine and more. This major aims to bridge the gap between nanotechnology and medicine, providing students with advanced knowledge, skills and practical experience within the principles, technology and applications within this exciting and innovative area.

Major Research Areas:

Nano, Nanotechnology, Nano Pharmacy, Nano Pharmaceutics, Nano Pharmaceutical

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- Bachelor's degree preferably in the biomedical, biological, chemical sciences or engineering
- GRE, MCAT, PCAT, or DAT standardized test scores. May be waived if the overall undergraduate GPA is 3.80 or higher.
- Minimum of two (2) letters of recommendation (preferably from previous professors or employers within the field of science; – all must be fairly recent – within the last five years of coursework or employment).
- A resume
- Professional Statement
- Interview (Optional, at program's discretion)

- A course-by-course evaluation from a foreign transcript evaluation
- Final determination for admission will be made by Graduate Director based on GPA, GRE, MCAT, PCAT or DAT scores, letters of recommendations, resume and personal statement combined.

Curriculum Requirements

Total Minimum Hours – 32 credit hours

Core Requirements - 11 credit hours
Concentration/Track – 13 minimum
Capstone (3 hours) or Thesis (8 hours)

Core Requirements (11 Credit Hours)

- PHA 6146 Introduction to Nanotechnology **Credit Hours: 3**
- PHA 6119 Micro-/Nanoscale Drug Delivery Systems **Credit Hours: 3**
- PHA 6118 Nanomaterials, BioMEMS, and Nanodevices in Medicine **Credit Hours: 3**
- PHA 6797 Scientific Writing and Communication **Credit Hours: 1**
- PHA 6277 Ethics in Pharmaceutical Practice and Research **Credit Hours: 1**

Students select from the following Tracks or Concentrations:

General Track (18 Credit Hours)

- Electives 18
- Plus the Capstone requirement

Entrepreneurship Track (18 Credit Hours)

The one-semester internship in a matched industry, institute or center must be approved by the Associate Dean of Graduate Programs. The Internship will culminate in a final project, which will be presented at the end of the Capstone course. Students must receive an evaluation of Satisfactory or higher from their internship supervisor to successfully complete the Internship course.

- PHA 6621 Graduate Program Internship in Pharmaceutical Sciences **Credit Hours: 6**
- PHA 6225 Invention, Innovation and Entrepreneurship **Credit Hours: 3**
- Electives 9
- Plus the Capstone requirement

Research Track (13 Credit Hours)

- Electives - 13
- Plus the thesis requirement

Biomedical Engineering Concentration (PNB) (18 Credit Hours)

- GMS 6440 Basic Medical Physiology **Credit Hours: 3**

or

- BME 6410 Engineering Physiology **Credit Hours: 3**

- GMS 6605 Basic Medical Anatomy **Credit Hours: 3**
- PHC 6051 Biostatistics II **Credit Hours: 3**
- BME 6000 Biomedical Engineering **Credit Hours: 3**
- BME 6931 Selected Topics in Biomedical Engineering **Credit Hours: 1-3 (3 credits for this program)**
- Electives 3
- Plus the Capstone requirement

Drug Discovery, Delivery, Development & Manufacturing Concentration (DDD) (13 Credit Hours)

- PHA 6124 Principles of Pharmacokinetics and Pharmacodynamics I **Credit Hours: 3**
- PHA 6147 Nanotechnology and Risk Management **Credit Hours: 3**
- PHA 6185 Drug Discovery and Frontier **Credit Hours: 3**
- Electives 4
- Plus the thesis requirement

Approved Electives

- PHA 6124 Principles of Pharmacokinetics and Pharmacodynamics I **Credit Hours: 3**
- PHA 6147 Nanotechnology and Risk Management **Credit Hours: 3**
- PHA 6148 Nanoformulations and Nanopharmaceuticals **Credit Hours: 3**
- PHA 6185 Drug Discovery and Frontier **Credit Hours: 3**
- PHA 6222 Pharmacy Practice Management **Credit Hours: 3**
- PHA 6225 Invention, Innovation and Entrepreneurship **Credit Hours: 3**
- PHA 6245 Pharmaceutical Informatics **Credit Hours: 3**
- PHA 6449 Pharmacogenomics--Current and Future Prospects **Credit Hours: 3**
- PHA 6618 Principles of Geriatric Medicine **Credit Hours: 3**
- PHA 6622 Advanced Geriatric Pharmacy Care **Credit Hours: 3**
- PHA 6756 - Bioengineering and Nano-biomedical Prospects **Credit(s): 3**
- PHA 7930 Special Topics in Pharmacy **Credit Hours: 1-6 (1-3 credits in this program)**
- GMS 6010 Personalized Medicine **Credit Hours: 3**
- GMS 6183 Clinical Research Methods **Credit Hours: 3**
- GMS 6201 Basic Medical Biochemistry **Credit Hours: 3**
- GMS 6440 Basic Medical Physiology **Credit Hours: 3**
- GMS 6505 Basic Medical Pharmacology **Credit Hours: 3**
- GMS 6605 Basic Medical Anatomy **Credit Hours: 3**
- PHA 6336 Tissue Engineering and Regenerative Medicine **Credit Hours: 3**
- PHC 6319 Modern Human Diseases, Diagnosis, and Treatment **Credit Hours: 3**

*Other graduate courses may be approved by the Program Director to serve as electives.

Capstone (3 Credit Hours)

As part of the Capstone course, students will also submit and present an e-portfolio outlining their understanding of Pharmaceutical Nanotechnology as a whole with artifacts from previous courses that demonstrate their learning throughout the program. Students must successfully complete PHA 6533, including submission and presentation of e-Portfolio.

- PHA 6952 Graduate Program Capstone in Pharmacy **Credit Hours: 3**

Thesis (8 Credit Hours Minimum)

Students will conduct original research in a lab approved by the Associate Dean of Graduate Programs and submit a final Committee-Approved Thesis, including oral defense, following guidelines from the Office of Graduate Studies. Students must submit a final Committee-Approved Thesis, including oral defense, following ETD guidelines from the Office of Graduate Studies (http://www.grad.usf.edu/ETD-res-main.php).

- PHA 6971 Master's Thesis **Credit Hours: 1 (8 credits for this program)** (to be taken over the final three semesters in a 3-3-2 credit hour sequence unless otherwise approved by the Program Director)

Comprehensive Exam

For non-thesis students, successful completion and presentation of the e-Portfolio in the Capstone course will be used in lieu of a comprehensive exam. For thesis students, the final Committee-Approved thesis, including defense, will be used in lieu of a comprehensive exam.

Concurrent Degree

Also available as a Concurrent Degrees

PH - Updates for 2019-2020

Graduate Council approved the following on the dates noted.

Majors

Public Health	M.P.H.	Change curriculum for compliance	4/1/19
Public Health	M.S.P.H.	Change curriculum for compliance	4/1/19
Public Health	Ph.D.	Change curriculum for compliance	4/1/19
Public Health	Dr.Ph.	Change curriculum for compliance	4/1/19
Public Health	Ph.D.		

Concurrent Degrees

Health Administration (MHA) and Public Health (MPH)	Align curriculum with MPH changes	2/4/19

Graduate Certificates

Environmental Health	Terminate Certificate	4/29/19
Health and Wellness Coaching	New Certificate	9/10/18
Planning for Healthy Communities	Terminate Certificate	

College of Public Health

PH - Updates for 2019-2020

PH - Programs

University of South Florida
College of Public Health
13201 Bruce B. Downs Blvd MDC56
Tampa, FL 33612

Web address: http://health.usf.edu/publichealth/index.htm
Email: coph-grad@health.usf.edu
Phone: 813-974-6505
Fax: 813-974-8121

College Dean: Donna Petersen, Sc.D., M.H.S., CPH
Vice Dean: Tricia Penniecook, M.D., M.P.H.
Associate Dean: Kay Perrin, Ph.D., M.P.H., CPH

Accreditation:

The College is accredited by the Council on Education for Public Health and the concentration of Occupational Exposure Science (Industrial Hygiene) in the M.S.P.H. degree is accredited by the Applied Science Accreditation Commission of ABET, http://www.abet.org. The M.H.A. and concurrent M.H.A/M.P.H are accredited by the Commission on Accreditation of Healthcare Management Education. For the concentration in Nutrition and Dietetics in the M.P.H degree the USF Dietetic Internship has been granted Candidacy Status for Accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) http://www.eatrightpro.org/resources/acend. The concentration in Genetic Counseling in the M.S.P.H. degree is accredited by the Accreditation Council for Genetic Counseling.

College Requirements

Attendance Policy

All Instructors teaching undergraduate and graduate courses are required to take attendance on the first day of class and to drop students who do not attend the first day of class. Students who experience extenuating circumstances that are beyond their control and who are unable to attend a first class meeting must notify the instructor or the department prior to the first class meeting to request waiver of the first class attendance requirement. Although Instructors are authorized to affect the drop, students are fundamentally responsible for knowing their registration status, and the student must insure that his/her registration status reflects the drop by the end of the drop/add period.

Graduate Assistantships

Graduate assistants may perform research, teaching functions, assist in the production of seminars and workshops, or other work related to their specific disciplines. Graduate assistants are paid a biweekly stipend and may qualify to receive in-state tuition waivers. Assistantships are awarded on a competitive basis. Students must have a GPA of 3.00 or better in their upper division coursework, must be degree-seeking and enrolled full time.

Health Administration, M.H.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 54
Level: Masters
CIP Code: 51.0701
Dept Code: DEA *(PUH as of Spring 2020)*
(Major/College): MHA PH
Approved: 1988

Also offered as a Concurrent Degree

Contact Information

College: Public Health

Contact Information: http://www.grad.usf.edu/majors

The M.H.A. program prepares students for public and privates sector leadership positions in health services and related organizations, such as hospitals, health systems, physician group practices, and health insurance plans. Students develop knowledge and skills in contemporary management methods and policy decision making, integrating a population health management approach. The curriculum develops skills in basic business disciplines with application to health services, a clinical and community perspective and professional skills. The M.H.A. program serves early to mid-career professionals, including those seeking transition into and advancement within the health care industry, as well as recent graduates of undergraduate programs.

Accreditation:
The College is accredited by the Council on Education in Public Health. Accredited by the Commission on Accreditation of Healthcare Management Education (CAHME).

Major Research Areas:
Health services management, Healthcare financial management, Health economics, Quantitative methods in health services, Health insurance, Health law, Quality management, Performance improvement, Community health assessment, Organizational theory and behavior applied to health settings, Health information management, Health policy, and Strategic planning and marketing.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below. Meeting these criteria per se shall not be the only basis for admission.

- Public health course prerequisites:
  - Suggested/preferred undergraduate majors: Life sciences, social sciences, business, or health professions.Prerequisite undergraduate courses: Microeconomics or equivalent (prerequisite must be completed prior to enrolling in PHC 6430 Health Economics I) and Accounting (prerequisite must be completed prior to enrolling in PHC 6160 Health Care Financial Management)

- Work experience: Preferred, but not required.
- Verbal GRE 50th percentile
- Quantitative GRE 50th percentile
- In lieu of the GRE, applicants may submit a minimum GMAT score of 500 for the MHA.
- Applicants admitted to the M.H.A. or an M.P.H. who have a score on the GRE Analytical Writing test which is below the 40th percentile may be required to take REA 2105—Critical Reading and Writing—or an equivalent English composition course, during the first semester of enrollment, and pass with a grade of "B" or better in the class.

Curriculum Requirements

Total minimum credit hours: 54 hrs

Core – 9 hours
Management and Policy – 21 hours
Finance, Economics, and Decision Making Skills – 18 hours
Culminating Requirements – 6 hours

Core Requirements (9 Credit Hours)

- PHC 6588 History and Systems of Public Health **Credit Hours: 1**
- PHC 6756 Population Assessment: Part 1 **Credit Hours: 5**
- PHC 6757 Population Assessment: Part 2 **Credit Hours: 3**

Management and Policy (21 Credit Hours)

- PHC 6148 Strategic Planning and Health Care Marketing **Credit Hours: 3**
- PHC 6147 Managing Quality in Health Care **Credit Hours: 3**
- PHC 6151 Health Policy and Politics **Credit Hours: 3**
- PHC 6180 Health Services Management **Credit Hours: 3**
- PHC 6181 Organizational Behavior in Health Services **Credit Hours: 3**
- PHC 6420 Health Care Law, Regulation and Ethics **Credit Hours: 3**
- PHC 6435 Comparative Health Insurance Systems **Credit Hours: 3**

Finance, Economics and Decision Making Skills (18 Credit Hours)

- PHC 6160 Health Care Financial Management **Credit Hours: 3**
- PHC 6760 Research Methods in Public Health Programs **Credit Hours: 3**
- PHC 6161 Health Finance Applications **Credit Hours: 3**
- PHC 6191 Quantitative Analysis in Health Services **Credit Hours: 3**
- PHC 6196 Information Systems in Health Care Management **Credit Hours: 3**
- PHC 6430 Health Economics I **Credit Hours: 3**

Comprehensive Exam

The internship report serves in lieu of the final comprehensive exam.

Culminating Requirements (6 Credit Hours)

(The MHA Internship report provides the final comprehensive exam)

- PHC 6941 Master of Health Administration Internship **Credit Hours: 2**
- PHC 6917 Master of Health Administration Internship Report **Credit Hours: 2**
- PHC 6166 Advanced Seminar in Health Care Management **Credit Hours: 2**

Concurrent Degree

Also available as a Concurrent Degrees

Public Health, Dr.P.H.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 43 post-masters

Level: Doctoral
CIP Code: 51.2201
Dept Code: DEA *(PUH as of Spring 2020)*
Major/College: DPH PH

Concentrations:

Advanced Practice Leadership in Public Health (APR)
Public Health and Clinical Laboratory Science and Practice (LSP)

Contact Information

College: Public Health
Contact Information: http://www.grad.usf.edu/majors

The **Doctor of Public Health (Dr.P.H.)** is a professional, practice-oriented research degree that is granted in recognition of the attainment of a broad set of practice, analytic, and evaluative skills, including demonstrated public health leadership skills. The Dr.P.H. prepares individuals for leadership roles in practice-based settings such as health departments, non-profit organizations, health services, international agencies, and community-based organizations. Accordingly, the emphasis of the Dr.P.H. is placed on fostering advanced expertise in developing, implementing, and evaluating evidence-based public health practice.

The Dr.P.H. degree offers two concentrations: Advanced Practice Leadership in Public Health (APLPH), and Public Health and Clinical Laboratory Science and Practice (PHLSP). Each of these has an applied curriculum that develops the student's skillset in community engagement, leadership and management, communication and education, and evidence-based public health. Students complete doctoral projects implemented in organizations during the program of study.

Mode of Delivery:
The USF College of Public Health Dr.P.H. degree is completed through a combination of distance-learning and blended courses that include on-campus learning via three one-week Dr.P.H. Institutes. Students are expected to attend an Institute in the first semester of their admission, and then in the subsequent two summer semesters. This combination of delivery formats allows working professionals to broaden their grasp of public health leadership, practice, and research without interrupting their careers.

Accreditation:
The College of Public Health is accredited by the Council on Education in Public Health (CEPH).

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- M.P.H., M.H.A., M.S.P.H., or other relevant Master's degree from an accredited institution with a minimum GPA of 3.00.
- GRE or equivalent (GMAT, MCAT, DATE, or PCAT) required. LSAT is not accepted in Lieu of the GRE. GRE scores will be compared to applicant pool and national GRE norms. This requirement can be waived if the student has at least a 3.50 GPA, or has a terminal degree (Ph.D., Sc.D., or Ed.D.) from an accredited institution, or an advanced professional degree (M.D., D.D.S., D.V.M., J.D., Pharm.D., D.P.T.) with licensure in the United States. Any student seeking a waiver must submit a GRE waiver request with supporting documentation.
- Minimum of three letters of Recommendation public health leadership
- Detailed personal statement of less than five pages that descirbes why you wish to obtain a Dr.P.H. degree in Public Health. This document should explain the applicant's public health background, current public health practice interests, demonstration of public health leadership, and how the Dr.P.H. is expected to affect the applicant's current practice.
- Two years advanced work experience in public health
- Resume or curriculum vitae
- Applicants must also be fully prepared to attend three Dr.P.H. Institutes on-campus.
- Students seeking acceptance into the Public Health Laboratory Science and Practice concentration must work at a health laboratory. Admission also depends on the availability of a Faculty Advisor who can advise the student in their area of interest. The final decision on admission is made by the faculty of the College.
- Completed USF Office of Graduate Studies application, and completed SOPHAS application, with fees paid for each.

Applicants to the Dr.P.H. degree are initially required to complete a SOPHAS application. Once that application is verified by SOPHAS, we will invite the applicant to submit a shortened USF Office of Graduate Studies application. Applicants must meet the University requirements (see Graduate Admissions) as well as the requirements of the major. However, these criteria are not the only basis for admission.

Pre-Requisites

Students are expected to come into the Dr.P.H. degree program with foundational public health knowledge. Students who have an M.P.H. or M.H.A. degree from a CEPH-accredited institution meet this requirement. Students with other degrees meet this requirement if they have taken the equivalent of the M.P.H. core coursework at a CEPH-accredited institution, or if they take the courses at USF listed below.

Pre-Requisite Public Health Core Courses - 9 credit hours

PHC 6588 History and Systems of Public Health
PHC 6756 Population Assessment I
PHC 6757 Population Assessment II

Financial Aid

Students seeking financial aid should contact the USF financial aid office for federal guidelines. Dr.P.H. students are not eligible for a doctoral fellowship in the College of Public Health, as it requires admission to a fully on-campus degree program. Dr.P.H. students are eligible for current student scholarships and awards that are announced each year. Please see the College of Public Health Scholarship and Award webpage.

Curriculum Requirements

Total minimum hours - 43 credits post-master's
Core - 13 hours
Concentration - 12 hours
Electives - 12 hours
Culminating Requirements/Doctoral Project - 6

At least 13 hours have to be completed at the 7000 level. A maximum of 12 hours can be transferred into the major, if the coursework was completed post-masters.

Core Courses (13 Credit Hours)

- PHC 7982 Introduction to Doctoral Training in Public Health **Credit Hours: 1**

- PHC 7103 Transforming Public Health Practice **Credit Hours: 3**
- PHC 7154 Evidence-informed Public Health I **Credit Hours: 3**
- PHC 7149 Practical Applications II: Public Health Leadership **Credit Hours: 1**
- PHC 7934 Writing for Scholarly Publication in Health Science **Credit Hours: 3**
- HSC 7268 Professional Foundations III: Joining the Academy **Credit Hours: 2**

Concentration Requirements (12 Credit Hours)

Students select one of the following concentrations

Advanced Practice Leadership in Public Health (APR) – 12 hours

- PHC 7932 Practical Applications I: Policy, Advocacy and Public Health **Credit Hours: 1**
- PHC 7466 Health Disparities and Cultural Competency in Public Health **Credit Hours: 1**
- PHC 7119 Organizational Behavior in Public Health Systems **Credit Hours: 3**
- PHC 7504 Innovative Education in Public Health **Credit Hours: 1**
- PHC 6411 Introduction to Social Marketing for Public Health **Credit Hours: 3**
- PHC 7156 Evidence-Informed Public Health II **Credit Hours: 3**

Public Health and Clinical Laboratory Science and Practice (LSP) – 12 hours

- PHC 7565 Public Health Laboratory Management I **Credit Hours: 3**
- PHC 7563 - Public Health Laboratory Management II **Credit(s): 3**
- PHC 7564 - Public Health Laboratory Microbiology **Credit(s): 3**
- PHC 7085 - Public Health Laboratory Bioinformatics **Credit(s): 3**

Electives (12 Credit Hours Minimum)

Culminating Requirements (6 Credit Hours Minimum)

PHC 7919 Public Health Doctoral Project (6 Credit Hours)

These lead to a field-based doctoral project that influences public health majors, policies, or systems:
Applied Practice Experiences
Qualifying Exam

Applied Practice Experiences

All Dr.P.H. students will engage in applied practice experiences to advance their leadership and professional skills in public health. Within their courses, students will select at least five Dr.P.H. foundational and concentration competencies and propose projects in a public health or related organization that will develop these competencies, with advice from a practice-based mentor in the proposed setting. These studies will be jointly planned by the student, the mentor, and the Faculty Advisor, and may consist of one project, or several projects, depending on the scope and competency goals. The final practice experience deliverables must be approved by the Faculty Advisor, verifying that the student has demonstrated achievement of the proposed competencies.

Doctoral Project Committee

The student will be assigned one or more Faculty Advisor(s) at the time of admission. The Faculty Advisor(s) will guide the student through the program of study in the initial stages. Within the second year of the major, the student should establish a doctoral project committee. The doctoral project committee will consist of a minimum of one Faculty Chair and one Faculty Member (or two Faculty co-Chairs) from the faculty of the College of Public Health, as well as an external public health professional or practitioner who is a mentor to the student.

Qualifying Exam

When the majority of the student's coursework is satisfactorily completed, the student must pass a qualifying examination. The student is required to submit a concept paper describing the proposed doctoral project, followed by an oral examination that relates the content, approach, and deliverables of the project to the Dr.P.H. curriculum domains in the student's concentration. The examination will be administered and evaluated by the student's doctoral project committee. The student must enroll in at least two credits in the semester the exam is completed.

Doctoral Project

PHC 7919 Public Health Doctoral Project (6 Credit Hours)

After successfully completing the qualifying examination, the student must complete a field-based doctoral project that is designed to influence programs, policies, or systems applicable to public health practice. The doctoral project must include a minimum of three high-quality, evidence-based deliverables, with at least one written product. The doctoral project must also demonstrate synthesis of foundational and concentration competencies across all Dr.P.H. curriculum domains in the student's concentration.

To complete the doctoral project, the student will be required to enroll in a minimum of six credits of PHC 7919: Public Health Doctoral Project. The final doctoral project deliverables must be approved by the doctoral project committee prior to graduation, and the student must be enrolled in a minimum of two credits in the semester the doctoral project is completed and approved.

Time to Degree

Students may be able to complete the Dr.P.H. degree program in a minimum of three years, with two years for the coursework and one year for the culminating experiences. Refer to USF Degree Requirements for time to degree limits.

Public Health, M.P.H.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 42
Level: Masters
CIP Code: 51.2201
Dept Code: DEA *(PUH as of Spring 2020)*
(Major/College): MPH/PH
Approved: 1981

Concentrations:

Applied Biostatistics (ABT)
Behavioral Health (BHH)
Environmental and Occupational Health (EOH)
Epidemiology (EPY)
Epidemiology (Online) (EPO)
Epidemiology and Global Communicable Disease(EGD)
Epidemiology and Global Health (EGH)
Epidemiology and Maternal and Child Health (EMC)
Global Communicable Disease (TCD)
Global Disaster Management, Humanitarian Relief and Homeland Security (GHH)
Global Health Practice (GLO)
Health Care Organizations and Management (HCO)
Health Policies and Programs (HPP)
Health, Safety and Environment (HLE)
Infection Control (IFC)
Maternal and Child Health (PMC)
Nutrition and Dietetics (NUD)
Public Health Education (PHN)
Public Health Practice (PHP)
Social Marketing (SOM)

Also offered as an Accelerated Major
Also offered as a Concurrent Degree

Contact Information

College: Public Health

Contact Information: http://www.grad.usf.edu/majors

Accreditation:
The College is accredited by the Council on Education in Public Health. For the concentration in Nutrition and Dietetics in the M.P.H degree the USF Dietetic

Internship has been granted Candidacy Status for Accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) http://www.eatrightpro.org/resources/acend.

Admission Information

Must meet University requirements (see Graduate Admissions) as well as requirements for admission to the major, listed below.

All applicants must take the Graduate Record Exam (GRE) or have taken an equivalent admissions examination within the five years preceding application and must meet the following criteria.

- GRE or equivalent (GMAT, MCAT, DATE, or PCAT) required. LSAT is not accepted in lieu of the GRE. GRE scores will be compared to the applicant pool and national GRE norms.

- Applicants who have a terminal degrees such as the PhD, ScD or EdD, and those with advanced professional degrees (MD, DDS, DO, DVM, JD, PharmD, DPT) from accredited institutions and who are individually licensed in the United States in their profession may request to waive the GRE (https://usfhealth.box.com/s/ievl84vasytoc20u3s9xsw59r44fdiyk). The GRE waiver is not automatic and must be approved by the College of Public Health.
- Applicants admitted to the M.H.A. or M.P.H. who have a score on the GRE Verbal or Analytical Writing test which is below the 40th percentile may be required to take REA 2105–Critical Reading and Writing–or an equivalent English composition course, during the first semester of enrollment, with a grade of "B" or better in the course.

Meeting of these criteria per se shall not be the only basis for admission.

Curriculum Requirements

Total Minimum Hours: 42 credit hours minimum

Core - 18 credit hours
Concentration - 9 credit hours minimum (varies with each concentration)
Electives - 9 credit hours minimum (varies with each concentration)

Comprehensive Exam

Students must complete the Major core requirements and then the requirements as specified for the Concentration. Concentration hour requirements vary, so in some instances, students will graduate with more than the 42-hour minimum required for the major. The minimum hours required for the major and concentration must be satisfied for degree completion.

Core Courses (18 Credit Hours)

- PHC 6588 History and Systems of Public Health **Credit Hours: 1**
- PHC 6756 Population Assessment: Part 1 **Credit Hours: 5**
- PHC 6757 Population Assessment: Part 2 **Credit Hours: 3**
- PHC 6145 Translation to Public Health Practice **Credit Hours: 3**
- PHC 6949 Applied Practice Experiences **Credit Hours: 3**
- PHC 6943 Integrated Learning Experience **Credit Hours: 3**

Concentration Requirements (9 credit hours minimum)(varies with each concentration)

Students select from one of the following concentrations:

Applied Biostatistics (ABT) (12 Concentration Credit Hours)

- PHC 6053 Categorical Data Analysis **Credit Hours: 3**
- PHC 6051 Biostatistics II **Credit Hours: 3**
- HSC 6055 Survival Analysis **Credit Hours: 3**
- PHC 6020 Clinical Trials: Design, Conduct, and Analysis **Credit Hours: 3**

Behavioral Health (BHH) (15 Concentration Credit Hours)

- MHS 7740 Survey Course in Planning, Evaluation and Accountability **Credit Hours: 3**
- PHC 6546 Epidemiology of Mental Disorders **Credit Hours: 3**
- PHC 6543 Foundations in Behavioral Health Systems **Credit Hours: 3**
- PHC 6708 Evaluation Methods in Community Health **Credit Hours: 3**
- PHC 6035 Comorbidity of Mental and Physical Disorders **Credit Hours: 3**

Environmental and Occupational Health (EOH) (12 Concentration Credit Hours)

- PHC 6300 Principles of Environmental Health **Credit Hours: 3**
- PHC 6310 Environmental Occupational Toxicology **Credit Hours: 3**
- PHC 6353 Environmental and Occupational Health Risk Assessment **Credit Hours: 3**
- PHC 6423 Environmental and Occupational Health Law **Credit Hours: 3**

Epidemiology (EPY) (15 Concentration Credit Hours)

- PHC 6051 Biostatistics II **Credit Hours: 3**
- PHC 6010 Epidemiology Methods I **Credit Hours: 3**
- PHC 6011 Epidemiology Methods II **Credit Hours: 3**
- PHC 6701 Computer Applications for Public Health Researchers **Credit Hours: 3**
- PHC 6053 Categorical Data Analysis **Credit Hours: 3**

Epidemiology (ONLINE) (EPO) (15 Concentration Credit Hours)

- PHC 6051 Biostatistics II **Credit Hours: 3**
- PHC 6010 Epidemiology Methods I **Credit Hours: 3**
- PHC 6011 Epidemiology Methods II **Credit Hours: 3**
- PHC 6701 Computer Applications for Public Health Researchers **Credit Hours: 3**
- PHC 6053 Categorical Data Analysis **Credit Hours: 3**

Epidemiology and Global Communicable Disease (EGD) (12 Concentration Credit Hours)

- PHC 6516 Tropical Diseases **Credit Hours: 3**
- PHC 6514 Infectious Disease Control in Developing Countries **Credit Hours: 3**

- PHC 6511 Public Health Immunology **Credit Hours: 3**
- PHC 6010 Epidemiology Methods I **Credit Hours: 3**

Epidemiology and Global Health (EGH) (17 Concentration Credit Hours)

- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**
- PHC 6106 Global Health Program Development and Administration **Credit Hours: 3**
- PHC 6442 Global Health Applications in the Field **Credit Hours: 3**
- PHC 6945 Supervised Field Experience **Credit Hours: 1-12 (2 credits for this program)**
- PHC 6010 Epidemiology Methods I **Credit Hours: 3**

Epidemiology and Maternal and Child Health (EMC) (12 Concentration Credit Hours)

- PHC 6530 Issues and Concepts in Maternal and Child Health **Credit Hours: 3**
- PHC 6537 Case Studies in MCH Programs, Policies and Research **Credit Hours: 3**
- PHC 6197 Secondary Data Analysis in Maternal and Child Health **Credit Hours: 3**
- PHC 6010 Epidemiology Methods I **Credit Hours: 3**

Global Communicable Disease (TCD) (9 Concentration Credit Hours)

- PHC 6516 Tropical Diseases **Credit Hours: 3**
- PHC 6514 Infectious Disease Control in Developing Countries **Credit Hours: 3**
- PHC 6511 Public Health Immunology **Credit Hours: 3**

Global Disaster Management, Humanitarian Relief and Homeland Security (GHH) (9 Concentration Credit Hours)

- PHC 6183 Overview of United States and International Emergency/Disaster Management **Credit Hours: 3**
- PHC 6230 Foundations of Humanitarian Assistance **Credit Hours: 3**
- PHC 6254 Public Health Implications and Concerns in Homeland Security **Credit Hours: 3**

Global Health Practice (GLO) (15 Concentration Credit Hours)

- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**
- PHC 6106 Global Health Program Development and Administration **Credit Hours: 3**
- PHC 6442 Global Health Applications in the Field **Credit Hours: 3**
- PHC 6945 Supervised Field Experience **Credit Hours: 1-12 (3 credits for this program)**

Health Care Organizations and Management (HCO) (15 Concentration Credit Hours)

- PHC 6151 Health Policy and Politics **Credit Hours: 3**
- PHC 6180 Health Services Management **Credit Hours: 3**
- PHC 6430 Health Economics I **Credit Hours: 3**

- PHC 6160 Health Care Financial Management **Credit Hours: 3**
- PHC 6181 Organizational Behavior in Health Services **Credit Hours: 3**

Health Policies and Programs (HPP) (15 Concentration Credit Hours)

- PHC 6151 Health Policy and Politics **Credit Hours: 3**
- PHC 6430 Health Economics I **Credit Hours: 3**
- PHC 6760 Research Methods in Public Health Programs **Credit Hours: 3**
- PHC 6421 Public Health Law and Ethics **Credit Hours: 3**
- PHC 6063 Public Health Data, Information and Decision Making **Credit Hours: 3**

Health, Safety and Environment (HLE) (15 Concentration Credit Hours)

- PHC 6307 Principles of Exposure Assessment & Control **Credit Hours: 3**
- PHC 6300 Principles of Environmental Health **Credit Hours: 3**
- PHC 6325 Environmental Laboratory Principles **Credit Hours: 3**
- PHC 6345 HSE Management & Administration **Credit Hours: 3**
- PHC 6326 Global Issues in Environmental Health **Credit Hours: 3**

Infection Control (IFC) (15 Concentration Credit Hours)

- PHC 6251 Disease Surveillance and Monitoring **Credit Hours: 3**
- PHC 6562 Microbiology for Healthcare Workers **Credit Hours: 3**
- PHC 6517 Infectious Disease Prevention Strategies **Credit Hours: 3**
- PHC 6314 Infection Control Program Design **Credit Hours: 3**

Pick one of the following two:

- PHC 6186 Public Health Emergencies in Large Populations (PHLEP) **Credit Hours: 3**
- PHC 6002 Infectious Disease Epidemiology **Credit Hours: 3**

Maternal and Child Health (PMC) (15 Concentration Credit Hours)

- PHC 6530 Issues and Concepts in Maternal and Child Health **Credit Hours: 3**
- PHC 6537 Case Studies in MCH Programs, Policies and Research **Credit Hours: 3**
- PHC 6197 Secondary Data Analysis in Maternal and Child Health **Credit Hours: 3**
- PHC 6505 Program Planning in Community Health **Credit Hours: 3**
- PHC 6708 Evaluation Methods in Community Health **Credit Hours: 3**

Nutrition and Dietetics (NUD) (15 Concentration Credit Hours)

- DIE 6127 Principles of Leadership and Management of Food and Nutrition **Credit Hours: 2**
- DIE 6248 Advanced Clinical Nutrition **Credit Hours: 3**
- HUN 5265 Methods of Nutritional Assessment **Credit Hours: 1**
- PHC 6521 Public Health Nutrition **Credit Hours: 3**
- PHC 6522 Nutrition in Health and Disease **Credit Hours: 3**

- HUN 6804 Nutrition and Dietetics Research **Credit Hours: 3**

Public Health Education (PHN) (17 Concentration Credit Hours)

- HSC 5036 Professional Foundations of Health Education **Credit Hours: 1**
- PHC 6500 Theoretical and Behavioral Basis for Health Education **Credit Hours: 4**
- PHC 6505 Program Planning in Community Health **Credit Hours: 3**
- PHC 6507 Health Education Intervention Methods **Credit Hours: 3**
- PHC 6412 Health Disparities and Social Determinants **Credit Hours: 3**
- PHC 6708 Evaluation Methods in Community Health **Credit Hours: 3**

Public Health Practice (PHP) (15 Concentration Credit Hours)

- PHC 6063 Public Health Data, Information and Decision Making **Credit Hours: 3**
- PHC 6421 Public Health Law and Ethics **Credit Hours: 3**
- PHC 6104 Management of Public Health Programs **Credit Hours: 3**
- PHC 6146 Health Services Planning and Evaluation **Credit Hours: 3**
- PHC 6147 Managing Quality in Health Care **Credit Hours: 3**

Social Marketing (SOM) (12 Concentration Credit Hours)

- PHC 6411 Introduction to Social Marketing for Public Health **Credit Hours: 3**
- PHC 6705 Formative Research Methods in Social Marketing **Credit Hours: 3**
- PHC 6460 Social Marketing Program Management **Credit Hours: 3**
- PHC 6461 Advanced Social Marketing **Credit Hours: 3**

Electives (9 credit hours minimum)(varies with each concentration)

All students must complete a minimum of nine credit hours of graduate electives. Students in the following concentrations must complete additional elective hours as noted:

6 additional hours - Applied Biostatistics (ABT)
3 additional hours - Environmental and Occupational Health (EOH)
13 additional hours - Epidemiology and Global Communicable Disease (EGD)
10 additional hours - Epidemiology and Global Health (EGH)
13 additional hours - Epidemiology and Maternal and Child Health (EMC)
6 additional hours - Global Communicable Disease (TCD)
6 additional hours - Global Disaster Management, Humanitarian Relief and Homeland Security (GHH)
3 additional hours - Social Marketing (SOM)

All elective hours must be approved by a faculty mentor.

Additional electives, if required, - 3 hours minimum (varies by concentration)

Comprehensive Exam

Passing the CPH exam is a requirement for graduation by all MPH students. Students must be enrolled for two credits the term taking the exam.

- 1st attempt the college of Public Health will pay funds permitting
- 2nd attempt student pays
- 3rd attempt is an oral exam given by the College of Public Health

Accelerated Major

Also available as an Accelerated Majors

Concurrent Degree

Also available as a Concurrent Degrees

Public Health, M.S.P.H.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 42

Level: Masters
CIP Code: 51.2299
Dept Code: DEA *(PUH as of Spring 2020)*
(Major/College): MSP PH
Approved 2002

Concentrations:

Behavioral Health (PBH)
Environmental and Occupational Health (EOV)
Epidemiology (PEY)
Genetic Counseling (GTC)
Genomics (GEO)
Global Communicable Disease (PGD)
Maternal and Child Health (PMH)
Occupational Exposure Science (OES)
Public Health Education (PPD)

Contact Information

College: Public Health
Contact Information: http://www.grad.usf.edu/majors

The base of knowledge for public health comes from a variety of disciplines, ranging from social sciences to biological sciences and business, brought together by a commitment to improve the public's health. Thus, the field of public health is broad and is open to students from diverse academic disciplines including Health Sciences, Education, Engineering, Business, Communications, Mathematics, Social Sciences, and Natural Sciences. Graduates are prepared for interdisciplinary focused public health professional careers as administrators, managers, educators, researchers, and direct service providers.

Accreditation:

The College is accredited by the Council on Education for Public Health and the concentration of Occupational Exposure Science (Industrial Hygiene) in the M.S.P.H. degree is accredited by the Applied Science Accreditation Commission of ABET, http://www.abet.org. The concentration in Genetic Counseling in the M.S.P.H. degree is accredited by the Accreditation Council for Genetic Counseling.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- GRE or equivalent (GMAT, MCAT, DATE, or PCAT, required. LSAT is not accepted in Lieu of th)e GRE. GRE scores will be compared to applicant pool and national GRE norms.
- Applicants who have a terminal degree (i.e.Ph.D., Sc.D. or Ed.D.), or advanced professional degrees (I.e., M.D., D.D.S., D.O., D.V.M., J.D., Pharm.D., D.P.T.) from accredited institutions and who are individually licensed in the United States in their profession may request to waive the GRE (https://usfhealth.box.com/s/ievl84vasytoc20u3s9xsw59r44fdiyk). The GRE waiver is not automatic and must be approved by the College of Public Health. Meeting of these criteria per se shall not be the only basis for admission.

Curriculum Requirements

Total Minimum Hours: 42 credit hours

Core Requirements - 9 hours
Concentrations Requirements - 6 hours minimum (varies)
Electives - 18 hours minimum
Additional electives, if required - 1 hour minimum (varies by concentration)
Thesis - 6 hours minimum

Students must complete the Major core requirements and then the requirements as specified for the Concentration. Concentration hour requirements vary, so in some instances, students will graduate with more than the 42 hour minimum required for the mojor. The minimum hours required for the major and concentration must be satisfed for degree completion.

Core Courses (9 Credit Hours)

- PHC 6588 History and Systems of Public Health **Credit Hours: 1**
- PHC 6756 Population Assessment: Part 1 **Credit Hours: 5**
- PHC 6757 Population Assessment: Part 2 **Credit Hours: 3**

Concentration Requirements - 6 hours minimum (varies)

Students select from the following Concentrations:

Behavioral Health (PBH) (6 Concentration Credit Hours)

- PHC 6543 Foundations in Behavioral Health Systems **Credit Hours: 3**
- PHC 6546 Epidemiology of Mental Disorders **Credit Hours: 3**

Environmental and Occupational Health (EOV) (6 Concentration Credit Hours)

- PHC 6310 Environmental Occupational Toxicology **Credit Hours: 3**
- PHC 7317 Risk Communication in Public Health **Credit Hours: 3**

Epidemiology (PEY) (6 Concentration Credit Hours)

- PHC 6053 Categorical Data Analysis **Credit Hours: 3**
- PHC 6011 Epidemiology Methods II **Credit Hours: 3**

Genetic Counseling (GTC) (8 Concentration Credit Hours)

- PHC 6596 Introduction to Genetic Counseling **Credit Hours: 1**
- PHC 6595 Applied Clinical Genetics **Credit Hours: 3**
- PHC 6593 Professional Development in Genetic Counseling **Credit Hours: 1**
- PHC 6940 Clinical Practicum in Genetic Counseling **Credit Hours: 1-6 (3 credits for this program)**

Genomics (GEO) (6 Concentration Credit Hours)

- PHC 6601 Human Genomics in Medicine and Public Health **Credit Hours: 3**
- PHC 6597 Quantitative Genomics and Genetics **Credit Hours: 3**

Global Communicable Disease (PGD) (6 Concentration Credit Hours)

- PHC 6561 Laboratory Techniques in Public Health **Credit Hours: 3**
- PHC 6722 Laboratory Rotations in Global Health Research **Credit Hours: 3**

Maternal and Child Health (PMH) (6 Concentration Credit Hours)

- PHC 6530 Issues and Concepts in Maternal and Child Health **Credit Hours: 3**
- PHC 6537 Case Studies in MCH Programs, Policies and Research **Credit Hours: 3**

Occupational Exposure Science (OES) (8 Concentration Credit Hours)

- PHC 6356 Industrial Hygiene **Credit Hours: 2**
- PHC 6358 Physical Agents - Assessment and Control **Credit Hours: 2**
- PHC 6365C Analytical Methods in Industrial Hygiene I **Credit Hours: 2**
- PHC 6366C Analytical Methods in Industrial Hygiene II **Credit Hours: 2**

Public Health Education (PPD) (6 Concentration Credit Hours)

- PHC 6500 Theoretical and Behavioral Basis for Health Education **Credit Hours: 4**
- PHC 6412 Health Disparities and Social Determinants **Credit Hours: 3**

Electives - 18 hours minimum

All students must complete a minimum of eighteen credit hours of graduate electives. Students in the following concentrations must complete additional elective hours as noted:

5 additional hours - Behavioral Health (PBH)
3 additional hours - Environmental and Occupational Health (EOV)
9 additional hours - Epidemiology (PEY)
1 additional hours - Genetic Counseling (GTC)
3 additional hours - Genomics (GEO)
3 additional hours - Global Communicable Disease (PGD)

5 (corrected from 3) additional hours - Maternal and Child Health (PMH)
4 additional hours - Occupational Exposure Science (OES) 5 additional hours -
Public Health Education (PPD)

All elective hours must be approved by faculty mentor.

Thesis (6 Credit Hours)

- PHC 6971 Thesis: Master of Science in Public Health **Credit Hours: 2-19 (6 credits for this program)**

Comprehensive Exam

Must be registered for at least two credit hours of coursework. Thesis proposal defense may be used in lieu of the comprehensive exam.

Public Health, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 55 post master's

Level: Doctoral
CIP Code: 51.2201
Dept Code: DEA *(PUH as of Spring 2020)*
(Major/College): PPH PH
Approved: 1987

Concentrations:

Biostatistics (BST)
Community and Family Health (CFH)
Environmental and Occupational Health (EOH)
Epidemiology (EPY)
Global Communicable Disease (TCD)
Health Services Research (HPM)

Also offered as a Concurrent Degree

Contact Information

College: Public Health

Contact Information: http://www.grad.usf.edu/majors

The base of knowledge for public health comes from a variety of disciplines, ranging from social sciences to biological sciences and business, brought together by a commitment to improve the public's health. Thus, the field of public health is broad and is open to students from diverse academic disciplines including Health Sciences, Education, Engineering, Business, Communications, Mathematics, Social and Natural Sciences. Graduates are prepared for interdisciplinary focused public health professional careers as administrators, managers, educators, researchers, and direct service providers.

The College accommodates the working professional as well as the full-time student by offering late afternoon and evening classes, online course delivery, partnerships with international schools to expand options, a variety of graduate certificates, and a professional M.P.H. for experienced Health Care professionals.

Accreditation:

The College is accredited by the Council on Education in Public Health.

Major Research Areas:

Faculty major research areas are listed at: http://health.usf.edu/publichealth/index.htm

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below. Applicants to the doctoral major in Public Health must meet the following minimum criteria in order to be considered for admission. However, the meeting of these criteria per se, shall not be the only basis for admission.

- Complete both a SOPHAS application and a USF Graduate Studies Application and pay the applicable fee for each (applicants will receive a request for the $30 fee once the SOPHAS application enters the USF system).

- GRE or equivalent (GMAT, MCAT, DATE, or PCAT) required. LSAT is not accepted in Lieu of the GRE. GRE scores will be compared to applicant pool and national GRE norms.

- Applicants who have a terminal degrees such as the PhD, ScD or EdD, and those with advanced professional degrees (MD, DDS, DO, DVM, JD, PharmD, DPT) from accredited institutions and who are individually licensed in the United States in their profession may request to waive the GRE (https://usfhealth.box.com/s/ievl84vasytoc20u3s9xsw59r44fdiyk). The GRE waiver is not automatic and must be approved by the College of Public Health

- Transcripts

- Resume or curriculum vitae

- At least two formal Letters of Recommendation.

- Evidence of written/analytical skills to the College of Public Health which will take two-forms:

  - A graduate level term paper, thesis, or research paper of which the student is the sole author, publication on which the student is the first author; and

  - A detailed personal statement of less than five pages that describes why the applicant wishes to obtain a Ph.D. degree in Public Health.

Curriculum Requirements

Prerequisites
The doctoral committee or the department may require prerequisites. These courses are not included in the minimum number of hours a student needs to complete the Ph.D. and are expected to be completed early in the course of study.

Total minimum hours – 55 Credit Hours Post-Master's

Core: 13 credit hours
Concentration: 12 credit hours minimum
Electives: 12 credit hours minimum
Dissertation: 18 credit hours minimum

Public Health Core Courses (13 Credit Hours)

- PHC 7982 Introduction to Doctoral Training in Public Health **Credit Hours: 1**
- PHC 7154 Evidence-informed Public Health I **Credit Hours: 3**
- PHC 7103 Transforming Public Health Practice **Credit Hours: 3**

- PHC 7149 Practical Applications II: Public Health Leadership **Credit Hours: 1**
- PHC 7934 Writing for Scholarly Publication in Health Science **Credit Hours: 3**
- HSC 7268 Professional Foundations III: Joining the Academy **Credit Hours: 2**

Concentration Option Requirements

Students select one of the following concentrations:

Biostatistics (BST) (12 Concentration Credit Hours)

- PHC 6061 Biostatistical Case Studies and Collaboration II **Credit Hours: 3**
- PHC 7098 Generalized Linear Models **Credit Hours: 3**
- PHC 7059 Advanced Survival Data Analysis **Credit Hours: 3**
- PHC 7056 Longitudinal Data Analysis **Credit Hours: 3**

Community and Family Health (CFH) (12 Concentration Credit Hours)

- PHC 7405 Theoretical Application to Public Health Issues **Credit Hours: 3**
- PHC 7702 Advanced Public Health Research and Evaluation Methods **Credit Hours: 3**
- PHC 7704 Applied Research Methods in Community and Family Health **Credit Hours: 3**
- PHC 7152 Policy and Practice in Community and Family Health **Credit Hours: 3**

Environmental and Occupational Health (EOH) (12 Concentration Credit Hours)

- PHC 6310 Environmental Occupational Toxicology **Credit Hours: 3**
- PHC 7317 Risk Communication in Public Health **Credit Hours: 3**

And six (6) additional hours of graduate coursework selected with the Graduate Advisor

Epidemiology (EPY) (12 Concentration Credit Hours)

- PHC 6011 Epidemiology Methods II **Credit Hours: 3**
- PHC 7045 Practical Issues in Epidemiology **Credit Hours: 3**
- PHC 6081 Intermediate SAS in Epidemiology **Credit Hours: 3**
- PHC 6021 Fundamentals of Clinical Trials **Credit Hours: 3**

Global Communicable Disease (TCD) (12 Concentration Credit Hours Minimum)

Select at least six (6) credits of the following courses and six (6) additional hours of graduate coursework selected with the Graduate Advisor. Course choices should be approved following consultation with the student's committee. Course substitutions will be permitted with the student committee's approval.

- ANG 6701 Contemporary Applied Anthropology **Credit Hours: 3**
- ANG 6732 Global Health from an Anthropological Perspective **Credit Hours: 3**
- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**
- BCH 6889 Bioinformatics II **Credit Hours: 3**
- BSC 6932 Selected Topics in Biology **Credit Hours: 1-4 (3 credits for this program)** (Proteomics)

- GIS 6306 Environmental Applications of Geographic Information Systems **Credit Hours: 3**
- GIS 6038C Remote Sensing **Credit Hours: 3**
- GMS 6101 Molecular and Cellular Immunology **Credit Hours: 3-4 (3 credits for this program)**
- GMS 6110 Microbial Pathogenesis and Host-Parasite Interactions **Credit Hours: 3**
- GMS 6200C Biochemistry, Molecular and Cellular Biology **Credit Hours: 5**
- GMS 7930 Selected Topics **Credit Hours: 1-3 (2 credits for this program)** (Medical Parasitology & Mycology)
- PCB 6525 Molecular Genetics **Credit Hours: 3**
- PHC 6010 Epidemiology Methods I **Credit Hours: 3**
- PHC 6106 Global Health Program Development and Administration **Credit Hours: 3**
- PHC 6190 Public Health Database Management **Credit Hours: 3**
- PHC 6251 Disease Surveillance and Monitoring **Credit Hours: 3**
- PHC 6373 Protecting Public Health: Bioterrorism/Biodefense **Credit Hours: 3**
- PHC 6442 Global Health Applications in the Field **Credit Hours: 3**
- PHC 6511 Public Health Immunology **Credit Hours: 3**
- PHC 6512 Vectors of Human Disease **Credit Hours: 3**
- PHC 6513 Public Health Parasitology **Credit Hours: 3**
- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**
- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6 (3 credits for this program)** (Public Health GIS)
- PHC 7908 Specialized Study in Public Health **Credit Hours: 1-9 (3 credits for this program)**
- PHC 7122 Vaccinology **Credit Hours: 3**
- PHC 7935 Special Topics in Public Health **Credit Hours: 1-3 (3 credits for this program)** (Field Methods I: EcoHealth & Ecology)
- PHC 7935 Special Topics in Public Health **Credit(s): 1-3 (3 credits for this program)** (Infection Control in Developing Countries)

Health Services Research (HPM) (12 Concentration Credit Hours)

- QMB 7565 Introduction to Research Methods **Credit Hours: 3**
- QMB 7566 Applied Multivariate Statistical Methods **Credit Hours: 3**
- PHC 7936 Seminar in Health Care Outcomes Measurement **Credit Hours: 3**
- PHC 7437 Applications in Health Economics **Credit Hours: 3**

Electives (12 Credit Hours Minimum)

All students complete a minimum of 12 credit hours of electives. Students in the following concentration must take additional graduate electives as noted above in the concentration section:

Environmental and Occupational Health (EOH) - 6 additional hours
Global Communicable Disease (TCD) - 6 additional hours

Teaching
All doctoral students will demonstrate or document proficiency in teaching academic courses at the university level.

Qualifying Exam

When all required coursework is satisfactorily completed (including tools of research and prerequisites), the student must pass a comprehensive qualifying examination covering the subject matter in the major and related fields. The concentration will set the specific criteria.

The qualifying exam will comprise of a written portion and may include an oral component. The exam will cover at least three major areas including: a) Broad area of public health; b) Focus area of study; c) Research methods. The student may have no longer than 10 weeks to complete the exam upon receipt of the exam from the Doctoral Supervisory Committee. The format and duration of the qualifying exam is the responsibility of the Doctoral Supervisory Committee following consultation with the student and consistent with concentration, college, and university guidelines. The Doctoral Supervisory Committee will have up to three weeks to review the exam and determine the outcome of either Pass or Fail. No more than two attempts will be allowed for the student to take the qualifying exam and earn a Pass. If the student receives a Fail on the qualifying exam on the first attempt and the Doctoral Supervisory Committee recommends that the student complete remedial work, the second attempt at the qualifying exam must be initiated within three- months of completion of remedial work. If the student earns a Fail on the first attempt, and the Commttee determines that no remedial work is needed, the student will have a second attempt to pass which must be initiated within three months. If the student does not earn a Pass on the qualifying exam on his/her second attempt, the student will not be admitted into doctoral candidacy. After successful completion of the qualfying exam and appropriate paperwork is submitted to the Office of Graduate Studies, the student is admitted to candidacy and may register for dissertation hours.

Dissertation (18 Credit Hours)

All students must follow the University's "Guidelines for Dissertations and Theses" found at https://www.usf.edu/graduate-studies/students/electronic-thesis-dissertation/index.aspx. The Dissertation must conform to one of the following two available options per USF degree requirements. For details, consult the USF Graduate Catalog Degree Requirements Section.

Option 1: Traditional format inclusive of Part 1 Perliminary Pages, Part II Text, Part III References/Appendices, Part IV About the Author.

Option 2: Collection of articles/papers instead of chapters inclusive of Part I Preliminary Pages, Part II Collection of Articles/Papers, Part III References/Appendices.

After the Doctoral Dissertation Committee has determined that the final draft of the Dissertation is suitable for presentation, the Committee will request the scheduling and announcement of the Dissertation Defense. Consistent with USF Graduate Degree Requirements, a copy of the announcement should be sent to the USF Office of Graduate Studies and posted in a public forum preferably two weeks in advance of the defense date.

In addition, the Concentration in Biostatistics and the Concentration in Epidemiology have additional format requirements. Consult with the dissertation committee and concentration lead or information on the format options and requirements for these two concentrations.

Guidelines for student progress:
Each Ph.D. student will undergo an annual review consistent with concetration guidelines. A summary of the annual review will be provided to the student and placed in the student's advising file.

- PHC 7980 Dissertation **Credit Hours: 2-19 (18 credits for this program)** (Doctorate)

Concurrent Degree

Also available as a Concurrent Degrees

Applied Biostatistics Graduate Certificate

This program is offered fully online.

Certificate Code: **XAB**

Description

Biostatistics is the application of statistical methods to scientific research in health-related fields, including medicine, nursing and public health. Biostatisticians play essential roles in designing studies, analyzing data using biostatistical methodology, and developing new methods to solve challenging research problems. This graduate certificate of applied biostatistics program is a good choice for students who want to acquire data-analysis skills and a greater knowledge of biostatistics. Such gains of skill are useful in fields such as public health, medicine, nursing, business, education, engineering and other related areas. Upon completion of the program, the acquired skills can be applied immediately in the workplace, making the graduates more valuable problem solvers for their organizations.

Course Location/Delivery

The Certificate is offered at the Tampa campus and fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

Quantitative skills as demonstrated by previous courses in algebra or equivalent.

Curriculum Requirements (14 Credit Hours)

- PHC 6756 Population Assessment: Part 1 **Credit Hours: 5**
- PHC 6051 Biostatistics II **Credit Hours: 3**
- PHC 6053 Categorical Data Analysis **Credit Hours: 3**

And select one of the following:

- PHC 6701 Computer Applications for Public Health Researchers **Credit Hours: 3**
- PHC 6010 Epidemiology Methods I **Credit Hours: 3**

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is two years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Assessing Chemical Toxicity and Public Health Risks Graduate Certificate

This program is offered fully online.

Certificate Code: XAR
Approved 201801

Description

The online Assessing Chemical Toxicity and Public Health Risks Graduate Certificate is designed to introduce post-baccalaureate students to fundamental concepts in the discipline of chemical toxicity and public health risks as they are applied in related professions. This certificate program will advance the knowledge of current professionals in fields related to occupational health and environmental health, and will prepare students with the intention of pursuing a graduate level degree in these fields. Students will apply concepts in chemistry, toxicology and hazardous materials to issues of occupational and environmental health regulations, hazardous materials safety, chemical related illness, and risk analysis.

Course Location/Delivery

The Certificate is offered fully online

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Applicants must hold a bachelor's degree in a science-based field (e.g. life science, natural science, and engineering) from a regionally accredited institution with a minimum 3.0 GPA.

Application Process

To learn about the application process, and to access the application, please review our **application process**.

Pre-Requisites

One course in college level chemistry.

Curriculum Requirements (13 Credit Hours)

- PHC 6353 Environmental and Occupational Health Risk Assessment **Credit Hours: 3**
- PHC 6373 Protecting Public Health: Bioterrorism/Biodefense **Credit Hours: 3**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**

Hazardous Materials of the Workplace (3 Credit Hours)

- PHC 7931 Advanced Interdisciplinary Seminar in Public Health **Credit Hours: 1-3**

Case Studies in EOH (3 Credit Hours)
Seminar (1 Credit Hour)

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is two years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Biostatistics Graduate Certificate

This program is offered partially online.

Certificate Code: XBS
Approved 200608

Description

The Graduate Certificate in Biostatistics provides students with an understanding of the basic Biostatistics concepts and the technical tools to analyze health related data appropriately. This certificate program will meet and surpass the needs of many of the health, biological and related programs across the University that require one or two statistics courses. At the same time the students in this certificate program will gain a solid analytical background for future research and employment prospects in the medial and health fields.

Course Location/Delivery

This graduate certificate curriculum is offered at the Tampa campus and partially online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

- Bachelor's degree from a regionally accredited institution or its U.S. equivalent, in any health, engineering, mathematics or related field with a minimum 3.0 GPA.
- International students must provide a certified copy of their transcripts showing equivalency.
- In addition applicants must have quantitative skills equivalent to college level algebra, calculus is recommended. Introductory skills equivalent to PHC 6050 (Biostatistics I) are also required.

Application Process

To learn about the application process, and to access the application, please review our **application process**.

Pre-Requisites

- College Algebra ; Calculus required for some electives
- Biostatistics I or equivalent
- PHC 6000 for some electives

Curriculum Requirements (15 credit hours)

- PHC 6051 Biostatistics II **Credit Hours: 3**
- PHC 6053 Categorical Data Analysis **Credit Hours: 3**

And choose three additional courses (9 hours) from the list below:

- PHC 6060 Biostatistical Case Studies and Collaboration I **Credit Hours: 3**
- PHC 6057 Biostatistical Inference I **Credit Hours: 3**
- PHC 6020 Clinical Trials: Design, Conduct, and Analysis **Credit Hours: 3**
- PHC 6701 Computer Applications for Public Health Researchers **Credit Hours: 3**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**

Design and Analysis of Experiments for Health Researchers (3 Credit Hours) (proposed HSC 6054)

- HSC 6055 Survival Analysis **Credit Hours: 3**
- HSC 6056 Survey Sampling Methods in Health Sciences **Credit Hours: 3**

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is nine semesters.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits (with a grade of B or above) may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Concepts & Tools of Epidemiology Graduate Certificate

This program is offered fully online.

Curriculum Code: **XCP**

Description

The online Graduate Certificate in Epidemiology is designed to combine basic training in epidemiologic concepts and methods with specialized training in epidemiologic disease areas and analytic/data skills. Required coursework provides an overview of basic epidemiologic concepts, methods and analytic/statistical tools while the electives provide more in-depth training in several epidemiologic specialty areas and the development of skills in data analysis/computer applications. The goal of the certificate is to provide students with an understanding of concepts and tools of epidemiology and in-depth knowledge of selected disease areas of public health importance.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Yes

Requirements of this Certificate (12 Credit Hours)

- PHC 6010 Epidemiology Methods I **Credit Hours: 3**
- PHC 6051 Biostatistics II **Credit Hours: 3**
- PHC 6701 Computer Applications for Public Health Researchers **Credit Hours: 3**

Electives

Consult Dept.

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Disaster Management Graduate Certificate

This program is offered fully online.

Curriculum Code: **XDM**

Description

The Graduate Certificate in Disaster Management is designed to enhance the knowledge base of public health professionals, as well as other disaster management personnel, in the management, preparedness, response, and recovery from natural and man-made disasters. The design of the certificate engages the student in critical thinking skills that enable them to reduce the health complexities of disasters. The certificate is also designed to increase the managerial and leadership skills of public health professionals working with large populations after a disaster (i.e., refugee and displaced populations).

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Yes

Requirements of this Certificate (12 Credit Hours)

- PHC 6183 Overview of United States and International Emergency/Disaster Management **Credit Hours: 3**
- PHC 6185 Emergency/Disaster Preparedness and Planning **Credit Hours: 3**
- PHC 6184 Emergency/Disaster Recovery **Credit Hours: 3**
- PHC 6186 Public Health Emergencies in Large Populations (PHLEP) **Credit Hours: 3**
- PHC 6945 Supervised Field Experience **Credit Hours: 1-12**

Electives

None

Time Limit

3 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Epidemiology of Infectious Diseases Graduate Certificate

This program is offered partially online.

Certificate Code: XEI
Approved: 201208

Description

This online Graduate Certificate in Epidemiology of Infectious Diseases creates an in depth training in epidemiologic methods and their application to the study, control and prevention of infectious diseases as well as basic training in biostatistical concepts, to help students understand and interpret the statistical methods used by epidemiologist. Focus will be on the application of methods such as study design, surveillance, GIS, vaccination strategies, etc. as applied to infectious diseases.

This certificate is unique because it will provide not only the knowledge and understanding of the epidemiology of infectious diseases, but will also provide the necessary tools to be applied in the field.

Course Location/Delivery

The Certificate is offered online and at the Tampa campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Pre-Requisites

- History and Systems (1 credit)
- Population Assessment I (5 credits)

Or the two following Graduate level courses:

- Epidemiology (3)
- Biostatistics (3)

Curriculum Requirements (12 Credit Hours)

- PHC 6002 Infectious Disease Epidemiology **Credit Hours: 3**
- PHC 6006 Epidemiological Methods in Infectious Diseases **Credit Hours: 3**

- PHC 6010 Epidemiology Methods I **Credit Hours: 3**

And one of the following:

- PHC 6251 Disease Surveillance and Monitoring **Credit Hours: 3**
- PHC 6517 Infectious Disease Prevention Strategies **Credit Hours: 3**
- PHC 6562 Microbiology for Healthcare Workers **Credit Hours: 3**

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is two years.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Global Health & Latin American and Caribbean Studies Graduate Certificate

Certificate Code: XGH Approved
200808

Description

This certificate is intended to create a unique interdisciplinary professional training experience for students interested in Global Health issues among Latin American and Caribbean populations. Within the field of Public Health in Latin America and the Caribbean, its particular focus is on public health assessment strategies, which encompass the systematic collection, assembling, and analysis of health data to illustrate an area's health situation. Through this graduate certificate program, students will be exposed to current challenges facing Latin America and the Caribbean and reach an understanding of the way global public health issues unfold in the region. Students will learn key methodological approaches for assessing public health issues among Latin American populations. This graduate joint program will train students to understand and deal with the economic, political, social and cultural processes that affect public health among Latin American populations. Graduates might be prepared to find jobs within American institutions like USAID or CDC dealing with health issues in Latin America, or international organizations like the Panamerican Health Organization, WHO and national institutions within the region.

Course Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Background and/or demonstrated interest in health issues and/or in Latin America and the Caribbean is required, in terms of course work in the transcripts, relevant travel to the region or working with institutions dealing with the region. Students lacking this background might be required to take pre-requisite courses that will be decided by the advisors to establish a basic foundation for this program.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

- LAS 6936 Seminar in Latin American Studies I **Credit Hours: 3**

Development and Democracy Building in Latin America (3 Credit Hours)
Globalization, the Environment and Agency in Latin America (3 Credit Hours)

- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**
- LAS 6913 Independent Study and Research in Latin American **Credit Hours: 1-9**
- PHC 6907 Independent Study: Public Health **Credit Hours: 1-6**

Student will divide the remaining 6 credit hours as suggested by the program advisor, according to the background course work they have in either Latin American & Caribbean Studies or in Global Health.

- SPW 5934 Selected Topics **Credit Hours: 3**

Cuban Culture (3 Credit Hours)

- HUM 6465 Studies in American Arts and Letters II **Credit Hours: 3**

Latin American Art and Letters (3 Credit Hours)

- SPN 5525 Modern Spanish American Civilization **Credit Hours: 3**
- ANG 5937 Seminar in Anthropology **Credit Hours: 2-4**

Mexico and Central America (3 Credit Hours)

- HIS 6925 Colloquium in History **Credit Hours: 3**

Modern Latin America (4 Credit Hours)

- ANG 6115 Seminar in Archaeology **Credit Hours: 3**

The Ancient Maya (3 Credit Hours)

- CPO 5934 Selected Topics in Comparative Politics **Credit Hours: 3**

Democracy in Latin America (3 Credit Hours)

- PHC 6186 Public Health Emergencies in Large Populations (PHLEP) **Credit Hours: 3**
- PHC 6110 International Health and Health Care Systems **Credit Hours: 3**
- PHC 6430 Health Economics I **Credit Hours: 3**
- PHC 6412 Health Disparities and Social Determinants **Credit Hours: 3**
- PHC 6230 Foundations of Humanitarian Assistance **Credit Hours: 3**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**

Assessment Strategies in Latin America (4 Credit Hours)

- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6106 Global Health Program Development and Administration **Credit Hours: 3**

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is three years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Global Health Practice Graduate Certificate

Certificate Code: XGP
Approved 201001

Description

The certificate is a cluster of four courses in global health practice and one international field course. The cluster is the concentration area of the MPH in Global Health Practice. The fifth course is taught by faculty from the College of Public Health who are leading researchers or health professionals in a particular resource poor country or region. Examples of field sites include China, India, Dominican Republic, Ecuador, Belize, Liberia, Malaysia, Western Africa and Eastern Europe.

Course Location/Delivery

Four of the courses are taught in the evenings at the USF Tampa College of Public Health. One course is a field course taught in-country.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

A bachelor's degree is Public Health from a regionally accredited institution is preferred, but other majors will be considered.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (15 Credit Hours)

- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**
- PHC 6106 Global Health Program Development and Administration **Credit Hours: 3**
- PHC 6442 Global Health Applications in the Field **Credit Hours: 3**
- PHC 6766 Global Health Challenges: In-Country Case Study (Field Course) **Credit Hours: 3**

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is three years.

Credit Toward Graduate Degree

Up to 12 credit hours of certificate related courses may be applied toward a master's degree, contingent upon departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Health and Wellness Coaching Graduate Certificate

College: Public Health
Curriculum Code: XHW

Delivery: on campus and face-to-face.
Description

This Certificate program is intended to train graduate students and healthcare providers to meet the requirements for certification as a Health & Wellness Coach. Certification will enable the student to provide Health & Wellness Coaching in a number of various healthcare organizations. The required courses will present the frameworks, methods, and skills necessary to met required competencies for credentialing.

Location/Delivery

Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

- Suggested/preferred undregraduate majors: physical education, exercise science, public health, psychology, health education, anthropology

Application Process

In addition to the application, please submit:

- Graduate Certificate Department Approval form (Print, sign, and submit this form with all other documents to our office)
- Official Transcripts
- a Resume
- Letter of Interest

Time Limit

Average time for completion is three semesters.

Credit toward Graduate Degree

Up to 9 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Prerequisites

None

Curriculum Requirements (9 credit hours)

- PHC 6587 Health & Wellness Coaching: Advanced Methods **Credit Hours: 3**
- PHC 6589 Health & Wellness Coaching: Core Principles **Credit Hours: 3**

- PHC 6942 Health & Wellness Coaching: Practicum **Credit Hours: 3**

Contact

Contact Information: http://www.grad.usf.edu/cert

Health Management & Leadership Graduate Certificate

This program is offered fully online.

Curriculum Code: **XHM**

Description

This certificate is designed to serve persons who want to enhance their knowledge and potential to pursue management and leadership positions in health services. It furthers an understanding of health system organization and financing, health policy, managed care and insurance, and management decision-making.

Course Location/Delivery

Campus & Downtown Center

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- PHC 6435 Comparative Health Insurance Systems **Credit Hours: 3**
- PHC 6180 Health Services Management **Credit Hours: 3**
- PHC 6181 Organizational Behavior in Health Services **Credit Hours: 3**

Electives

Consult Dept

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Health, Safety and Environment Graduate Certificate

This program is offered fully online.

Certificate Code: XHH
Approved 201505

This Certificate program is intended to appeal to experienced working professionals anywhere in the world who seek to broaden their understanding of the interrelatedness of the areas of health, safety and environment. The required courses will present the fundamental of HSE and address topics that include basics of the persistent worldwide issues of air and water quality, solid and hazardous wastes, worker safety, legal requirements, and effective management. The impact of health, safety and the environment topics will be addressed for developed and less developed countries.

Location/Delivery
The Certificate is offered fully online

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. Suggested/preferred undergraduate majors: environmental science, engineering, biology, public health.

Application Process

To learn about the application process, and to access the application, please review our application process.

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is two years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Pre-Requisites

None.

Curriculum Requirements (15 Credit Hours)

- PHC 6307 Principles of Exposure Assessment & Control **Credit Hours: 3**
- PHC 6300 Principles of Environmental Health **Credit Hours: 3**
- PHC 6325 Environmental Laboratory Principles **Credit Hours: 3**

- PHC 6345 HSE Management & Administration **Credit Hours: 3**
- PHC 6326 Global Issues in Environmental Health **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Homeland Security Graduate Certificate

This program is offered fully online.

Certificate Code: XHS
Approved 200501

The Graduate Certificate in Homeland Security has been developed to provide credentialing for the Homeland Security profession. The intent is to prepare local, state and federal Homeland Security leaders to:

- Develop strategies, plans and programs
- Develop organizational arrangements including civil-military, local/state/federal and interagency cooperation
- Make sound leadership decisions regarding Homeland Security related policy, priority, scientific advancements and resources

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.A bachelor's degree in public health is preferred, but others will be considered.

Application Process

To learn about the application process, and to access the application, please review our application process.

- Official transcripts
- A resume
- Letter of interest including overview of experience or education in public health, global issues or resource poor countries

Pre-Requisites

None.

Curriculum Requirements (15 Credit Hours)

- PHC 6235 Critical Infrastructure Protection for Public Health Concepts **Credit Hours: 3**
- PHC 6236 Business Continuity for Global Health and Security **Credit Hours: 3**
- PHC 6254 Public Health Implications and Concerns in Homeland Security **Credit Hours: 3**
- PHC 6255 Homeland Security: Law, Policy and Public Health **Credit Hours: 3**
- PHC 6373 Protecting Public Health: Bioterrorism/Biodefense **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Humanitarian Assistance Graduate Certificate

This program is offered fully online.

Certificate Code: XHA
Approved 200601

The Graduate Certificate in Humanitarian Assistance is intended for public health professionals, as well as other humanitarian aid providers, who are interested in enhancing their knowledge of the foundations and principles of humanitarian assistance, while providing mechanisms for putting that knowledge into practice. This certificate is designed to supplement and enhance the work related experiences of professionals who are serving those affected by humanitarian emergencies, either in the United States or abroad, while also providing a foundation for persons who wish to pursue such a career. The Certificate aims to engage students in critical thinking skills, enabling them to help develop more effective aid delivery systems.

The Certificate is also intended to enhance the leadership and management skills for public health professionals working with populations in need of humanitarian assistance, particularly international refugees and displaced populations. The curriculum is interdisciplinary in nature and scope and designed to develop and improve the skills of persons interested in providing emergency health services in humanitarian emergencies.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

The approximate time to complete the Certificate is four years.

Pre-Requisites

Courses are sequenced. Each course listed below is the prerequisite for the one following it.

Curriculum Requirements (12 Credit Hours)

- PHC 6230 Foundations of Humanitarian Assistance **Credit Hours: 3**

- PHC 6231 Organizing Emergency Humanitarian Actions **Credit Hours: 3**
- PHC 6232 From Emergency to Development and Prevention **Credit Hours: 3**
- PHC 6233 Current Challenges in the Humanitarian Field **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Infection Control Graduate Certificate

This program is offered fully online.

Certificate Code: XIC
Approved 199908

The Graduate Certificate in Infection Control enhances the knowledge base of post-baccalaureate nurses, medical technologists, microbiologists, or other health professionals employed as infection control practitioners. The director is certified in infection control (CIC) and brings over 20 years of infection control experience to administer this program. The design of the certificate encourages critical thinking skills that build competency for infection control professionals and provides managerial skills for effective infection control practice. The courses in the certificate program provide a comprehensive knowledge base to prepare students for the Certification Board of Infection Control and Epidemiology (CBIC) examination. (Note: specific infection control practical experience requirements must be met to sit for the CBIC exam).

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. The applicant must hold an earned bachelor's degree from a regionally accredited institution in nursing, medicine, microbiology or one in a related environmental or occupational health field. Appropriate work experience is required.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Per University Policy, all Certificates have a five year time limit; however, it is possible to complete the certificate in one year if two courses are taken in the fall semester.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

- PHC 6562 Microbiology for Healthcare Workers **Credit Hours: 3**
- PHC 6517 Infectious Disease Prevention Strategies **Credit Hours: 3**
- PHC 6314 Infection Control Program Design **Credit Hours: 3**
- PHC 6251 Disease Surveillance and Monitoring **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Maternal & Child Health Graduate Certificate

This program is offered fully online.

Curriculum Code: **XMR**

Description

The certificate in maternal and child health (MCH) is designed to provide specialized training in public health problems affecting infants, children, adolescents, and women of all ages. Required coursework is designed to overview the major health issues affecting MCH populations, develop methodological skills selected areas, such as data analysis, program planning and evaluation and research. Support courses allow students to focus some of their coursework in selected areas of MCH interest.The certificate program has been developed for the following groups: 1) Public health practitioners 2) MPH students who desire focused graduate level training in MCH.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

Letter of Intent

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

- PHC 6530 Issues and Concepts in Maternal and Child Health **Credit Hours: 3**

Select 1:

- PHC 6708 Evaluation Methods in Community Health **Credit Hours: 3**
- PHC 6505 Program Planning in Community Health **Credit Hours: 3**
- PHC 6197 Secondary Data Analysis in Maternal and Child Health **Credit Hours: 3**
- PHC 6715

Electives

Time Limit

2 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Pharmacoepidemiology Graduate Certificate

Certificate Code: XPED
Approved 201808

The USF College of Public Health certificate in Pharmacoepidemiology is designed to enable students to acquire the necessary skills to provide evidence based solutions. Students will be required to take requisite courses with an applied/hands on approach that will culminate with an introductory course in Pharmacoepidemiology.

Pharmacoepidemiology is a burgeoning field of life sciences that studies the use and effect of drugs in the population. In collaboration with local organizations, students will gain experience in pharmacovigilance, adverse event reporting systems, regulatory requirements, biases most common in Pharmacoepidemiology, analysis, and industry standards.

Location/Delivery

USF Tampa - College of Public Health

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. BS Pharm or other relevant Bachelor's degree

Application Process

To learn about the application process, and to access the application, please review our application process. In addition to your completed application form, transcripts, resume and letter of interest are required.

Credit Toward Graduate Degree

Should a graduate certificate student subsequently apply and be accepted to a degree-granting program, the University's Transfer of Credit Policy applies. It is up to the Program to determine the number of credits that may be transferred in from the Graduate Certificate into the Graduate Program, up to the limits specified in the Transfer of Credit policy. Any application of such credit must be approved by the degree-granting college and must be appropriate to the program. See the Transfer of Credit Policy for more information.

Time Limit / Average time to Completion

Five Years

Pre-Requisites

- PHC 6000 Epidemiology **Credit Hours: 3**

OR

- PHC 6050 Biostatistics I **Credit Hours: 3**

OR

- PHC 6756 Population Assessment: Part 1 **Credit Hours: 5**

- PHC 6701 Computer Applications for Public Health Researchers **Credit Hours: 3**

Curriculum Requirements (12 Credit Hours)

- PHC 6043 Trending Topics in Pharmacoepidemiology and Pharmacoeconomics **Credit Hours: 3**
- PHC 6042 Methods in Pharmacoepidemiology **Credit Hours: 3**
- PHC 6010 Epidemiology Methods I **Credit Hours: 3**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**

Application in Advanced Biostatistical Methods (3 Credit Hours)

Contacts

Contact Information: http://www.grad.usf.edu/cert

Public Health Generalist Graduate Certificate

This program is offered fully online.

Certificate Code: XPU
Approved 200601
This certificate program aims at serving the following groups:

- Students who are undecided about a specific concentration area in the College of Public Health.
- Students who are only interested in completing a few courses, not an MPH.
- Physicians or nurses who want to explore public health.
- Public health professionals who want additional graduate-level credentials.

This Public Health Generalist certificate is an attempt to facilitate and encourage formal training not only for our public health workforce, but also for other professionals interested in the future of our profession. This certificate consists of five core courses, representing the five essential core areas of public health as well as our five academic departments. Once obtained, this certificate allows the individual to continue in a chosen track if departmental criteria for admission are met, while receiving up to 12 hours of credit toward a graduate degree for the core courses completed and passed. This certificate program helps students gain an overview of the core disciplines and allows them to explore and discover some exciting career paths.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process. In addition to your completed application form, transcripts, resume and letter of interest, you will need to submit the following documents:

- Two letters of recommendation

Credit Toward Graduate Degree

Up to 12 credit hours of certificate related courses may be applied toward a master's degree, contingent upon departmental approval. However, admission requirements for the College and the Department, such as a GRE score and letters of recommendation, must first be met.

Time Limit / Average time to Completion

The approximate time to complete the Certificate is three years.

Pre-Requisites

Students must have consent of the instructor to take courses.
Prerequisite for PHC 6050 is College Algebra

Curriculum Requirements (12 Credit Hours)

- PHC 6588 History and Systems of Public Health **Credit Hours: 1**

- PHC 6756 Population Assessment: Part 1 **Credit Hours: 5**
- PHC 6757 Population Assessment: Part 2 **Credit Hours: 3**
- PHC 6145 Translation to Public Health Practice **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Public Health Policy & Programs Graduate Certificate

This program is offered fully online.

Curriculum Code: **XPH**

Description

This certificate is designed to serve persons who want to enhance knowledge and skills in public policies, use of public health data, and program management that advance the health of communities and populations, and who may not be available in the local community to do so.

Course Location/Delivery

Online, Campus (Sarasota)

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- PHC 6063 Public Health Data, Information and Decision Making **Credit Hours: 3**
- PHC 6146 Health Services Planning and Evaluation **Credit Hours: 3**
- PHC 6421 Public Health Law and Ethics **Credit Hours: 3**

Electives

Select 1:

- PHC 6104 Management of Public Health Programs **Credit Hours: 3**
- PHC 6147 Managing Quality in Health Care **Credit Hours: 3**
- PHC 6435 Comparative Health Insurance Systems **Credit Hours: 3**
- or other w/ director consent

Time Limit

3 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Social Marketing & Social Change Graduate Certificate

This program is offered fully online.

Curriculum Code: **XSP**

Description

The Graduate Certificate in Social Marketing is offered to graduate students and professionals who wish to develop the skills needed to develop, implement, and evaluate social marketing programs. The certificate coursework emphasizes translation of theory and evidence-based practice into community applications. The University of South Florida, College of Public Health, has been a leader in social marketing in public health for over 20 years.The certificate program was developed to meet the training needs of graduate students and professionals from multiple disciplines including public health, healthcare, mass communications, environmental studies, anthropology, social work, engineering, and business. Out- of- state and international learners are welcome in the certificate program.USF hosts the International Social Marketing conference and Training Academies bi-annually. USF also has the distinction of being a CDC funded Prevention Research Center, of which there are 26 in the country. The Florida Prevention Research Center uses community based prevention marketing to reduce health disparities.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

Current graduate enrollment, or 15 hrs in master's level program OR B.S. w/ min. 3 yrs. Professional exp.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

- PHC 6411 Introduction to Social Marketing for Public Health **Credit Hours: 3**
- PHC 6705 Formative Research Methods in Social Marketing **Credit Hours: 3**
- PHC 6460 Social Marketing Program Management **Credit Hours: 3**
- PHC 6461 Advanced Social Marketing **Credit Hours: 3**

Electives

Time Limit

5 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Toxicology Graduate Certificate

This program is offered fully online.

Certificate Code: XTO
Approved 201808

This online Graduate Certificate in Toxicology is designed to introduce post-baccalaureate students to fundamental concepts in the discipline of toxicology. This certificate program will advance the knowledge of current professionals in fields related to occupational health and environmental health, and will prepare students with the intention of pursuing a graduate level degree in these fields. Students will apply concepts in the science of toxicology to issues of occupational and environmental health regulations, hazardous materials safety, chemical related illness, and exposure assessment.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. Applicants must hold a bachelor's degree in a science-based field (e.g. life science, natural science, and engineering).

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

The approximate time to complete the Certificate is two years.

Pre-Requisites

One course in college level chemistry.

Curriculum Requirements (14 Credit Hours)

- HSC 6556 Pathobiology of Human Disease I **Credit Hours: 3**
- PHC 6310 Environmental Occupational Toxicology **Credit Hours: 3**
- PHC 6369 Industrial Toxicology **Credit Hours: 2**
- PHC 6325 Environmental Laboratory Principles **Credit Hours: 3**
- PHC 6307 Principles of Exposure Assessment & Control **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Translational Research in Adolescent Behavioral Health Graduate Certificate

This program is offered fully online.

Curriculum Code: **XTR**

Description

This certificate program, funded by the National Institute on Drug Abuse of the National Institute of Health under award number R25DA031103, will provide an innovative education program in translational research, merging the skills and experience of USF academic researchers, local community service providers and national experts. The Department of Child & Family Studies at the USF College of Behavioral & Community Sciences, the Center for Health Equity Research at Northern Arizona University (NAU), the Department of Community & Family Health at the USF College of Public Health, and Community Collaborating Partners that span a range of services relevant to child and adolescent drug abuse and mental health, will work together to provide advanced training in translational research and the implementation of evidence-based practices in the areas of alcohol, drug abuse, and co-occurring disorders. Developed as a research education project, the Institute for Translational Research Education in Adolescent Drug Abuse will provide a team mentoring approach with student researchers and professionals in the field. Paired with local and national experts serving as mentors, students and professionals will work together in developing an applied research study and then presenting the results at the Annual National Research & Policy Conference on Child, Adolescent, & Young Adult Behavioral Health held in Tampa, FL.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

M.S. or Enrolled in M.S./Ph.D. in areas of mental health, behavioral health, public health, social work, nursing, or ed, or wk full time in behavioral health community agency

2 letters of recommendation

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (15 Credit Hours)

- PHC 6539 Foundations in Adolescent Behavioral Health **Credit Hours: 3** (Spring semester)

- PHC 6728 Translational Research Methods in Adolescent Behavioral Health **Credit Hours: 3** (Summer semester)
- PHC 6946 Service Learning in Adolescent Behavioral Health I **Credit Hours: 2** (Summer semester)
- PHC 6729 Advanced Research Education in Adolescent Behavioral Health **Credit Hours: 3** (Fall semester)
- PHC 6947 Service Learning in Adolescent Behavioral Health II **Credit Hours: 2** (Fall semester)
- PHC 6948 Service Learning in Adolescent Behavioral Health III **Credit Hours: 2** (Spring semester)

Electives

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Water, Health and Sustainability Graduate Certificate

Certificate Code: XWA
Approved 200901

The graduate certificate in Water, Health and Sustainability is intended for public health professionals, humanitarian aid providers, engineers and other planners, or anyone with an interest in addressing critical shortages and health problems associated with inadequate and unsanitary water throughout the world. The coursework is designed to provide instruction in the testing, treatment and management of water supplies; the role of water resources within the broader context of the earth's environment, particularly from a sustainability perspective; the role of water as a crucial component to global health; and the cultural dimensions of local and global health. As a result, the curriculum is highly interdisciplinary and aims to provide the skills and information necessary to address complex problems associated with water, sanitation, sustainability and health impacts to form teams that bring together many specialties. This certificate is particularly unique in that it draws from several disciplines within the colleges of Arts & Sciences, Engineering and Public Health, ensuring that its participants are very well prepared to think critically about these issues and address them using novel approaches.

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

The approximate time to complete this Certificate is three years.

Pre-Requisites

None.

Curriculum Requirements (16 Credit Hours)

Contact advisor to set up course plan.

- CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4** (1 Credit Hour)

And select nine (9) Credit hours from:

- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**

Foundations of Medical Anthropology (3 Credit Hours)

- ANG 6585 Theories in Applied Bioanthropology **Credit Hours: 3**

CGN 6933 taken as Green Infrastructure for Sustainable Communities (3 Credit Hours)

- ECH 5785 Sustaining the Earth: An Engineering Approach **Credit Hours: 3**
- PHC 6761 Global Health Assessment Strategies **Credit Hours: 3**
- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**

Water Pollution and Treatment (3 Credit Hours)

- ENV 6510 Sustainable Development Engineering **Credit Hours: 3**

And select 6 Credits from the following:

- ANG 6731 Health and Disasters **Credit Hours: 3**
- ANG 6739 Applied Anthropology and International Health **Credit Hours: 3**
- ECH 5786 Green Engineering **Credit Hours: 3**
- ECH 5748 Selected Topics in Biomedical Engineering **Credit Hours: 1-3**

Living in the Environment: An Integrated Approach (3 Credit Hours)

- ENV 6519 Physical and Chemical Processes for Groundwater Remediation **Credit Hours: 3**
- ENV 6666 Aquatic Chemistry **Credit Hours: 3**
- EVR 6216 Advances in Water Quality Policy and Management **Credit Hours: 3**
- GEO 6286 Advances in Water Resources **Credit Hours: 3**
- PHC 6764 Global Health Principles and Contemporary Issues **Credit Hours: 3**
- PHC 6183 Overview of United States and International Emergency/Disaster Management **Credit Hours: 3**
- PHC 6514 Infectious Disease Control in Developing Countries **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Women's Health Graduate Certificate

Return to: Graduate Majors (A-Z)
Return to: Graduate Certificates

Certificate Code: XWH
Approved 200408

This certificate is offered to enhance knowledge, research and policy in women's health. The certificate is interdisciplinary in nature because by definition, the field of women's health encompasses the physical, mental and emotional aspects of health. These varied aspects of women's health cannot be well represented by just one discipline, either in the health or social sciences, or the humanities.

The certificate is offered to a variety of groups: graduate students in the health and social sciences, as well as experienced professionals in the health sciences and social services, health educators, social workers and others who wish to develop the skills needed to evaluate and utilize findings in women's health research, as well as articulate the varied aspects of women's health issues. The certificate program is organized through a group of course tracks designed to offer professional and research-based options within the various disciplines. Each track has 5 courses with 3 additional options for electives. Applicants for the certificate should contact Ellen Daley, Ph.D. to discuss the various tracks in order to identify the most appropriate for their individual interests and skills. Signatures from two faculty members, Dr. Daley and an additional advisor from the College of Arts and Sciences, are required for each person's plan of study. The specialized tracks offered through the Women's Health Graduate Certificate are:

Track 1: Teaching Women's Health Courses in the Health Sciences
Track 2: Teaching Women's Health and/or Sexuality Courses in Arts and Sciences
Track 3: Community-based Organizations/Social Service Agencies
Track 4: Advocacy/Policy
Track 5: Women's Physical Wellness/Health Promotion
Track 6: Teaching Women's Health Courses in the Diverse Populations
Track 7: Teaching Women's Health Courses to At-Risk Women's Populations
Track 8: Women's Health Research (qualitative)
Track 9: Women's Health Research (quantitative)

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

The approximate time to complete the Certificate is four semesters.

Pre-Requisites

None

Curriculum Requirements (15 Credit Hours)

All students are required to take one 3-hour core course and one 3-hour research course. The required core course is:

- PHC 6532 Women's' Health Issues in Public Health **Credit Hours: 3**

Required research courses - Select One:

- PHC 6934 Selected Topics in Public Health **Credit Hours: 1-6**

Foundations of Research in Public Health (3 Credit Hours) - Track 1, Track 5, Track 9

- WST 6001 Feminist Research and Methodology **Credit Hours: 3** Track 2
- CCJ 6705 Research Methods in Criminology **Credit Hours: 3-4** (Qualitative Research Methods) Track 3
- COM 6025 Health Communication **Credit Hours: 3** Track 4
- PHC 6193 Qualitative Methods in Community Health Research **Credit Hours: 3** Track 6
- SYA 6315 Qualitative Research Methods **Credit Hours: 3** Track 7
- SYA 6933 Special Topics-Sociology **Credit Hours: 3**

Feminist Issues, Research and Methodology (3 Credit Hours) Track 8

And select three courses from the following:

SYA 6933 - Taken as Sexualities (3 Credits) Tracks 1, 2, 6

- PHC 6414 Adolescent Health **Credit Hours: 3** Track 1, 3, 5

PHC 6934 taken as Reproductive Trends and Issues (3 Credits) Tracks 1, 2

- WST 6562 Body Politics **Credit Hours: 3** Tracks 1,2,4,5
- WST 6936 Selected Topics in Women's Studies **Credit Hours: 3** The Response of Women to Illness and Health (3 Credit Hours) Track 1*
- WST 5934 Selected Topics **Credit Hours: 1-4** Gender, Race, Sexuality and Mental Health (3 Credit Hours) Track 2,3,5,6,7
- PHC 6413 Family and Community Violence in Public Health **Credit Hours: 3** Track 3,7
- ANG 6198 Regional Problems in Methods of Public Archaeology **Credit Hours: 3** Track 3,6,7,8
- MHS 6494 Women's Mental Health **Credit Hours: 3** * Track 3

PHC 6934 - Aging and Women's Health: Issues in Chronic Illness (3 Credit Hours)* Track 3,4

- PHC 6537 Case Studies in MCH Programs, Policies and Research **Credit Hours: 3** Track 4,9
- NGR 7905 Directed Readings **Credit Hours: 1-6** Physical and Cultural Aspects of Menopause; Political Control of Reproduction (3 Credit Hours)* Track 4,8

PHC 6934 - Gender and Health issues in Public Health (3 Credit Hours) Track 4,8

- PHC 6530 Issues and Concepts in Maternal and Child Health **Credit Hours: 3** Track 5

MED XXXX - Women's Health electives (4th year Med students and residents) (3 Credit hours)* Track 5

WST XXXX - Women and Sexuality (3 Credit hours)* Track 5

- ANG 6463 Social Epidemiology Applied Anthropology **Credit Hours: 3** Track 6,8

WST XXXX - Women's Health Perspectives from the Healing Sciences (3 Credit Hours)* Track 6

- ANG 6469 Selected Topics in Medical Anthropology **Credit Hours: 3**

HIV/AIDS (3 Credit Hours)* Track 6,7,9

PHC 6934 - Seminars in Women's Mental Health Issues (3 Credit Hours)* Track 7

SYA 6933 Sociology of Gender (3 Credits)* Track 8,9

- PHC 6591 Reproductive and Perinatal Epidemiology **Credit Hours: 3** Track 9
- GMS 6807 Epidemiology of Women's Health **Credit Hours: 3** Track 9

Contacts

Contact Information: http://www.grad.usf.edu/cert

TA - Updates for 2019-2020

The USF Graduate Council approved the following on the date noted.

Majors			
Architecture	M.Arch.	Change curriculum for compliance	11/4/18
Art	M.F.A.	Non-Substantive changes	3/4/19
Art History	M.A.	Change curriculum for compliance	3/4/19

College of The Arts

TA - Updates for 2019-2020

TA - Programs

University of South Florida
College of The Arts
4202 E. Fowler Ave FAH110
Tampa, FL 33620

Web address: http://www.arts.usf.edu/
Email: info@arts.usf.edu
Phone: 813-974-2301
Fax: 813-974-2091

College Dean: James S. Moy, Ph.D.
Associate Dean: Barton Lee

Mission Statement:

The mission of the USF College of The Arts is to conduct scholarly and creative research and to challenge and inspire students to make significant contributions in the arts. The College provides a learning environment that is engaged locally and nationally in contemporary issues and initiatives. The College offers graduate degree programs in Architecture, Art, Art History, Music, Music Education, and Urban and Community Design, as well as graduate certificates and advanced graduate certificates.

Major Research Areas: Contact College for information.

College Requirements

College Activities and Events

The College of The Arts arranges a full schedule of concerts, plays, lectures, exhibitions, and workshops featuring students, faculty, and visiting artists/scholars. Events are open to the general public and are presented both during the day and in the evening. Special ticket privileges are available to USF students. For more information, contact the COTA Events Office. Refer to the College website for more information.

School of Architecture and Community Design

Architecture, M.Arch.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 39 post-professional
Level: Masters
CIP Code: 04.0201
Department Code: DEA
Major/College Codes: ARC AR
Approved: 1995

Also offered as an Accelerated Major (2+4)

Contact Information

College: The Arts
Dept: School of Architecture and Community Design

Contact Information: http://www.grad.usf.edu/majors

The major leading to the accredited Master of Architecture degree is intended for students who have completed baccalaureate degrees in architecure or pre-professional majors. Students with non-architectural majors or with a pre professional undergraduate major may also enter the program once pre-requisites are completed.. The comprehensive and rigorous curriculum prepares graduates for a full range of professional activities. The course of study emphasizes urban architecture and related topics to take advantage of its diverse metropolitan setting in Florida's Tampa Bay.

The School of Architecture and Community Design (SACD) is home to the Florida Center for Community Design and Research, is a non-profit public service institute of the School of Architecture and Community Design. It was founded in 1986 to assist the citizens of Florida in the creation of more livable and sustainable communities through applied community design, multi-disciplinary research, and public education. The diverse staff includes architecture faculty and students,research scientists, and programmer analysts. In addition, the Center has affiliated faculty or graduate students from the Department of Anthropology, Biology, Fine Arts, Geography, and Social Work.

Accreditation and Licensure:

Applicants for architectural licensure in Florida, and most jurisdictions in the United States, normally must have:

- earned a professional degree from a School accredited by the National Architectural Accrediting Board (NAAB)
- completed the Intern Development Program (IDP)
- passed the Architect Registration Examination (ARE)

According to the 2014 edition of the of the NAAB Conditions and Procedures: "In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit US professional degree programs in architecture, recognized two types of degrees: the Bachelor of Architecture and the Master of

Architecture. A program may be granted a six-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards. Masters degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree."

Major Research Areas:

Architecture and Community Design

Admission Information

In order to enroll in the M.Arch. major, students must be accepted by the Office of Graduate Studies and the School of Architecture and Community Design. These are separate admission processes that involve different application forms, supportive materials, and deadlines. For more detailed information, students should see Graduate Admissions online and visit the SACD website.

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

The Master of Architecture (M.Arch.) requires

- GRE Test Score
- Written Statement of Intent
- Three letters of recommendation
- Portfolio of creative work*
- Completed 3 prerequisite courses: Physics, Calculus, and AutoCAD

*Students who do not have a body of creative work may enroll in 11 hours of studio to create the required portfolio

Foundational Knowledge: 54 hours

Students who do not have a Bachelor's in Architecture or a post-professional degree are required to complete the following pre-requisites prior to admission to the Master's program. Courses completed in undergraduate pre professional or similar programs with a grade of B or above may apply with approval of admissions committee. Students must have an overall minimum of 3.00 GPA for Foundational Knowledge courses. Applicants must have completed courses in Physics, Calculus, and AutoCAD by the end of the first year in the Degree Program.

Design/Graphics- 39 hours

- ARC 5256
- ARC 5361
- ARC 5362
- ARC 5363
- ARC 5364
- ARC 5731
- ARC 5732

Technology -15 hours

- ARC 5467
- ARC 5470
- ARC 5587
- ARC 5588

- ARC 5689

Curriculum Requirements

Total Minimum hours- 39 (post-professional)

Note: for licensure a total of 108 hours is required

Core hours- 30 hours

Research- 4 hours

Project - 5 hours

Core Requirements (30 hours)

- ARC 5365 Advanced Design B **Credit Hours: 6**
- ARC 5366 Advanced Design C **Credit Hours: 6**
- ARC 6287 Professional Practice I **Credit Hours: 3**
- ARC 6288 Professional Practice II **Credit Hours: 3**
- ARC 6367 Advanced Design D **Credit Hours: 6**
- ARC 6398 Introduction to Community and Urban Design **Credit Hours: 3**
- ARC 6481 Design Development **Credit Hours: 3**

Required Research Courses (4 hours)

- ARC 6936 Research Methods in Architecture **Credit Hours: 2**
- ARC 6974 Master's Project Planning **Credit Hours: 2**

Additional Courses (15 hours)

Students entering with a non-professional post-bachelor's will need to take additional coursework to meet the 108 hour requirement. All courses must be at the 5000 or 6000 level. Non-ARC courses must have prior approval of the faculty.

Comprehensive Exam

Successful completion of a the master's project serves in lieu of the comprehensive exam.

Master's Project (5 hours)

- ARC 6976 Terminal Master's Project **Credit Hours: 5**

Other Requirements

GPA of 3.00 in Design

In addition to the state-wide requirement that students maintain an overall grade point average(GPA) of 3.00 or better, the School also requires that students maintain a GPA of 3.00 or better in all design courses.

Portfolios

The faculty requires the submission of portfolios of academic work by each student at two formal portfolio reviews. Students must pass these portfolio reviews in order to advance in the major. The portfolio policy can be found on the School's website. Students are advised to prepare their design work for inclusion in their portfolios at the end of each design semester, instead of waiting until just before the portfolio due dates. Some expense, varying widely according to reproduction technique and/or ambition, should be anticipated.

Field Trips

During the fall and spring semesters, studio students take trips with their faculty to various cities, foreign and domestic. Students are responsible for the costs of these trips.

Accelerated Major

Also available as an Accelerated Majors

Urban and Community Design, M.U.C.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 45
Level: Masters
CIP Code: 04.0401
Dept Code: ARC
Major/College Codes: UCD FA
Approved: 2009

Contact Information

College: The Arts
Department: School of Architecture and Community Design

Contact Information: http://www.grad.usf.edu/majors

The Urban and Community Design major at USF is a rigorous "design-based" course of study (i.e. post professional degree for design students) leading to the Master of Urban and Community Design (M.U.C.D.) degree. The major focuses on the myriad physical, functional, visual, social and sustainable circumstances in contemporary urban contexts and stresses the amassing of knowledge, and the acquisition of design, research, analytical and other practical skills. The instructional scope of the MUCD major is both broad and diverse. The major builds on previous studies in architecture or landscape architecture as the foundation for involving students in crafting design interventions across the varied spectrum of scales of urbanism – from the urban street and block, up to the metropolitan region. Support courses in the program's curriculum infuse an understanding of the fundamentals of urban and community design, the historical and theoretical foundations of the discipline, the methods of research and analysis used in urban and community design, the major determinants of urban form, the evolution of urban contexts, and the different modes of contemporary urban design practice. The major invites applications from prospective students who are interested in expanding their understanding of the physical dimensions of urbanism and the morphology of urban places, and amassing the skills necessary in crafting compelling design interventions that address the human experience and physical conditions of cities, towns and communities.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- Professional undergraduate or graduate design degree (i.e. B.Arch., M.Arch., B.L.A., M.L.A.).
- Portfolio of design and creative work (While work completed in a professional capacity is welcomed, academic work is preferred as the primary portfolio content).
- Graduate Record Exam (GRE preferred minimum score of 500 on verbal and 500 on quantitative sections. The GRE will only be waived for applicants who have already earned a Master's degree).
- Letter of intent
- Three letters of recommendation (At least one letter must be from a former instructor or faculty member).

Curriculum Requirements

The curriculum for the M.U.C.D. major is intended to be completed in one full calendar year – Fall, Spring and Summer semesters. Each semester includes a design studio and up to three lecture courses, totaling 15 credit hours (The length of time to complete all degree requirements depends on individual course load during each semester of enrollment).

Total Minimum Hours - 45

Core – 33 hours
Electives – 12 hours

Core Requirements (33 Credit Hours Minimum)

Design

- ARC 6373 Community Design Studio **Credit Hours: 6**
- ARC 5366 Advanced Design C **Credit Hours: 6**
- ARC 6930 Special Topics in Urban and Community Design **Credit Hours: 1-6 (6 credits for this program)** (Master's Studio)

History/Theory

- ARC 6398 Introduction to Community and Urban Design **Credit Hours: 3**
- ARC 6930 Special Topics in Urban and Community Design **Credit Hours: 1-6 (3 credits for this program)** (The City)

Practice

- ARC 6414 - The Real Estate Development Process **Credit(s): 3**
- ARC 6930 Special Topics in Urban and Community Design **Credit Hours: 1-6 (3 credits for this program)** (Site/Context Analysis)

Globalization

- ARC 6930 Special Topics in Urban and Community Design **Credit Hours: 1-6 (3 credits for this program)** (Global Urbanism NOW!)

Electives (12 Credit Hours)

- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Reading and Representing the City)
- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Urban Resiliency)
- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Urban Design Seminar)
- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Design Research)
- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Urban Design Tools and Strategies)
- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Art of Placemaking)
- ARC 6372 The Neighborhood **Credit Hours: 3**
- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Sustainable Neighborhood/Community Design)
- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Landscape Urbanism)
- ARC 6930 Special Topics in Urban and Community Design **Credit(s): 1-6 (3 credits for this program)** (Urban Form Continuum)
- ARC 5931 Special Studies in Architecture **Credit Hours: 1-5**

Comprehensive Exam

School of Art and Art History

Art History, M.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 38
Level: Masters
CIP Code: 50.0703
Dept Code: ART
Major/College Codes: ATH FA
Approved: 1985

Also offered as an Accelerated Major

Contact Information

College: The Arts
Department: School of Art and Art History

Contact Information: http://www.grad.usf.edu/majors
Other Resources: www.art.usf.edu

The M.A. program in Art History provides students with training in art history, theory, and methods to prepare them for careers in art collections, education, and cultural institutions, and for further graduate study at the Ph.D. level. Courses are offered in art from antiquity to the present. We see art history as an integral part of social and cultural history in a global context and our classes are interdisciplinary in scope. The major is unique in featuring small, intensive seminar-style courses. Students receive individual attention from an active, award-winning research faculty, who expose students to the most recent approaches in the field. Course work can be supplemented by international travel and study-abroad programs sponsored by the School of Art and Art History. The Contemporary Art Museum, Graphicstudio Institute for Research in Art and the Kennedy Family Visiting Artist/Scholar program are all valuable resources contributing to course content, study and possible internship opportunities in the program.

The degree provides an excellent foundation in graduate level art-historical analysis, research, and writing, an outstanding springboard for either continuing graduate studies (Ph.D.) to become a university professor, or professional work in a variety of arts fields including museums, non-profit and commercial galleries, libraries, education and publishing. Some of the positions in the arts held by our graduates include: museum curator, museum registrar, non-profit art gallery director, commercial art gallery director or administrator, museum educator, museum director, art critic, art librarian, visual resources professional, corporate art collection curator, state arts agency administrator, university administrator and program director, art history instructor K-12 and college, and after further graduate work, tenured university professor.

M.A. Art History students are guided by the art history faculty in selecting their area of research after completing a year of graduate study. This major features an endowed chair in modern and contemporary art history.

Accreditation:

Accredited by the National Association of Schools of Art and Design.

Major Research Areas:

Ancient, Late Medieval, Renaissance, Early Modern, Nineteenth Century, Twentieth Century, Contemporary, Islamic.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

For priority consideration: The electronic application and fee payment for USF Graduate Admissions must be completed by January 15 at https://secure.vzcollegeapp.com/usf/ Supportive application materials can be submitted online beginning September 30 to January 15 at https://usf.slideroom.com/#/login. All official transcripts must be postmarked by January 15 and sent directly to the School of Art and Art History.

Applications will be accepted to June 1, but submissions after January 15 are less likely to receive scholarships and funding.

Application requirements:

- A GRE General Test Score, taken within five years preceding application, is required. Applicants who have graduated from USF with a major in art history in the last five years are exempted from this requirement. Official GRE scores must be sent to USF's Office of Graduate Admissions by the test administrator
- a CV/Resume
- a research paper dealing directly with Art History or a related discipline (literature, political history, psychology, philosophy or classical studies).
- Three letters of recommendation from people who can professionally assess the applicant's ability to do scholarly and academic work.
- A short essay of one to two pages explaining the applicant's research interests and goals for graduate study in art history. A personal interview by the Art History faculty may be requested.
- Admission is competitive. Fulfillment of the above-listed minimal admissions requirements does not guarantee acceptance into the program. All submitted materials of each applicant, including the Research Paper, statement of research goals, and the letters of recommendation, are reviewed by the Art History Faculty to assess academic potential.

Undergraduate Deficiencies in Art History

- Students pursuing graduate studies in Art History, who do not have an undergraduate degree in Art History may be required to take additional classes preliminary to acceptance.
- Exceptions can be granted only with consent of the Art History faculty.

Language Requirements

Reading knowledge of the foreign language most relevant for study and research in the student's area of specialization must be acquired before the end of the second semester of enrollment in the major. Students consult with their advisors to determine the language most appropriate to their scholarly interests. Please see the Academic Advisor for exceptions to this rule.

The student may take appropriate courses in the Department of World Languages. Whenever the courses are available, the student should be encouraged to take one of the special one semester foreign language courses designed for graduate students.

When these courses are not available, the student may take two semesters of a beginning foreign language course. These courses may not be taken pass/fail or audit. In order to fulfill the foreign language requirement, the student must receive a letter grade of "B" or better in both courses. Courses taken to fulfill the foreign language requirement can count toward up to eight hours of electives necessary for graduation and the grades in these courses will be computed in the student's graduate GPA.

Students may elect to take the GSFLT (Office of Graduate Studies Foreign Language Test). The student must achieve a score of 450 or above on the test in order to fulfill the foreign language requirement.

Students may take a proficiency exam in which they translate, from a foreign language into English, materials relevant to their particular disciplines. The form of these proficiency exams should be devised by the appropriate language professors from either of these two units.

Transfer of Credit

There is no automatic transfer of non-degree seeking student credit or graduate credit earned at other institutions or from other graduate majors in the University towards M.A. degree requirements. The School of Art and Art History has designated a six hour limit on all credit taken as non-degree seeking student status. Any transfer of credit or non-degree seeking student hours to be used toward M.A. degree requirements are only granted after a faculty review at the time the student has been accepted into the M.A. major.

Curriculum Requirements

Total Minimum Hours - 38

(38 hours minimum thesis option; 42 hours minimum qualiying paper option)

Core – 8 hours

Area courses – 16 hours

Electives – 8 hours

Qualifying Paper option – 10 hours

Thesis Option – 6 hours

Core Courses (8 hours)

Core Courses (8 hours)

- ARH 5813 Methods of Art History **Credit Hours: 4**
- ARH 5816 Research in Art History **Credit Hours: 4**

Area Courses (16 hours)

Area Courses (16 hours minimum)

To learn about a range of art-historical methods, graduate students are required to take seminars in a variety of historical periods and taught by different faculty. A student should, if possible, have at least one graduate class in each of these three areas:

1. Ancient/Medieval/Islamic
2. Renaissance/Early Modern (15th-18th centuries)
3. Modern/Contemporary (19-21st centuries).

Museum experience is encouraged for all students, but course credit for museum internships is limited to those seeking a Certificate in Museum Studies.

- ARH 6798 Seminar in Art History **Credit Hours: 4**

Students choose from ARH 6798 with the following topics, or ARH 6891.
Cross-Cultural Interactions in Islamic Art - proposed ARH 5577

- ARH 5226 Art of the Medieval and Renaissance Book **Credit Hours: 4**
- ARH 5428 Cultural Encounters in Art **Credit Hours: 4**
- ARH 6868 Current Historiography: 20th Century **Credit Hours: 4**
- ARH 6891 Paris Art History **Credit Hours: 4**

Electives (8 hours)

Determined by individual consultation with Grad Director.

Thesis and Qualifying paper options

Students either write a qualifying paper or thesis to complete the requirements of the major. Students should consult with the Graduate Coordinator and the faculty to determine which option is the best for them; the final decision rests with the faculty. For either option, a B+ average or above is required in courses taken to fulfill Major graduate credits, for students to move on to this final phase of their graduate studies.

The M.A. in Art History is a two-year major for students who attend full time, but the thesis option often takes longer to complete.

Qualifying paper option (10 hours)

Students in the qualifying paper option complete ARH 6055 and an additional 8 hours in art history area courses (5000-level or above).

The qualifying paper should demonstrate the student's ability to do significant art-historical research, to persuade by effective use of evidence and argument, and to write fluently and clearly. The qualifying paper will usually be a substantially revised seminar paper and should be about 15-20 typed pages in length, excluding endnotes, bibliography, illustrations or other materials. Students choosing this option should form a qualifying paper committee by the end of the second semester of their first year. The Committee is composed of a major professor and a second faculty member. Members of the Committee are faculty in the School of Art and Art History, of which one must be tenured or tenure-earning. The Major Professor will usually be the professor who oversaw the writing of the original seminar paper. Students pursuing this option download the relevant form at http://www.arts.usf.edu/absolutenm/articlefiles/20-GradComApptFrm.pdf. Students are responsible for collecting committee members' signatures. The M.A. Graduate Coordinator must authorize all committee assignments with his/her signature

When submitting drafts of the qualifying paper to committee members, students must allow faculty members two weeks to read any given version. Remember that first drafts usually have to be extensively revised, often several times, before the qualifying paper is accepted. Faculty are not normally available during the summer to read qualifying paper drafts.

The qualifying paper committee must approve the qualifying paper before the student can graduate. Qualifying papers must be submitted two weeks before the last day of classes of the semester in which the student wishes to graduate. The major professor, in consultation with the other faculty member, notifies the Academic Advisor of the School of Art and Art History of approval of the paper before the end of the semester. If a paper is not approved, the student may revise and resubmit it a second time. It is the student's responsibility to stay abreast of Office of Graduate Studies deadlines and registration requirements in the final semester, which are available online at http://www.grad.usf.edu.

- ARH 6055 Art History **Credit Hours: 1-4**

(Writing the Qualifying Paper) (2 hours required)

Thesis Option (6 hours)

Students writing the thesis should work with faculty during the second semester to begin developing potential topics. By the end of the first year, students who wish to write the thesis should decide on a thesis topic with a major professor from the art history faculty. The topic is usually related to research done in a seminar. During the following summer students prepare the thesis proposal. The proposal should define a significant research problem and explain how the topic has the potential to contribute to scholarship in the field; it must include a research plan and a critical review of the scholarly literature on the subject area. Thesis proposals will be presented to faculty and fellow graduate students in a public forum at the beginning of the third semester. Each presentation is followed by discussion, which provides an opportunity for students to receive suggestions and recommendations from faculty and peers. If the proposal is declined, the student will be eligible to pursue a Qualifying Paper.

If the art history faculty approves the thesis topic, the student should form a thesis committee by the end of the semester in which they have successfully proposed a thesis topic, and have thereby achieved thesis candidacy.

The Committee is composed of at least two members and the Major Professor. The Major Professor and at least one other committee member must be chosen from tenured or tenure-earning art history faculty, or otherwise as approved by the Graduate Coordinator of the Art History Major. Students forming the thesis committee download the relevant form at http://www.arts.usf.edu/absolutenm/articlefiles/20-GradComApptFrm.pdf. Students are responsible for collecting committee members' signatures. The M.A. Graduate Coordinator must authorize all committee assignments with his/her signature.

While moderate in length and considerably more limited in scope than a doctoral dissertation, the M.A. thesis must demonstrate the student's ability to do original, independent research of publishable quality. The thesis should be approximately 35-40 typed pages of text – the usual length of a journal article -- excluding notes, bibliography, illustrations or other materials. When submitting drafts of the thesis to committee members, students must allow faculty members two weeks to read any given version. Remember that first drafts will have to be extensively revised several times before the thesis is accepted. Faculty are not normally available during the summer to read thesis drafts. The thesis committee must approve the final thesis before the student may schedule a date for the M.A. thesis defense. The examining committee will consist of the thesis committee and at least two additional questioners who are chosen by the student in consultation with the thesis committee. Students should keep in mind that the questioners must also be allowed two weeks to read the draft of the thesis after it is accepted for the defense by the thesis committee. The oral defense is open to the public. No defenses are scheduled during the summer. Immediately after the orals, the examining committee meets to determine whether the student has passed the oral examination and whether the thesis is acceptable in its current form.

NOTE: It is usually necessary to make some changes in the thesis after the oral defense. Allow at least one week between the oral exam and the Office of Graduate Studies deadline so that you will be able to make the changes.

Ideally, the student will complete the thesis and submit it in the fourth semester. It is the student's responsibility to stay abreast of Office of Graduate Studies deadlines and registration requirements in the final semester. Check with the USF Office of Graduate Studies for specific deadlines and requirements for the M.A. thesis and graduation. These are available online at http://www.grad.usf.edu/ETD-res-main.php . All theses must be submitted electronically.

- ART 6971 Thesis: Master's **Credit Hours: 2-19**

6 hours minimum

Accelerated Major

Also available as an Accelerated Majors

Art, M.F.A.

Degree Information

Priority Admission Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 60
Level: Masters
CIP Code: 50.0702
Dept Code: ART
Major/College Codes: MFA FA
Approved: 1967

Contact Information

College: The Arts
Department: School of Art and Art History

Contact Information: http://www.grad.usf.edu/majors
Other Resources: www.art.usf.edu

The nationally ranked MFA Degree Program in Art has been carefully designed as a course of study that will maximize the student's potential for in depth investigation of his or her chosen artistic ideas, themes and /or media. Students are encouraged to acquire technical and conceptual skills in more than one medium or studio discipline and to work toward developing techniques that best communicate the content of their artistic pursuits.

Accreditation:

Accredited by the National Association of Schools of Art and Design.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- A Bachelor's degree or equivalent from a regionally accredited university or art school
- Approved portfolios are required for admission into the M.F.A. Art Major
- Transfer Credits: Requests for use of transfer credits or credits earned under non-degree seeking student status should be made when the student applies to the graduate major. The faculty will decide at the time of admission whether or not transfer credits and credits earned will be used toward the requirements for the M.F.A. degree. Transfer credit and credit earned as a non-degree seeking student to be used toward the students' M.F.A. degree is limited to 8 semester hours.

Curriculum Requirements

Total Minimum Hours: 60 credit hours

Core - 9 hours

Additional Required Courses - 8 hours

Electives - 41 hours

Research Project - 2 hours

Core Requirements (9 hours)

- ART 6895 Graduate Seminar I **Credit Hours: 3**
- ART 6896 Graduate Seminar II **Credit Hours: 3**
- ART 6816 MFA Professional Practices **Credit Hours: 3**

Additional Required Courses (8 hours)

Students must complete ARH 6798 (Critical Perspectives in Contemporary Art), and then must take either ARH 6055 Art History or ARH 6798 (with a different topic).

- ARH 6798 Seminar in Art History **Credit Hours: 4**

ARH 6798: Seminar in Art History (Critical Perspectives in Contemporary Art)

- ARH 6055 Art History **Credit Hours: 1-4** (4 credits for this program)

Electives (41 Credit Hours)

- ART 5000 and 6000 Studio and Discretionary Electives
- ART 6937 Graduate Instruction Methods **Credit Hours: 1-4** (This course is an elective option for students who have not worked as a Teaching Assistant.)

Other Requirements

The School of Art and Art History highly recommends that all students seeking an advanced degree in Art take a minimum of one course in Electronic Media.

The remainder of the major is discretionary and is designed by the student with the guidance of the Graduate Art Advisor.

Directed Studies

As part of the student's studio and discretionary electives, he/she may register with a faculty member under a Directed Study Contract. All M.F.A. students are required to take coursework for a grade until they have formed their Supervisory Committees.

The descriptions for Directed Study are as follows:

- ART 6940 Selected Topics in Art, Grading option Regular (For a grade), 1-4 credits

Suitable for coursework by contract in an area in which the student has prior skill.

- ART 5910 Research, Grading option Regular (For a grade), 1-4 credits

Suitable for coursework by contract in an area in which the student has little or no prior skill.

- ART 6907 Independent Study, Grading option S/U, 1-19 credits.

Suitable for graduate level coursework in any area for which the student does not wish a letter grade, or which justifies more than 4 hours of credit. May be used only after the student's Supervisory Committee is formed. (See S/U Grades)

- ART 6911 Directed Research, Grading option Regular (For a grade)1-19 credits.

Suitable for graduate level coursework in any area that justifies more than 4 hours of credit. May be used only after the student's Supervisory Committee is formed.

As noted, ART 6907 and ART 6911 are not for use by M.F.A. students who have not yet established their Supervisory Committees. The other, media specific, course numbers such as Sculpture or Painting are not often used as they are fixed at 4 credit hours.

S-U Grades

A Student may not take any course work for a grade of "S/U" until they have elected a supervisory committee, usually by the fourth semester. All course work taken during the first three semesters must be taken in course work assigning letter grades that designate quality points. Appropriate contract numbers would include graduate level studios such as Sculpture or Painting, and ART 5910 Research for an area in which a graduate student did not have prior skill, or ART 6940 Selected Topics in Art for studies in an area where prior skill exists but the student requires variable credit or the research does not conform to clear categorization by discipline. ART 6907 Independent Study offers the S/U grading option and is not to be used until after the student has elected a supervisory committee.

Faculty Evaluations

Faculty Evaluations at the end of first, second, and third semesters

At the end of the first, second and third semesters, students will receive a written evaluation from a faculty committee regarding their progress in the major based on a presentation of their work. A student receiving "unsatisfactory" evaluation for any two of these three semester reviews will be dropped from the major. The full faculty will review a student with two unsatisfactory evaluations before they can be dismissed from the major.

M.F.A. Research Project Proposals

During the fourth semester students will present a proposal for their MFA Research Project. The student must form and meet with their Graduate Supervisory Committee before the conclusion of their second year. The student must present a body of work and written paper supporting the student's proposed direction.

If a student's proposal is satisfactory, he/she will select a graduate Supervisory Committee to oversee the realization of the research project. If a student's project proposal is not satisfactory, another proposal can be presented before the end of the fourth semester. If the student's proposal and re-proposal are voted unsatisfactory the student will be dismissed from the major.

M.F.A. Research Project (2 hours)

Exhibition/Orals/Written Document

The exhibition, written document and the orals defense conclude the student's graduate major and take place after all course work is completed. The exhibition is usually during the term the student plans to graduate, typically the second semester of the third year. M.F.A. Research Project exhibitions cannot be scheduled for the summer term. Information regarding the exhibition, the written document and the orals defense will be distributed to students prior to the final semester.

- ART 6956 MFA Research Project **Credit Hours: 2-19**

2 hours minimum required

School of Music

Music Education, M.A.

This program is offered fully online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 13.1312
Dept Code: MUS
Major/College Codes: MUE FA
Approved: 1962

Contact Information

College: The Arts
Department: School of Music

Contact Information: http://www.grad.usf.edu/majors

The MA degree at USF is intended for the currently practicing music educator who wishes to increase their understanding of informal learning and learner-centered pedagogies. This major also empowers students to become action researchers and thoughtful consumers of research in music education.

Accreditation: National Association of Schools of Music (N.A.S.M.).

Major Research Areas:

Alternate Methods, Community Collaboration, Contemporary Changes, Early Childhood, General Music, International Perspectives, Multicultural Issues, Technology, Teacher Behaviors, Philosophy, Psychology, Sociology.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- The Graduate Record Examination (GRE) is not required.
- An official **Transcript** for a completed undergraduate degree in music (from an accredited program) is required with the application.
- The GPA for all music, music education, and education courses included in the undergraduate degree must be at least 3.00.
- A Résumé
- A minimum of two (2) current **Letters of Recommendation** from people qualified to speak on behalf of the applicant's professional capabilities must accompany the application.
- At least two years of K-12 music teaching experience, or the equivalent, are required.
- However, final approval for admission must be granted by the music education faculty.

International students must include copies of graduation **Certificates** and/or **Diplomas** (in addition to official transcripts) with their applications.

It is important to enroll in the term of admission. If postponement is necessary, you should request that your application be updated for the term when you will register for classes.

Curriculum Requirements

Total Minimum Hours - 30

Core - 21 hours

Electives - 9 hours

Core Requirements (21 hours)

- MUE 6428 Learner-Centered Approaches in Music Education I **Credit Hours: 6** (alternative calendar)
- MUE 6785 Research Design and Methods in Music Education **Credit Hours: 3**
- MUE 6787 Literature Review in Music Education **Credit Hours: 3**
- MUE 6789 Research Report Writing in Music Education **Credit Hours: 3**
- MUE 6429 Learner-Centered Approaches in Music Education II **Credit Hours: 3**
- MUH 6020 - History of Blues and Rock **Credit(s): 3**

Electives (9 Credit Hours)

Any graduate level music courses or course related to the student's research interests.

The responsibility for seeing that all graduation requirements are met rests with the student.

Comprehensive Exam

The submission of an action research project final report will be the Comprehensive Examination.

Final recommendation with signatures presented to Graduate Director of Graduate Studies in Music

Music, M.M.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 50.0903
Dept Code: MUS
Major/College Codes: MUS FA
Approved: 1984

Concentrations:

Chamber Music (MCL) *(Piano and Strings only)*
Choral Conducting (MCC)
Composition (MMC)
Electro-Acoustic Music (MEM)
Instrumental Conducting (MID)
Jazz Composition (MJC)
Jazz Performance (MJP)
Performance (MMP)
Piano Pedagogy (MPP)
Theory (MMT)

Contact Information

College: The Arts
Department: School of Music

Contact Information: http://www.grad.usf.edu/majors

Music Faculty, Alumni, and Students

Perhaps the most compelling reason to study music at the University of South Florida is the opportunity to work with our superb music faculty. These gifted, dedicated artists/scholars are among the preeminent leaders in their fields and have been carefully chosen for their professional training, excellence in musical performance and research, and pedagogical expertise. They are featured on many professional recordings and appear in prestigious concert venues around the world. Their compositions are premiered globally. Their scholarship is published in the leading research journals, books, and monographs in their disciplines. The School of Music also invites guest composers, conductors, and performing musicians to enhance its performances and to provide master classes, symposia, and clinics for students and the public. Many USF music alumni are currently performers in a variety of concert settings and successful teachers in public schools, colleges, and universities around the country in a variety of concert settings. The School of Music at USF offers the student the opportunity to study with distinguished faculty and to be in the company of other superior music students for an exciting and exacting period of study.

The Master of Music degree provides students with an opportunity to pursue intense, focused study in their music specialty, coupled with a vigorous, balanced curriculum in music theory, music literature, and electives. Students in this major are mentored expertly by senior faculty and exhibit mastery of their specialty

at the end of the course of study by way of appropriate capstone experiences, including recitals or theses and comprehensive examinations. The provisions and balance of these experiences comport precisely with the curriculum guidelines required by the National Association of Schools of Music.

Accreditation:

Full member, National Association of Schools of Music (NASM)

Major Research Areas:

Chamber Music, Composition, Conducting, Jazz Studies, Music Performance, Music Theory, Pedagogy, Electronic Music,

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

- Successful auditions and/or interviews are required for acceptance into chamber music, conducting, electro-acoustic music, performance, pedagogy, and theory concentrations. Approved portfolios are required for acceptance into composition (jazz or traditional).
- Diagnostic tests in music theory and history must be taken before classes begin in the first semester. Based upon the scores, the music faculty may require remediation in one or both areas of study in order to qualify the student for permission to enroll in certain courses. Graduate review courses are offered each fall semester.
- The Graduate Record Examination (GRE) is not required.
- Students who do not enroll in the semester for which they applied and were admitted must receive permission from the Director of Graduate Studies in music to enroll in courses in the following semester(s). This procedure is to determine the availability of applied and academic courses in music.
- An official undergraduate Transcript for a completed undergraduate degree in music (from an accredited program) is required with the application.
- The GPA for all music courses included in the undergraduate degree must be at least 3.00 International students must include copies of graduation Certificates and/or Diplomas (in addition to official transcripts) with their applications.

Curriculum Requirements

Total Minimum Hours 30 credit hours

Diagnostic Music Tests taken prior to classes in first term. Students may be required to enroll in a remedial history and/or theory course as a consequence of their scores.

Core Requirements (8 Credit Hours Minimum)

- MUS 6973 - Techniques of Research in Music and Music Education **Credit(s): 3**

In addition, students in all concentrations must choose 2 of the following 7 courses.

One must be a 20th/21st century course, as indicated by the asterisks.

NOTE: Students in the Music Theory Concentration must take both MUT 6545 & 6626. MUT 6665 is required for Jazz Composition and Jazz Performance Concentrations. Students in the Instrumental Conducting Concentration are required to take MUT 6545 and MUT 6575 and then choose one from MUH 6057, MUL 6375 and MUT 6586.

- MUL 6375 Twentieth Century Music Literature **Credit Hours: 3** *
- MUL 6505 Symphonic Literature **Credit Hours: 3**

- MUS 6057 - Intercultural Composers **Credit(s): 3** *
- MUT 6545 Analysis of 18th and 19th Century Music **Credit Hours: 3**
- MUT 6575 Analysis of Twentieth Century Music **Credit Hours: 3** *
- MUT 6586 Critical Analysis-History **Credit Hours: 2**
- MUT 6665 Seminar Jazz Styles and Analysis **Credit Hours: 2**

Specific Concentration Requirements

(beyond the requirements above)

Chamber Music (MCL) (18 Credit Hours)

- MVK or MVS 6### - Applied Studio **Credit(s): 8** (4 credits; taken two terms) (for piano and string students, only)
- MUS 5905 Directed Study **Credit Hours: 1-4 (6 credits for this program)** (Chamber Music Ensemble)
- MUL 6565 Chamber Music Literature **Credit Hours: 2**
- MUS 6976 Graduate Recital **Credit Hours: 2** (Chamber Music, only)

Must Include:

1. Major standard sonata
2. Major standard work for 3 or more instruments
3. Major contemporary chamber work for 2 or more instruments

Scholarship Requirement for Piano: STUDIO ACCOMPANYING
Scholarship Requirement for Strings: USF ORCHESTRA

Choral Conducting (MCC) (21 Credit Hours)

- MUG 6205 Advanced Choral Conducting **Credit Hours: 2 (8 credits for this program)** (2 credits; taken four terms; variable content)
- MUG 6930 Advanced Choral Techniques **Credit Hours: 3**
- MUL 6655 Choral Literature 1500-1800 **Credit Hours: 3**
- MUL 6656 Choral Literature 1800-present **Credit Hours: 3**
- MUN 6XXX - Ensemble **Credit(s): 2** (1 credit; taken two terms)
- MUS 6976 Graduate Recital **Credit Hours: 2**

Electro-Acoustic Music (MEM) (15 Credit Hours)

- MUC 6444 Electronic Music/Analog/Digital Systems Research I **Credit Hours: 3**
- MUC 6445 Electronic Music/Analog/Digital Systems Research II **Credit Hours: 3**
- MUS 5905 Directed Study **Credit Hours: 1-4 (6 credits for this program)** (3 credits; taken two terms) (Computer Music Research)

- MUS 6976 Graduate Recital **Credit Hours: 2**

or

- MUS 6971 Thesis: Master's **Credit Hours: 2-19 (2 credits for this program)**

Instrumental Conducting (MID) (17 Credit Hours)

MM Major is 34 hours with this concentration

Conducting (8 Credit Hours):

**may be taken twice*

- MUG 6307 Advanced Wind Conducting I **Credit Hours: 2**
- MUG 6308 Advanced Wind Conducting II **Credit Hours: 2** *
- MUG 6309 Advanced Orchestral Conducting I **Credit Hours: 2**
- MUG 6310 - Advanced Orchestral Conducting II **Credit(s): 2** *

Literature (3 Credit Hours)

Choose one:

- MUL 6555 Band/Wind Ensemble Literature **Credit Hours: 3**
- MUL 6505 Symphonic Literature **Credit Hours: 3**

Ensembles (4 Credit Hours)

- Any MUN Ensemble Course

Graduate Recital (2 Credit Hours)

- MUS 6976 Graduate Recital **Credit Hours: 2**

Jazz Composition (MJC) (16 Credit Hours)

MUC 6626 Jazz Composition **Credit Hours: 4 (8 credits for this program)** (*4 credits; taken two terms*)
MUC 6930 Seminar in Jazz Compositional Styles **Credit Hours: 2 (4 credits for this program)** *(2 credits; taken two terms)*
MUN 6--- Ensemble **Credit(s): 2** *(1 credit; taken two terms)*
MUS 6976 Graduate Recital **Credit Hours: 2**

Jazz Performance (MJP) (16 Credit Hours)

MVJ 6--- Applied Jazz **Credit(s): 8** *(4 credits; taken two terms)*
MUT 6665 Seminar Jazz Styles and Analysis **Credit Hours: 2 (4 credits for this program)** *(2 credits; taken two terms)*
MUN 6XXX - Ensemble **Credit(s): 2** *(1 credit; taken two terms)*
MUS 6976 Graduate Recital **Credit Hours: 2**

Music Composition (MMC) (10 Credit Hours)

MUC 6251 Composition **Credit Hours: 4 (8 credits for this program)** *(4 credits; taken two terms)*

MUS 6976 Graduate Recital **Credit Hours: 2**
or
MUS 6971 Thesis: Master's **Credit Hours: 2-19** (Oral Defense)

Music Performance (MMP) (21 Credit Hours)

MV? 6--- Applied Studio **Credit(s): 8** *(4 credits; taken two terms)*
MUN 6--- Ensemble **Credit(s): 2** *(1 credit; taken two terms)*
MUS 6976 Graduate Recital **Credit Hours: 2**

Piano Majors must include:

MUL 6410 Keyboard Repertory I **Credit Hours: 2** *(Fall)*
MUL 6411 Keyboard Repertory II **Credit Hours: 2** *(Spring)*

Music Theory (MMT) (15 Credit Hours)

**MUT 6545 and MUT 6626 included in Core Requirements)*

MUT 6545 Analysis of 18th and 19th Century Music **Credit Hours: 3** *
MUT 6586 Critical Analysis-History **Credit Hours: 2**
MUT 6626 - Analysis of 20th C. Music **Credit(s): 3** *
MUT 6627 - Schenkerian Analysis **Credit(s): 3**
MUT 6751 Teaching of Music Theory **Credit Hours: 3**
MUT 6760 History of Music Theory **Credit Hours: 3**
MUS 6971 Thesis: Master's **Credit Hours: 2-19** (Oral Defense required)

Piano Pedagogy (MPP) (16 Cedit Hours)

MVK 5--- Applied Studio **Credit(s): 4** *(2 credits; taken two terms)*
MUL 6410 Keyboard Repertory I **Credit Hours: 2** *(Fall)*
MUL 6411 Keyboard Repertory II **Credit Hours: 2** *(Spring)*
MVK 6650 Graduate Piano Pedagogy I **Credit Hours: 2**
MVK 6651 Graduate Piano Pedagogy II **Credit Hours: 2**
MUN 6--- Ensemble **Credit(s): 2** *(1 credit; taken two terms)*
MUS 6976 Graduate Recital **Credit Hours: 2**

Electives

Students complete sufficient electives in addition to the core and concentration requirements to complete the minimum of 30 hours required for the major. Depending on the Concentration, this ranges from 4 to 11 hours of electives, but may be more depending on the student's course selections.

Courses are subject to change. Summer and online courses may be offered. All inquiries should be directed to the Director of Graduate Studies in Music.

Comprehensive Examination

Selection of Committee, including major professor (committee chair) and two other professors from varying concentrations in music with whom they have studied. One member must be from the academic area. The student and the committee must sign a contract available from the Director of Graduate Studies in Music at the beginning of the final term.

Written Examination
Collection of examination questions by chair from committee members

Presentation of questions to candidate with deadline of one week for completion (theory majors take a two-hour written examination.)
Candidate submits questions and answers to chair one week before oral examination
Oral Examination (meeting for candidate and committee members scheduled by chair)
Final Recommendation with signatures presented to the Director of Graduate Studies in Music

The course outlines below are mandatory for the respective fields of study. Secondary applied music courses may be taken in conjunction with MUS 6976 Graduate Recital, if two semesters of four-credit hour major study have already been completed.

Final Project

(according to Concentration area)

Composition(s) as required by composition faculty, or
Recital (includes recital approval hearing one to two weeks in advance of recital), or
Thesis (includes Oral Defense)

The responsibility for seeing that all graduation requirements are met rests with the student.

Music, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 60
Level: Doctoral
CIP Code: 50.0901
Dept Code: MUS
Major/College Codes: DMS FA
Approved: 2003

Concentrations:

Music Education (MDE)

Doctoral applicants are encouraged to contact Dr. C. Victor Fung, Coordinator of the Doctoral Major, as early as possible at fung@usf.edu

Contact Information

College: The Arts
Department: School of Music

Contact Information: http://www.grad.usf.edu/majors

Financial Aid Deadlines: Fall Admissions Only

$5,580 to $22,000 per year plus Tuition Waiver	**Residency Requirement** One academic year of full-time study. Successive summers may be considered.	
Graduate Assistantships	Feb 15	No Application - By Faculty Recommendation only
Fellowships	Feb 1	No application. By faculty recommendation only.

Music Faculty, Alumni, and Students

Perhaps the most compelling reason to study music at the University of South Florida is the opportunity to work with our superb music faculty. These gifted, dedicated artists/scholars are among the preeminent leaders in their fields and have been carefully chosen for their professional training, excellence in musical performance and research, and pedagogical expertise. They are featured on many professional recordings and appear in prestigious concert venues around the world. Their compositions are premiered globally. Their scholarship is published in the leading research journals, books, and monographs in their disciplines. The School of Music also invites guest composers, conductors, and performing musicians to enhance its performances and to provide master classes, symposia, and clinics for students and the public. Many USF music alumni are currently performers in a variety of concert settings and successful teachers in public schools, colleges, and universities around the country in a variety of concert settings. The School of Music at USF offers the student the opportunity to study with distinguished faculty and to be in the company of other superior music students for an exciting and exacting period of study.

Ph.D. in Music Education

The Doctor of Philosophy in Music Education is the highest degree in the field. At the University of South Florida, this major is designed to develop leaders in music education research, teaching, and administration. The curriculum prepares the student to engage in original research in music education and related fields (arts education, music technology, aesthetics, philosophy, cognitive development, creativity, social psychology, neuropsychology, engineering, gerontology, speech and communication sciences, special and gifted education, etc.). In coordination with faculty mentors, the student has great flexibility in designing a program of study that fits his/her interests and strengths. Admission requirements include an interview with the music education faculty and the submission of writing samples and GRE scores. A limited number of fellowships and assistantships are available for qualified students.

Accreditation:

National Association of Schools of Music (N.A.S.M.); National Council for Accreditation of Teacher Education (N.C.A.T.E.)

Major Research Areas:

Alternative Methods, Community Collaboration, Contemporary Changes, Creativity, Early Childhood, General Music, International Perspectives, Multicultural Issues, Philosophy, Psychology, Sociology, Teacher Behaviors, Technology, and Lifelong Learning in Music

Music Education Concentration in the Ph.D. in Music

The Ph.D. major varies, depending on individual interests and needs. All applicants are expected to have two or more years of teaching experience in a public or private school (or its equivalent). A dissertation and dissertation defense are required. The Ph.D. degree empowers students to become scholarly producers of research in music education.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Official Application to the USF Office of Graduate Studies for the Ph.D. in Music (code DMS) with a concentration in Music Education (code MDE) in Music (code MUS) in COTA (code FA).
Master's degree from an accredited institution. Official undergraduate and graduate transcripts must be received at the same time as the application for admission. Credits to be considered for transfer to this major, which are reflected on other transcripts besides the degree-bearing transcripts, must also be sent for consideration by the faculty.
Minimum GPA of 3.50 for master's degree.
GRE General Test required.
Successful interview with the music education faculty, either in person or by other arrangement. **Prior to the interview**, the following must be reviewed by the music education faculty:
At least three letters of recommendation from people qualified to speak on behalf of the applicant's academic and professional capabilities.
Sample of the applicant's best academic writing.
Curriculum vita.
15-20 minute video recording of the applicant teaching music.
Personal goal statement.
International students must include copies of graduation **Certificates and Diplomas** (in addition to official transcripts) with their applications

Curriculum Requirements

COMPLETION OF COURSES

Appointment of Doctoral Committee
Comprehensive Qualifying Examination
Admission to Candidacy

SUBMISSION OF DISSERTATION
APPLICATION FOR GRADUATION (due by beginning of final semester)
DISSERTATION PROPOSAL
DISSERTATION DEFENSE
Final Oral Examination
Final recommendation with signatures presented to Director of Graduate Studies in Music

Total Minimum Hours – 60 (post-masters)

Core - 21 hours

Specialization - 3 hours

Cognate - 9 ours

Statistics and Measurement - 12 hours

Dissertation - 16 hours

The responsibility for seeing that all graduation requirements are met rests with the student.

Core Requirements (21-23 Credit Hours)*

*6 hours of MUE 7939 – 16 hours of MUE 7980; 4 hours of MUE 7939 – 18 hours of MUE 7980

MUE 7746 Measurement and Evaluation in Music **Credit Hours: 3**
MUE 7786 Qualitative Methods of Music Education **Credit Hours: 3**
MUE 7815 Social Psychology of Music **Credit Hours: 3**
MUE 7816 Music Cognition **Credit Hours: 3**
MUE 7835 Philosophical and Historical Issues in Music Education **Credit Hours: 3**
MUE 7939 Center for Music Education Research Seminar **Credit Hours: 1-2** (four semesters 1+1+1+1+1*+1* hrs) **(4-6 credits in this program)***
MUE 7935 Seminar on Music in Higher Education **Credit Hours: 2**

Specialization: Alternative Course:

**MUE 7937 may replace one of the specialization courses except MUE 7786, MUE 7939, and MUE 7935

MUE 7937 Special Topics in Music Education **Credit Hours: 2-3 (3 credits for this program)** **

Cognate (9 Credit Hours)

Choice of graduate courses in music from the following:

Jazz Studies, Music Composition, Music Conducting, Music History, Music Literature, Music Performance, Music Theory (Or an education-related field)

Statistics and Measurement (12 Credit Hours)

EDF 6407 Statistical Analysis for Educational Research I **Credit Hours: 4**
EDF 7408 Statistical Analysis for Educational Research II **Credit Hours: 4**
EDF 7410 Design of Systematic Studies in Education **Credit Hours: 3**

Dissertation (16-18 Credit Hours)*

*6 hours of MUE 7939 – 16 hours of MUE 7980; 4 hours of MUE 7939 – 18 hours of MUE 7980

Prerequisite: Comprehensive Qualifying Examination

MUE 7980 Dissertation **Credit Hours: 2-19** * **(16-18 credits in this program)***

Music Graduate Certificate

Certifiate Code: XMU
Approved 200205

The Graduate Certificate in Music is a 12-credit-hour program for the non-degree-seeking student who holds a bachelor's degree in music and plans to pursue a master's degree at a later date. Up to 12 credit hours earned in this program can be transferred to a master's degree in music at USF.

It is also possible for a current student in the M.A. degree program in music education or the M.M. degree program to concurrently pursue the certificate as a means of completing a particular line of study as a supplement to the degree requirements.

Location/Delivery

USF Tampa. Not available online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Successful Auditions and/or Interviews are required for admission into conducting and performance programs. Approved portfolios are required for aSdmission into composition (jazz or traditional). Inquiries regarding auditions and interviews should be sent by email to the School of Music Admissions Director at MusicAdmissions@usf.edu. Be sure to include complete contact information in the email.

Official undergraduate transcripts are required with applications. The GPA for all music courses included in the undergraduate degree must be at least 3.00.

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Five years

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

Students may focus their studies in one of the following areas:

Choral Conducting
Instrumental Conducting
Jazz Composition
Jazz Performance
Music Composition
Music Performance

In each of the areas, the student must establish a program of study (curriculum) in consultation with their major professor in music. The course work should conclude with a capstone project, such as a recital and/or research paper.

School of Theatre and Dance

MD - UPdates for 2019-2020

Graduate Council approved the curriculum as noted on the date below.

Majors

Advanced Athletic Training	M.S.	Change curriculum for compliance; shared core with Ath.	4/1/19
Athletic Training	M.S.	Change curriculum for compliance; shared core with Adv. Ath. Trng	4/1/19
Medical Sciences	M.S.M.S.	Change curriculum for compliance	4/29/19
Medical Sciences	Ph.D.	Change curriculum for compliance; terminate concentrations (ANA, BMB, CTR, MMI, PLM, PAT, PAB	4/29/19

Graduate Certificates

Biomedical Ethics	Terminate Certificate	4/29/19

Morsani College of Medicine

MD - Updates for 2019-2020

MD - Programs

University of South Florida
Morsani College of Medicine
12901 Bruce B. Downs Blvd. MDC40
Tampa, FL 33612-4799

Web address: www.health.usf.edu/medicine/graduatestudies
Email: biomed@health.usf.edu
Phone: 813-974-4181
Fax: 813-974-4317

Dean, Morsani College of Medicine — Charles Lockwood, MD, MHCM
Vice Dean, Educational Affairs — Bryan Bognar, MD MPH, FACP
Sr. Associate Dean, Office of Graduate Affairs — Robert Deschenes, PhD
Associate Dean, MS Programs — Michael Barber, DPhil
Associate Dean, PhD and Postdoctoral Programs — Michael Teng, PhD
Sr. Associate Dean, Academics & Institutional Effectiveness — TBA

Mission Statement:

The Morsani College of Medicine Graduate Faculty consist of scientists who conduct research in many fields of science basic to understanding disease processes and to the development of improved methods of diagnosis, treatment and prevention of disease. Students receive their research training in up-to-date methods of scientific investigation and gain experience in modern well-equipped laboratories. The faculty is dedicated to providing high quality education in an environment conducive to scholarly activity and scientific achievement.

Candidates for the Ph.D. in Medical Science enter into an interdisciplinary major enabling them to select any one of the concentrations that are offered. Collaboration among laboratory scientists of all disciplines is encouraged. The programs of study allow students to tailor their majors to individual needs and interests. Thanks to faculty research awards, students have a multitude of opportunities to participate in cutting-edge research projects. Medical Science Ph.D. graduates go on to become deeply involved in research sponsored by academic, industrial and government institutions

The master's degree in Medical Sciences (M.S.M.S.) can be completed in as little as one year and has been designed to assist students who are seeking admissions into doctoral degree programs (Ph.D. or M.D.). Successful graduates of the Medical Science master's degree program can improve their chances for admissions into professional programs by further developing their foundational knowledge of biomedical science. Currently, the Medical Sciences master's degree program boasts a ninety percent success rate for adequately preparing students for entry into doctoral or professional majors. Financial Aid - A limited number of assistantships, fellowships, and tuition waivers are available for doctoral students.

Major Research Areas:

Allergy, Immunology and Infectious Diseases Cancer Biology, Cardiovascular Research, Neuroscience Research

Health Informatics, M.S.H.I.

Degree Information

Priority Admission Application Deadlines: www.grad.usf.edu/majors.php

Minimum Total Hours: 32
Level: Masters
CIP Code: 51.2706
Dept Code: MED
Major/College Codes: HIF/MD
Approved: 2013

Concentrations:

Healthcare Analytics (BHAP)

Contact Information

College: Medicine

Contact Information: www.grad.usf.edu/majors.php

The Master of Science in Health Informatics degree offers a curriculum that integrates the domains of information science, information resources management and health care organization and management.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

$65 non-refundable application fee
The breakdown of this fee is as follows:
$30.00 USF's Application Fee
$35.00 Transcript Procurement Fee
A bachelor's degree from a regionally-accredited university in the biological, chemical, computer or management information sciences or other appropriate field, or the equivalent bachelors and/or graduate degrees from a foreign institution.
Minimum grade point average of 3.00 in the sciences
Resume
Two Letters of Recommendation
While these are not required, GRE, MCAT or VAT standardized test scores or evidence of substantial health informatics experience can be submitted to enhance an application.
Applicants who are not U.S. citizens, but are residing in the U.S., must provide a copy of a U.S. Visa or permanent resident card. Contact the program and International Admissions for more information on which visas are eligible to apply to this major.

Curriculum Requirements

Total Minimum Hours 32 credit hours

Core Requirements (26 Credit Hours)

Required Courses (11 Credit Hours)

HIM 6667 Foundation in Management Information Systems **Credit Hours: 3**
HIM 6017 Legal Aspects of Health Information Management **Credit Hours: 3**
HIM 6217 Health Data Management **Credit Hours: 3**
HIM 6018 e-Healthcare Ethics **Credit Hours: 2**

Concentration Requirements

Students select either the General Pathway or the Healthcare Analytics Concentration:

General Pathway Course Requirements: (15 Credit Hours)

HIM 6840 Case Studies in Health Information Management **Credit Hours: 3**
HIM 6118 - Introduction to Health Informatics **Credit(s): 3**
HIM 6350 e-Medicine Business Models **Credit Hours: 3**
HIM 6114 Integrated Electronic Medical Records **Credit Hours: 3**
HIM 6320 Managerial Communication **Credit Hours: 3**

Healthcare Analytics Concentration (15 Credit Hours):

HIM 6141 Introduction to Health Informatics **Credit Hours: 3**
HIM 6628 Health Data Visualization **Credit Hours: 3**
HIM 6623 Statistics for Healthcare Analytics **Credit Hours: 3**
HIM 6655 Healthcare Data Mining and Predictive Analytics **Credit Hours: 3**
HIM 6844 Health Outcomes Research **Credit Hours: 3**

Electives (6 Credit Hours)

General Pathway Electives (6 Credit Hours)

Two or more required:

HIM 6137 Pharmacy Informatics **Credit Hours: 3**
HIM 6943 Health Informatics Internship **Credit Hours: 1-3 (3 credits for this program)**
HIM 6908 Health Informatics Independent Study **Credit Hours: 1-3 (3 credits for this program)**
HIM 6141 Introduction to Health Informatics **Credit Hours: 3**
HIM 6686 Healthcare Decision Support **Credit Hours: 3**
HIM 6844 Health Outcomes Research **Credit Hours: 3**
HIM 6664 Healthcare Project Management **Credit Hours: 3**
HIM 6477 Medical Terminology for Health Informatics Professionals **Credit Hours: 3**

Concentration Electives (6 Credit Hours)

Two or more required:

HIM 6686 Healthcare Decision Support **Credit Hours: 3**
HIM 6629 Applied Healthcare Analytics **Credit Hours: 3**
HIM 6908 Health Informatics Independent Study **Credit Hours: 1-3 (3 credits for this program)**
HIM 6671 Advanced Healthcare Analytics Applications **Credit Hours: 3**
HIM 6943 Health Informatics Internship **Credit Hours: 1-3 (3 credits for this program)**
HIM 6118 - Introduction to Health Informatics **Credit(s): 3**
HIM 6477 Medical Terminology for Health Informatics Professionals **Credit Hours: 3**

Comprehensive Exam

Internship Project

For students who select the Internship option, each student will be assigned a faculty director who will oversee the internship project. Students will formally present their projects which will be shared with all major participants.

A minimum of thirty-two (32) semester hours are required and entail a minimum of 480 contact hours

Aging & Neuroscience Graduate Certificate

This program is offered fully online.

Certificate Code: **XAN**

Description

The Graduate Certificate in Aging and Neuroscience offers students the opportunity to do graduate-level study that focuses on Neuroscience, Aging and Brain Repair. Students study anatomy, physiology, pathology, and molecular biology of the nervous system, and how these disciplines relate to behavioral sciences and modern therapeutic advances.

The graduate certificate offers students flexibility in class scheduling and focused course work. Graduates will develop the specialized skills needed to work in research and/or clinical environments, in hospital, laboratory, industry, or university settings, where specialized knowledge of Neuroscience is required. In addition to medical residents, the certificate is also intended for students who are not yet committed to pursuing a graduate degree. It is anticipated that some students will apply for master's or Ph.D. degrees offered by USF's Health Science Center.

Course Location/Delivery

Partial

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (9 Credit Hours)

9-12 Cr. Hrs. (Exemption poss. w/ advanced standing)

GMS 6706 Basic Medical Neuroscience **Credit Hours: 3**
GMS 6771 Aging and Neuroscience **Credit Hours: 3**

Electives

Select 1 or more:

GMS 6735 Neuropharmacology **Credit Hours: 3**
GMS 6773 Stem Cells and Brain Repair **Credit Hours: 3**

GMS 6201 Basic Medical Biochemistry **Credit Hours: 3**
GMS 6440 Basic Medical Physiology **Credit Hours: 3**
GMS 6772 The Spinal Cord: Development, Pathology and Therapy **Credit Hours: 3**
GMS 6908 Medical Sciences Independent Study **Credit Hours: 1-3**

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Anatomy Graduate Certificate

This program is offered fully online.

Certificate Code: **XAY**

Description

The Graduate Certificate in Anatomy offers a thorough study in human anatomy using on-line & on-ground, traditional, hands-on and clinically-relevant learning tools. This certificate is targeted to students seeking to improve their academic credentials for future careers in biomedical careers or education.

Course Location/Delivery

Partially online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have:

Letter of Interest, resume

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Courses in Gen. BYS, Gen CH, & Gen PH

Requirements of this Certificate (12 Credit Hours)

GMS 6604 Human Structure and Function **Credit Hours: 3**
GMS 6605 Basic Medical Anatomy **Credit Hours: 3**
GMS 6630 Basic Medical Histology **Credit Hours: 3**
GMS 6610 Advanced Neuroanatomy **Credit Hours: 3-6**

Electives

Time Limit

1 Year

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Bioinformatics Graduate Certificate

This program is offered fully online.

Certificate Code: **XBI**

Description

The rapid expansion of genomic information and the databases that contain various types of sequence and structural data has resulted in the field of bioinformatics, contributing an increasingly important role in the study of a diverse array of biological and biomedical problems. To solve these problems, more biological scientists and health and information professionals require familiarity with modern bioinformatics resources and protocols to perform their professional duties more efficiently and to gain additional insight into the applications of genomic information. The diverse array and magnitude of available genomic information challenges scientists to translate this data into new discoveries. Whether the need is academic or professional, familiarity with modern bioinformatics-based analyses has become an essential component of most genomic and proteomic studies. This certificate provides both biological scientists and information technologists with the necessary coursework for a broad understanding of the principles of bioinformatics and their application to different biological and biomedical problems.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have:

bachelor's degree from a regionally accredited college in any of the biological sciences or information systems or computer science. Quantitative and qualitative skills as demonstrated by completion of courses in biology, chemistry and computer science.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (13 Credit Hours)

GMS 7930 Selected Topics **Credit Hours: 1-3**
GMS 6012 Basic Medical Genetics **Credit Hours: 3**
GMS 7930 Selected Topics **Credit(s) 1-3**

Electives

BSC 6932 Selected Topics in Biology **Credit Hours: 1-4**
or

PHC 6050

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Biotechnology Graduate Certificate

This program is offered fully online.

Certificate Code: **XBT**

Description

The rapid explosion of genomic information available for a variety of prokaryotic and eukaryotic organisms has resulted in the interdisciplinary field of biotechnology contributing increasingly important roles in the study of a diverse array of biological, biomedical and engineering problems. To solve these problems, more biological and chemical scientists and engineers require familiarity with modern biochemical and molecular biology pathways, biotechnical applications and protocols to perform their professional duties more efficiently and to gain additional insight into the relevance and applications of biotechnology. The diverse array and magnitude of available biotechnology information challenges scientists to translate this data into new discoveries and applications in such areas as transgenic organisms, bioremediation, bioprocess development and the design of novel therapeutics. Whether the need is academic or professional, familiarity with modern biotechnology and recombinant DNA methods or molecular biological-based analyses has become an essential component of most biological-, biomedical- or bioengineering-oriented studies. This certificate provides both biological and chemical scientists and engineers with the necessary coursework for a broad understanding of the principles of biotechnology and their application to different biological, biomedical, chemical and engineering problems.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also have:

Bachelor's degree from a regionally accredited institution, or its equivalent, in the biological sciences and have 1) Quantitative and qualitative skills as demonstrated by completion of courses in biology and chemistry. 2) GRE scores can also be used to demonstrate qualitative and quantitative skills.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

GMS 7930 Selected Topics **Credit Hours: 1-3**
GMS 7930 Selected Topics **Credit(s): 1-3**
GMS 7930 Selected Topics **Credit(s): 1-3**

Electives

Select 5 Crs:

BCH 6746 Structural Biology **Credit Hours: 3**
BCH 6135C Methods in Molecular Biology **Credit Hours: 4**
GMS 6847
GMS 6012 Basic Medical Genetics **Credit Hours: 3**
GMS 7939 Graduate Seminar **Credit Hours: 1**
GMS 6943 Biotechnology Internship **Credit Hours: 3**

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Health Sciences Graduate Certificate

This program is offered fully online.

Curriculum Code: **XHL**

Description

Modern advances in the basic biomedical sciences have had a tremendous impact on how illness and disease occur or can be prevented at the cellular or molecular level. Central to human disease diagnosis and therapy are a clear understanding of the underlying anatomical, biochemical, histological and neurological alterations and abnormalities that occur at the organ and cellular levels that contribute to these diseases. The disciplines of anatomy, biochemistry, histology and neuroscience are key fields in the advancement of both medical diagnostics and treatment and when combined with the emerging technologies of genomics, proteomics and pharmacogenomics, these topics have profound effects on the diagnosis, monitoring and treatment of many diseases that result from inborn errors in metabolism. Major advances within the past few years in the fields of human genomics, molecular and cellular biology and the neurosciences have had a substantial impact on medical research and clinical care. Initially they were most successfully exploited for determining the causes of genetic diseases and how to control them. However, it is now clear that a more integrated systems approach to both diagnosis and therapy is finding applications in almost every branch of medical practice. It is revolutionizing cancer research, offers new approaches to vaccine development, has spawned a biotechnology industry that is already producing a wide range of diagnostic and therapeutic agents and, in the longer term, promises to play a major role in clarifying the causes of some of the unsolved mysteries of modern medicine including heart disease, hypertension, psychiatric disorders, rheumatic disease and many others. It should also assist in gaining insights into broader aspects of human biology, including development, aging and evolution. Recently, the rapid explosion of available human genomic information has profoundly influenced the biomedical sciences. More medical, biological and health-related practitioners require familiarity with the fundamental aspects of modern medicine that include basic human anatomy, the organization of the many biochemical pathways that control metabolism, tissue structure and neurological alterations to perform their professional duties more efficiently and to gain additional insight into the relevance and applications of modern healthcare practices. Whether the need is academic or professional, familiarity with the many aspects of the basic health sciences, has become an essential component of most biomedical-oriented studies. This certificate provides students with interests in the medical and biological sciences with the necessary coursework for a broad understanding of the principles of human anatomy, biochemistry, histology and neuroscience and their application to modern medical problems.

Course Location/Delivery

Online

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

GRE required for admission to Graduate Degree Program

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Yes

Requirements of this Certificate (12 Credit Hours)

GMS 6201 Basic Medical Biochemistry **Credit Hours: 3**
or
GMS 6706 Basic Medical Neuroscience **Credit Hours: 3**

Electives

Select 9 crs:

GMS 6707 Medical Neuroscience **Credit Hours: 3-7**
GMS 6320
GMS 6012 Basic Medical Genetics **Credit Hours: 3**
GMS 6141 Basic Medical Immunology and Microbiology **Credit Hours: 3**
GMS 6440 Basic Medical Physiology **Credit Hours: 3**
GMS 6111 Basic Medical Pathology **Credit Hours: 3**
GMS 6505 Basic Medical Pharmacology **Credit Hours: 3**
GMS 6605 Basic Medical Anatomy **Credit Hours: 3**

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Healthcare Analytics Graduate Certificate

Certificate Code: XHN
Approved 201701

Description

A SAS Approved Graduate Certificate in Healthcare Analytics from USF Health's Morsani College of Medicine positions you to enter one of healthcare's fastest-growing fields. The volume of digitized healthcare-related information has increased rapidly in recent years, and healthcare organizations need professionals who can analyze that data for improved patient outcomes and continuing advancements in healthcare delivery.

Course Location/Delivery

USF Tampa and online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Preferred bachelor's in Health Informatics, HIM or Computer Science, with a GPA of 3.00 or greater.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

HIM 6930 Selected Topics in Health Informatics **Credit Hours: 1-3**
Introduction to Healthcare Analytics (3 Credit Hours) (Proposed HIM 6116)
HIM 6628 Health Data Visualization **Credit Hours: 3**
HIM 6623 Statistics for Healthcare Analytics **Credit Hours: 3**
HIM 6655 Healthcare Data Mining and Predictive Analytics **Credit Hours: 3**

Time Limit / Average Time to Completion

Average time to complete: 2 years

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with department approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Intellectual Property Graduate Certificate

This program is offered fully online.

Curriculum Code: **XPY**

Description

The Certificate in Intellectual Property provides insight into the translation of scientific ideas and results into products or services and the legal restriction and protection of their uses. The protection of intellectual property serves as an incentive and reward from the huge amount of time and expenses that have to be invested to bring a new product to market, and only with such protection can the biotechnology Industry grow and strive.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

GMS 6095
ENT 6186 Strategic Market Assessment **Credit Hours: 3**
GMS 6847
EIN 6106 Technology and Law **Credit Hours: 3**

Electives

Time Limit

2 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Medicine & Gender Graduate Certificate

This program is offered fully online.

Curriculum Code: **XMG**

Description

The Graduate Certificate in Medicine and Gender offers students the opportunity to do graduate-level study that focuses on topics of gender-specific medicine. Recently, there has been an increased awareness that gender-specific issues influence women's and men's health more broadly and with a higher impact than previously recognized. These differences are not limited to reproductive health, but extend to almost every other organ and tissue. Students will learn about common medical issues discussed in a gender context. Since females have been traditionally excluded from clinical trials, most of the available medical knowledge applies to men accurately but not to women.Over the past two decades, inclusion of women in clinical trials and the mandated testing of drugs on females has significantly increased the available knowledge of women's health. Data are also accumulating that show significant differences in male and female biology, physiology and drug pharmacology in almost every body organ and tissue.Prospective students: This certificate is intended for all students interested in women's health or gender-specific health issues. It is also intended for medical residents, health science professionals, and students who are not yet committed to pursuing a graduate degree. It is anticipated that some students will apply for master's or Ph.D. degrees offered by USF's Health Science Center.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

2-3 page essay

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (10 Credit Hours)

GMS 7930 Selected Topics **Credit Hours: 1-3**
GMS 7930 Selected Topics **Credit(s): 1 -3**

Electives

Select 4-7 hrs:

GMS 6334 Pathobiology of Human Cancer **Credit Hours: 3**
GMS 7930 Selected Topics **Credit Hours: 1-3**
BCH 6935 Grant Writing and Scientific Communication **Credit Hours: 2**
BCH 6411 Biomedical Genomics and Genetics **Credit Hours: 4**
GMS 7910 Directed Research **Credit Hours: 1-19**
GMS 7930 Selected Topics **Credit(s): 1-3**
PHC 6532 Women's' Health Issues in Public Health **Credit Hours: 3**

Time Limit

2 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Scholarly Excellence, Leadership Experiences, & Collaborative Training (S.E.L.E.C.T) Graduate Certificate

This program is offered fully online.

Curriculum Code: **XSH**

Description

The USF Health Morsani College of Medicine SELECT program (Scholarly Excellence, Leadership Experiences, and Collaborative Training) prepares students to be physician leaders who can accelerate change in health care. The program recruits and develops students with the intellectual perspective, empathy, creativity and passion to change patient care, the health of communities and the medical profession. The founding principle of SELECT is the concept that students with high emotional intelligence are more likely to develop the skills needed to transform health care and improve the health of communities. Half of the curriculum is delivered on the USF-Tampa campus in the first two years of the MD program and the other half is delivered at the USF-Lehigh Valley campus in Allentown, PA during the third and fourth years of the degree.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

Admission to M.D. program

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (13 Credit Hours)

BMS 6890
BMS 6890B
BMS 7231S
MDE 8920
MDE 8950

Electives

Time Limit

5 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Medicine

Medicine, M.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: Four Year Program
Level: Doctoral Professional
CIP Code: 51.1201
Dept Code: MD
Major/College Codes: MED MD

Also offered as an Accelerated Major
Also offered as an Concurrent Degree

Contact Information

College: Medicine
Department: MD

Contact Information: www.health.usf.edu/medicine/mdprogram

The Morsani College of Medicine offers a traditional medical program and a parallel program that give you a choice of emphasis and geographical focus.

The CORE program is based in Tampa for four years and features a strong preclinical integrated curriculum with small group and engaged learning emphasis, integrated clerkships, and year 4 career tracks that prepare you for the residency of your choice. The Scholarly Concentration option allows you to focus and develop yourself in an area of interest outside the normal curriculum in fields such as Health Care Disparities, Engineering, Business, and Medical Education.

The SELECT program is based in Tampa (2 years) and Lehigh Valley, Pennsylvania (2 years). It has the same integrated curriculum focus as the CORE program, but also offers additional training in Leadership, Health Systems, and Values-Centered Patient Care, all important domains for developing medical leadership. This increased emphasis on leadership (in one on one coaching, small groups, seminars) is a focused alternative to the Scholarly Concentration program for students who want to focus on developing their medical leadership skills.

Major Research Areas
Biomedical research
International Medicine
Medical Education
Health Systems
Health Disparities

Admission Information

Admission Requirements:
Students applying for admission to the USF Morsani College of Medicine (MCOM) M.D. degree program must complete the requirements for a bachelor's degree at a regionally accredited U.S. university or college by the time of matriculation. In addition, all prerequisites must be completed from a U.S. regionally

accredited institution by the time of matriculation into the MCOM. Required coursework may not be taken as Pass/Fail or online. Applicants who are currently pursuing a graduate or professional degree are obligated to complete all degree requirements prior to matriculation into the M.D. degree program.

AMACS Primary Application
Secondary Application with program selection
Bachelor's Degree (from U.S. regionally accredited institutions only)
Pre-professional committee evaluation or three faculty letters of recommendation
Two personal / character letters of recommendation
Personal Statement
Interview
Completion of prerequisite courses
Medical College Admissions (MCAT)
Residency – must be either a U.S. Citizen or Permanent Resident of the U.S.

Curriculum Requirements:

Required Core Curriculum Descriptions

Doctoring 1-3
A three-year small group-based sequence that teaches students interviewing, physical diagnosis, and differential diagnostic skills; bioethics, medical humanities, health systems and economics; community, preventive, and public health. Introduces care of special populations including the disabled.

Evidence-based Clinical Reasoning 1-2
A two-year sequence first introducing students to principles of statistics and evidence-based medicine, then applying that knowledge in small group based problem based learning (PBL) cases in which students research topics relevant to the presented cases and teach their small group peers what they learned. The course emphasizes evidence-based and lifelong learning principles.

Year 1-2 Medical Science Courses
Years 1 and 2 of the curriculum are a continuum that introduce students to an organ system-based overview of normal and disease processes, increasing the emphasis on diseases and therapy as the courses progress. Courses integrate anatomy, physiology, pathophysiology, cell biology, biochemistry, microbiology and pharmacology relevant to the organ systems under study.

Course 1: Musculoskeletal System - dissection based anatomy of the back and extremities; physiology and biochemistry of muscle contraction
Course 1: Cancer biology - a review of important tenets of molecular/cellular biology, genetics and immunology from the perspective of cancer pathogenesis and treatment.
Course 2: Neurologic System - structure and function of the central and peripheral neurologic system
Course 3: Cardiovascular and Pulmonary Systems - normal function, common abnormalities, and structural anatomy of the heart, lungs and vessels; components and physiology of blood.
Course 4: Renal, Endocrine, Gastrointestinal, and Reproductive Systems - integrated histology, physiology and gross anatomy of these systems; biochemistry and physiology of metabolism.
Course 5: Immunology, Microbiology, Hematology, Rheumatology, Dermatology - principles of immune host defense, microbial pathogenesis; autoimmunity/rheumatologic diseases; diseases of blood and skin.
Course 6: Nephrology, Pulmonary Disease, Cardiology, Gastroenterology - pathophysiology, pathology, and pharmacology for diseases of kidneys, lungs, heart/vessels, liver, and GI tract.
Course 7: Neurology, Psychiatry, Endocrinology, Men's and Women's Health - diseases and therapy of the brain and peripheral nervous system, endocrine system, male and female reproductive tracts; psychiatry, including psychiatric interviewing.

Colloquium 1-2
Selective seminars in several areas of the students' choice (e.g. advances in radiology, sun and skin, neurosurgery principles, etc.) designed to give the students elective choice in developing career plans. Taken twice, once per year.

Year 3 Clinical Clerkships

MCOM clinical clerkships in Tampa emphasize integrative process of patient care from a patient perspective, vs. the traditional departmental-based approach. Multiple departments interact to deliver the curriculum at core clinical sites including Tampa General Hospital, Haley VA Medical Center, All Children's Hospital, and Morsani Center for Advanced Patient care. The year includes 4 weeks of elective time of the student's choice to explore non-clerkship career options or do research.

Primary Care - outpatient care in Family Medicine, Internal Medicine, Pediatrics, and Women's Health/Gynecology, emphasizing management of common chronic diseases and prevention strategies.

Adult Medicine - inpatient care of acute adult illness

Surgical Care - principles of pre-, intra-, and post-operative care, with rotations in general, trauma, vascular, and gynecologic surgery. Includes selective rotations in surgical subspecialties and simulation training at the Center for Advanced Medical Learning and Simulation (CAMLS) in downtown Tampa.

Psychiatry and Neurology - diagnosis and therapy of neurologic and psychiatric illness in the inpatient and outpatient settings. Shared approaches to patients with altered mental state.

Maternal, Newborn, and Pediatric Care - Obstetrics, prenatal care, labor and delivery, newborn nursery, inpatient pediatric care

Year 4 Electives/Selectives

Year 4 is focused on preparation for residency, building advanced clinical skills, and exploration of areas of medicine of interest to the student. Nine months of coursework are required, including:

Four months of work in a track that prepares students for a specific residency discipline, including:
An Acting Internship with direct patient management responsibility (1 month)
A return to basic science in the discipline of the track, involving both clinical and basic science approaches to the discipline (2-4 weeks)
1-2 months of specialty, consultative, or other selectives
Five months of additional coursework, which may include independent study electives, externships at other approved medical centers, and additional electives of the student's choice.

SELECT Program Overview

Building Leadership Competencies and Emotional Intelligence

The USF Health Morsani College of Medicine SELECT program (Scholarly Excellence. Leadership Experiences. Collaborative Training.) prepares students to be physician leaders who can accelerate change in health care. The program recruits and develops students with the intellectual perspective, empathy, creativity and passion to change patient care, the health of communities and the medical profession. The founding principle of SELECT is the concept that students with high emotional intelligence are more likely to develop the skills needed to transform health care and improve the health of communities. In essence: students with a strong foundation in emotional intelligence will become more engaged, compassionate physicians who will connect deeply with their patients and their patients' families; feel more comfortable with and be more effective as team leaders and team members; and have the relationship building skills and systems perspectives to more effectively lead change in health care organizations.

One of the most distinctive features of SELECT is the opportunity for medical students to shape their educational experiences at both a highly progressive, student-centered medical school, the USF Morsani College of Medicine in Tampa, FL, AND at one of the country's top health networks known for its quality, safety, and lean approach to driving efficiency in healthcare, the Lehigh Valley Health Network in Allentown, PA. The first class was admitted in 2011, and 56 students are now admitted annually. Students admitted to SELECT spend their first two years taking classes at the USF Morsani College of Medicine in Tampa, and then go to Lehigh Valley Campus for two years of clinical education. Students admitted to SELECT develop leadership skills that will arm them with the knowledge, resources, and network to change the healthcare landscape for the better. These include:

Making a difference in the lives of patients, peers, community, and hospitals.
Applying continuous improvement approaches to optimize healthcare quality, patient safety, and efficient use of resources.
Building resilience to operate efficiently in complex health systems.
Acquiring tools to become a change catalyst.
Becoming a driving force for the evolution of healthcare quality.

Accelerated Major

Also available as an Accelerated Majors

Concurrent Degree

Also available as a Concurrent Degrees

Physician Assistant Studies, M.P.A.S.

Degree Information

Priority Admission Application Deadlines: www.grad.usf.edu/majors

Spring April - (Contact department for exact date)

Minimum Total Hours: 90
Level: Masters
CIP Code: 51.0912
Dept Code: MPA
Major/College: MPA / MCOM
Approved Effective Fall 2016

Contact Information

College: Morsani College of Medicine
Department Physician Assistant Program

Contact information
www.health.usf.edu/medicine/pa/

The goal of the USF PA Major is to prepare its graduates to deliver high-quality, evidence-based, patient-centered health care. This is accomplished through a robust, systems-based curriculum. The major (delivered over 24 continuous months) begins with a rigorous 12-month phase in basic and medical sciences. Educational methodologies include traditional lecture, clinical simulation, team-based problem solving, and hands-on laboratory learning experiences – often delivered with students from other USF health students. The 12-month clinical phase follows and students engage in approximately 2300 hours of supervised clinical practice experiences. Students will participate in the following five week, core clinical clerkships: Internal Medicine, Family Medicine, Pediatrics, Surgery, Emergency Medicine, Women's Health, Behavioral and Mental Health, and two elective clerkships. Upon successful completion of the two-year curriculum, the student is awarded the Master of Physician Assistant Studies degree. The graduate is then eligible to sit for the Physician Assistant National Certifying Exam (PANCE) administered by the National Commission on Certification of Physician Assistants (NCCPA).

Accreditation

The ARC-PA has granted Accreditation - Provisional status to the USF Morsani College of Medicine Physician Assistant Program sponsored by the University of South Florida. Accreditation-Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed major that has not yet enrolled students appear to demonstrate the degree program's ability to meet the ARC-PA Standards or when a program holding Accreditation-Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students.

Accreditation-Provisional does not ensure any subsequent accreditation status. It is limited to no more than five years from matriculation of the first class.

Admission Information

All applicants to the USF MCOM PA major must apply through the Central Application Service for Physician Assistants (CASPA).

Degree, GPA and GRE

Degree and prerequisite coursework taken outside of the U.S. is not accepted (regardless if made equivalent by a U.S. institution).
Science GPA of 3.0;
Graduate Record Examination (GRE) Test is required– official scores are required and must be from tests taken within the past five years.
GRE Scores are to be sent directly to CASPA. The Univ South Florida PA Prgm CASPA GRE code 8854. (DO NOT use USF institution code of 5828).
Transfer credit or Admission with Advanced Standing from another PA major is not accepted. All curriculum requirements for the major are required for graduation and must be completed at the USF PA major.

Prerequisites Coursework

CLEP (College Level Examination Program), AP (Advanced Placement), IB (International Baccalaureate), and AICE (Advanced International Certificate of Education) course credit may not be used or substituted to meet prerequisite requirements. Dual enrollment course credits from an accredited college or university are acceptable for prerequisites.
Prerequisite coursework must be completed by the end of the fall semester preceding matriculation.
Courses designed for non-science majors will not be accepted.
All prerequisites are required for an applicant to be considered for acceptance into the PA program.
Veterans are encouraged to apply, and as all other applicants, must meet all the prerequisites for admissions. Veterans with questions regarding prerequisite course work should contact the PA program. Please provide a copy of the Joint Services Transcript with course descriptions to determine if the course in question satisfies the prescribed prerequisite.
The courses listed below are required for acceptance into the PA program. o Biology with Laboratory – 1 semester
Microbiology with Laboratory – 1 semester
Chemistry with Laboratory – 2 semesters
Organic Chemistry with Laboratory – 1 semester
Organic Chemistry II **OR** Biochemistry – 1 semester
Anatomy & Physiology with Laboratory – 2 semesters
Medical Terminology – 1 semester or course

Experience in Healthcare Setting

A minimum of 500 hours of direct patient care experience in a health care setting must be completed prior to application.
Hands-on patient care experiences may come from a variety of places. The extent to which an applicant is actually involved in patient care will be weighed based on the description of the applicant's duties during those hours. The title of a position is not as important as the duties the applicant performed in terms of patient contact and interaction with the patients and other healthcare providers (physicians, PAs, nurses, etc.)
Example as of direct patient care experiences may include, but are not limited to EMT, paramedic, medical assistant, scribe, patient care tech, nurse, surgical tech, athletic trainer, physical therapy aide, etc.
Applicants will submit verifiable information regarding their health care experiences on CASPA.
Shadowing experiences are not accepted as direct patient care.

Letters of Recommendation

Three letters of recommendation are required.
Letters should be from Physicians, Physician Assistants, Nurse Practitioners, Research Mentors, Professors, Volunteer Coordinators/Supervisors who had direct interaction with the applicant and can attest to his/her qualities, strengthens and suitability for a career as a Physician Assistant.
One letter of a recommendation must be from someone who supervised the applicant in a clinical setting.
Letters should not be from a peer or family member.

Residency

U.S. Citizen or Permanent Resident Alien
Permanent Resident Alien must possess a valid Green Card at the time of application. Documentation will be required.
In State or Out of State for tuition purposes
To qualify for in state tuition, proof of residency for the 12 months preceding matriculation is required.
For more information, please visit our General Classifications Procedures page.

Curriculum Requirements:

Total minimum hours required: 90 hours post-baccalaureate

Curriculum for Year 1

Summer (18 Credit Hours)

Anatomy I **Credit(s): 2**
Pathophysiological Basis of Disease I **Credit(s): 3**
Clinical Medicine I **Credit(s): 5**
Clinical Pharmacology I **Credit(s): 3**
Physical Diagnosis I **Credit(s): 2**
Role of the Physician Assistant in American Healthcare **Credit(s): 1**
Clinical Laboratory and Diagnostics I **Credit(s): 2**

Fall (18 Credits Hours)

Anatomy II **Credit(s): 2**
Pathophysiological Basis of Disease II **Credit(s): 3**
Clinical Medicine II **Credit(s): 5**
Clinical Pharmacology II **Credit(s): 3**
Physical Diagnosis II **Credit(s): 2**
Biostatistics and Epidemiology: An Introduction to Clinical Research **Credit(s): 1**
Clinical Laboratory and Diagnostics II **Credit(s): 1**
Basic Medical Genetics **Credit(s): 1**

Spring (17 Credit Hours)

Clinical Medicine III **Credit(s): 8**
Advanced Clinical Pharmacotherapeutics **Credit(s): 3**
Clinical Skills and Procedures **Credit(s): 2**
Evidence-Based Medicine **Credit(s): 1**
Behavioral Medicine **Credit(s): 2**
Cultural Issues in Healthcare **Credit(s): 1**

Curriculum for Year 2

Capstone Research Project **Credit(s): 1**
Internal Medicine **Credit(s): 4** (Length of Clerkship Weeks: 5)
Surgery **Credit(s): 4** (Length of Clerkship Weeks: 5)
Pediatrics **Credit(s): 4** (Length of Clerkship Weeks: 5)
Family Medicine **Credit(s): 4** (Length of Clerkship Weeks: 5)
Women's Health **Credit(s): 4** (Length of Clerkship Weeks: 5)
Emergency Medicine **Credit(s): 4** (Length of Clerkship Weeks: 5)
Behavioral and Mental Health **Credit(s): 4** (Length of Clerkship Weeks: 5)
Elective **Credit(s): 8** (Length of Clerkship Weeks: 10)

Core Course Requirements

All courses above.

Electives

Students chose clinical electives in year two of the major.

Comprehensive Exam

Capstone Research Project

The major culminates in a required capstone research project. The goal of the capstone research project is to develop competency in the critical appraisal of research and the application of the best evidence to patient care, health policy, and advocacy; ultimately resulting in improved patient outcomes.

Internship

Other

Upon graduation, the MPAS graduate will be eligible to sit for the Physician Assistant National Certifying Exam (PANCE) administered by the National Commission on Certification of Physician Assistants (NCCPA).

Department of Molecular Medicine

Bioinformatics and Computational Biology, M.S.B.C.B.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 26.1103
Dept Code: MED
Major/College Codes: BCB MD
Approved: 2003

Contact Information

College: Medicine
Department: Molecular Medicine

Contact Information: http://www.grad.usf.edu/majors

Other Resources:
http://gradaffairs.health.usf.edu/Bioinformatics.html

The Master's Degree Program in Bioinformatics and Computational Biology at the University of South Florida represents a multi-college partnership and a truly interdisciplinary collaboration. Participating departments include the Departments of Biochemistry & Molecular Biology in the Morsani College of Medicine, Mathematics in the College of Arts and Sciences, Computer Sciences and Engineering and the Division of Biomedical Engineering in the College of Engineering, Epidemiology and Biostatistics in the College of Public Health and Information Systems and Decision Sciences in the College of Business Administration. The major is designed to meet the increasing demand for trained people in this emerging area, which crosses the traditional fields of biological, mathematical and computer sciences. The major, therefore, builds on and complements the current strengths of the university.

The goal of the Master's Degree Program in Bioinformatics and Computational Biology is to provide students enrolled in the major with high quality training and education that will prepare them for careers in science, industry, health care and education. The curriculum has been designed accordingly and provides the theoretical background, the practical training and, with the internships, the "real life" experience, which will equip students with the essential tools for a successful career in the field of Bioinformatics and Computational Biology.

The Master's Degree Program in Bioinformatics & Computational Biology is designed for 36 credit hours to be obtained during one to two years of study. Core courses will provide the foundation and basics before advanced work, including electives, and a Master's thesis or internship will be pursued. The curriculum is flexible and will be tailored to the individual student's background, interests and career goals. However, electives must be selected from at least two of the participating departments to assure breadth of training.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Minimum grade-point average of 3.00 in the sciences
Graduate Record Examination*
Completed pre-requisites in:
Calculus I-III
Linear algebra
Biostatistics
At least "C" and "Maple" or "Mathematica" or "MATH-CAD"
General biology (1 year)
Organic chemistry (1 year)

*The GRE may be waived in special circumstances where the applicant can demonstrate substantial bioinformatics experience. This experience includes (but is not limited to) 2-3 years of research experience in academic or industrial settings working on bioinformatics analysis of biological data, or software development (preferentially in biological or bioinformatics fields), or participation in research projects leading to published papers. The decision on the waiving of GRE will be at the Graduate Director's discretion.

Prerequisites:
Calculus I-III, linear algebra, biostatistics, at least "C" and "Maple" or "Mathematica" or "MATH-CAD", one year of general biology and one year of organic chemistry.

Curriculum Requirements

Total Minimum Hours - 36

Core Requirements – 28
Electives – 8

Required Courses (28 hours)

Required courses: (28 Credit Hours)

Students who can demonstrate significant prior training in any required course can, at any time during their studies, with written approval of the Graduate Director, replace the course with a major elective course.

GMS 7930 Selected Topics **Credit Hours: 1-3 (4 credits in this program)** (Principles of Molecular Medicine Sec I & II)
GMS 7930 Selected Topics **Credit(s): 1-3 (3 credits for this program)** (Python Programming)
BCH 6886 Fundamentals of Structural Bioinformatics **Credit Hours: 4**
GMS 7930 Selected Topics **Credit(s): 1-3 (3 credits for this program)** (Applied Bioinformatics)
BSC 6932 Selected Topics in Biology **Credit Hours: 1-4 (3 credits for this program)** (Computational Biology)
GMS 6901 - Research Ethics **Credit(s): 1**
PHC 6050 Biostatistics I **Credit Hours: 3**
BCH 6942 Bioinformatics Internship I **Credit Hours: 4-6 (4 credits in this program)**
MAT 5932 Selected Topics **Credit Hours: 1-4 (3 credits in this program)** (Combinatorics/Graph Theory)

Electives (8 Credit Hours)

Students select from the lists below, or other course as approved by Graduate Director.

Sequence

Required Courses:

Fall

GMS 7930 Selected Topics **Credit Hours: 1-3 (4 credits in this program)** (Basic Principles of Molecular Medicine Sec I & II)
MAT 5932 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Combinatorics/Graph Theory)
GMS 6091 Responsible Conduct in Research **Credit Hours: 1**

Spring

BCH 6886 Fundamentals of Structural Bioinformatics **Credit Hours: 4**
PHC 6050 Biostatistics I **Credit Hours: 3**
BSC 6932 Selected Topics in Biology **Credit Hours: 1-4 (3 credits for this program)** (Computational Biology)

Summer

GMS 7930 Selected Topics **Credit Hours: 1-3**
GMS 7930 Selected Topics **Credit(s): 1-3 (3 credits for this program)** (Python Programming)
BCH 6952 - Bioinformatics Internship (all semesters) **Credit(s): 4-6**

Science/COM:

BCH 6135C Methods in Molecular Biology **Credit Hours: 4**
GMS 6114 Vaccines and Applied Immunology **Credit Hours: 2**
GMS 6194 Biotechnology Forum **Credit Hours: 1**
GMS 6933 Case Studies Intellectual Property in Biotechnology **Credit Hours: 2**
GMS 6141 Basic Medical Immunology and Microbiology **Credit Hours: 3**
CIS 6930 Special Topics **Credit Hours: 1-5 (3 credits for this program)** (Advanced Data Structures)
MAT 6932 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Sel. Topics in Bioinformatics & Comp. Biology)
GMS 7930 Selected Topics **Credit Hours: 1-3 (3 credits for this program)**
GMS 7939 Graduate Seminar **Credit Hours: 1**
GMS 6847 - Translational Biotechnology **Credit(s): 3**
GMS 7910 Directed Research **Credit Hours: 1-19 (1-4 credits for this program)**
GMS 6101 Molecular and Cellular Immunology **Credit Hours: 3-4 (3 credits for this program)**
BCH 6746 Structural Biology **Credit Hours: 3**
BCH 6227 - Molecular Basis of Disease **Credit(s): 4**
GMS 6103 Foundations in Medical Microbiology and Immunology **Credit Hours: 4**
GMS 6107 Advances in Virology **Credit Hours: 2**

Management Information Systems/COBA:

ISM 6124 Advanced Systems Analysis and Design **Credit Hours: 3**
ISM 6218 Advanced Database Management **Credit Hours: 3**
ISM 6225 Distributed Information Systems **Credit Hours: 3**

ISM 6930 Selected Topics in MIS **Credit Hours: 1-6 (3 credits for this program)** (Data Warehousing and Data Mining)
ISM 6930 Selected Topics in MIS **Credit(s): 1-6 (3 credits for this program)** (Information Technology in Medical Care)

Computer Science and Engineering/Biomedical Engineering/CE:

COT 6405 Introduction to the Theory of Algorithms **Credit Hours: 3**
CEN 6016 - Software Engineering **Credit(s): 3**
CAP 5625 Introduction to Artificial Intelligence **Credit Hours: 3**
CAP 6638 Geometric/Statistical Pattern Recognition Techniques **Credit Hours: 3**
CAP 5400 Digital Image Processing **Credit Hours: 3**
ESB/ CIS 6930 Special Topics **Credit Hours: 1-5 (3 credits for this program)** (Bioinformatics in Biomedical Engineering)

Mathematics/CAS:

STA 5326 Mathematical Statistics I **Credit Hours: 3**
MAD 5305 Graph Theory **Credit Hours: 3**
STA 5166 Statistical Methods I **Credit Hours: 3**
MAT 6939 Graduate Seminar **Credit Hours: 1-4 (2 credits for this program)**

Epidemiology & Biostatistics/CPH:

PHC 6051 Biostatistics II **Credit Hours: 3**
PHC 6053 Categorical Data Analysis **Credit Hours: 3**
PHC 6054 - Design of Experimental Studies for Health Researchers **Credit(s): 3**
PHC 6057 Biostatistical Inference I **Credit Hours: 3**

Comprehensive Exam

As an alternative to a Master's Comprehensive Exam, Bioinformatics Master's students will have to complete a practical internship and theoretical assignment, which will both require the successful application of the knowledge they have acquired during their formal training. Required are:

An internship with a written and an oral internship report and
A review paper providing an overview of recent advancements in an area of bioinformatics of the student's choice.

Thesis

Complete M.S. Thesis Project or Internship **Credit(s): 4-6**

Biotechnology, M.S.B.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

In select cases, late admission is possible.

Minimum Total Hours: 36
Level: Masters
CIP Code: 26.1201
Dept Code: MED
Major/College Codes: MSB MD
Approved: 2007

Also offered as a Concurrent Degree

Contact Information

College: Medicine
Department: Molecular Medicine

Contact Information: http://www.grad.usf.edu/majors
biotech@health.usf.edu

Other Resources:
Website: http://health.usf.edu/medicine/graduatestudies/biotechnology

The USF Master's Degree Program in Biotechnology represents a multi-college partnership and a truly interdisciplinary collaboration. Participating colleges include the Morsani College of Medicine, the College of Engineering, the College of Public Health, the College of Arts and Sciences and the College of Business Administration. The major is designed to meet the increasing demand for trained people in this exploding area, which crosses the traditional fields of biological, chemical, engineering, health and computer sciences. The curriculum has been designed accordingly and provides the theoretical background, the practical training and, with the internships, the "real life" experience, which will equip students with the essential tools for a successful career in the field of biotechnology. In 2008, the USF Biotechnology major was recognized by the Council of Graduate Schools as **Professional Science Master's Program.** Graduates take jobs in the Biotechnology Industry or move on to a Ph.D. Degree Program, Medical School, Dental School, Veterinary School or Pharmacy School. The Master's Degree Program in Biotechnology can be obtained in 3 semesters of study and is available for full-time and part-time enrollment.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

The USF Biotechnology major will be available for full -time and part-time enrollment. In order to be considered for admission to the Master's degree program in Biotechnology, applicants must fulfill the following requirements:

Administrative Pre-Requirements:

A GRE test score *
Two letters of recommendation
Statement of purpose, indicating how the major would suit the student's interests and serve his/her professional goals

*The GRE may be waived in special circumstances where the applicant can demonstrate substantial graduate level experience. This experience can include (but is not limited to) a post-graduate degree, 2-3 years of research and/or development experience in an academic or industrial settings, or participation in research projects leading to published papers. The decision on the waiving of GRE will be at the Graduate Director's discretion.

Major Pre Requirements:

A good foundation in biochemistry, molecular biology and genetics, i.e. a bachelor's degree in either the biological or chemical sciences or at least one year of studies in those disciplines would be the optimal preparation for admission to the major in Biotechnology. However, the faculty of the USF Biotechnology major is aware that not all applicants who are interested in pursuing this degree will have this formal background. Instead, some might have accumulated substantial knowledge in one of these disciplines during their work as laboratory technicians, engineering assistants or environmental or public health service providers. Those students would be ideally suited to start their graduate education with a Graduate Certificate in Biotechnology that is also offered by the Department of Molecular Medicine in the Morsani College of Medicine.

Curriculum Requirements

Total Minimum Hours- 36 credit hours

Core – 21 credit hours
Electives – 12 credit hours
Internship – 3 credit hours

Core Requirements (17 Credit Hours)

Students who can demonstrate significant prior training in any required course, can at anytime during their studies, with written department approval, replace a course with an elective.

BCH 6135C Methods in Molecular Biology **Credit Hours: 4**
BSC 6436 Introduction to Biotechnology **Credit Hours: 3**
EIN 6106 Technology and Law **Credit Hours: 3**
GMS 6847 - Translational Biotechnology **Credit(s): 3**
BSC 6437 Biotechnology and Bioethics **Credit Hours: 3**
GMS 6194 Biotechnology Forum **Credit Hours: 1**
GMS 6066 Molecular Medicine **Credit Hours: 11 (4 credits for this program)** (Sec I & II)

Electives (12 Credit Hours)

Students may select from the lists below, or other courses based on availability and approval by the Graduate Director.

Science:

GMS 6773 Stem Cells and Brain Repair **Credit Hours: 3**
GMS 6513 Principles of Pharmacology and Therapeutics **Credit Hours: 3**
GMS 6771 Aging and Neuroscience **Credit Hours: 3**

GMS 6114 Vaccines and Applied Immunology **Credit Hours: 2**
GMS 7939 Graduate Seminar **Credit Hours: 1**
GMS 6141 Basic Medical Immunology and Microbiology **Credit Hours: 3**
GMS 6115 Medical Parasitology and Mycology **Credit Hours: 3**
GMS 6110 Microbial Pathogenesis and Host-Parasite Interactions **Credit Hours: 3**
BCH 6746 Structural Biology **Credit Hours: 3**
GMS 6103 Foundations in Medical Microbiology and Immunology **Credit Hours: 4**
GMS 7930 Selected Topics **Credit Hours: 1-3 (3 credits for this program)** (Applied Bioinformatics)
BCH 6627 Molecular Basis of Disease **Credit Hours: 4**
GMS 6101 Molecular and Cellular Immunology **Credit Hours: 3-4 (3 credits for this program)**
GMS 6012 Basic Medical Genetics **Credit Hours: 3**
GMS 6107 Advances in Virology **Credit Hours: 2**
BCH 6886 Fundamentals of Structural Bioinformatics **Credit Hours: 4**
GMS 7930 Selected Topics **Credit(s): 1-3 (3 credits for this program)** (Python Programming)
GMS 7930 Selected Topics **Credit(s): 1-3 (2 credits for this program)** (FDA Regulations)
GMS 7910 Directed Research **Credit Hours: 1-19 (1-4 credits for this program)**

Engineering:

BMD 6931 - Intro to Bioengineering **Credit(s): 3**
BME 6000 Biomedical Engineering **Credit Hours: 3** (I)
BME 6931 Selected Topics in Biomedical Engineering **Credit Hours: 1-3 (3 credits for this program)** (II)
BME 6107 Biomaterials I: Material Properties **Credit Hours: 3**
BME 6108 Biomaterials II Biocompatibility **Credit Hours: 3**
BME 6634 Biotransport Phenomena **Credit Hours: 3**
ECH 6417 Bioseparations **Credit Hours: 3**
ECH 5740 Theory and Design of Bioprocesses **Credit Hours: 3**
BME 5040 Pharmaceutical Engineering **Credit Hours: 2**
ENV 6667 Environmental Biotechnology **Credit Hours: 3**

Public Health:

PHC 6310 Environmental Occupational Toxicology **Credit Hours: 3**
PHC 6050 Biostatistics I **Credit Hours: 3**
PHC 6051 Biostatistics II **Credit Hours: 3**
PHC 6000 Epidemiology **Credit Hours: 3**
PHC 6017 - Design and Conduct of Clinical Trials **Credit(s): 3**

Business/Law:

ENT 6186 Strategic Market Assessment **Credit Hours: 3**
ENT 6016 New Venture Formation **Credit Hours: 3**
ENT 6116 Business Plan Development **Credit Hours: 3**
ENT 6126 Strategies in Technology Entrepreneurship **Credit Hours: 3**
ENT 6415 Fundamentals of Venture Capital and Private Equity **Credit Hours: 3**
GMS 6095 - Principles of Intellectual Property **Credit(s): 3**
GMS 6933 Case Studies Intellectual Property in Biotechnology **Credit Hours: 2**

Comprehensive Exam/Internship:

GMS 6943 Biotechnology Internship **Credit Hours: 3**

As an alternative to a Master's Comprehensive Exam

As an alternative to a Master's Comprehensive Exam, biotechnology Master's students will have to complete a practical internship and theoretical assignment, which will both require the successful application of the knowledge they have acquired during their formal training. Required are:

an internship with a written and an oral internship report and
a review paper providing an overview of recent advancements in an area of biotechnology of the student's choice.

Concurrent Degree

Also available as a Concurrent Degrees

Department of Orthopedics and Sports Medicine

Advanced Athletic Training, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Master's
CIP Code: 51.0913
Dept Code: OSM
Major/College Codes: AAT/MD
Approved 201508

This major shares core requirements with the M.S. in Athletic Training.

Contact Information

College: Medicine
Department: Orthopedics and Sports Medicine

Contact Information: http://www.grad.usf.edu/majors
www.usfathletictraining.com

USF Athletic Training Admissions Office – Professional Degree Program
Attn: Angela Moore
13220 USF Laurel Drive, MDF 5th Floor, MDC106,
Tampa, FL 33612

The Master of Science in Advanced Athletic Training has an emphasis on youth sports injury and other advanced athletic training competencies. This post-professional major is directed towards students either who hold the athletic training credential issued by the Board of Certification (BOC) or who are BOC-eligible or have equivalent athletic training professional preparation and wish to seek an advanced degree. This major is designed to provide students with a post-professional degree in Advanced Athletic Training with an emphasis on youth sports injury. For information on tuition costs, please contact the Department.

Major Research Areas:

Athletic training, youth sports injury

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Board of Certification (BOC)-certified or equivalent (i.e. certified athletic trainer, recent graduate from CAATE-accredited Athletic Training Program, Canadian Athletic Therapist certification)
Minimum 3.00 grade point average in Athletic Training courses
Completion of GRE on record

Curriculum Requirements

Total Minimum Hours: 33 Credit Hours

Shared Core Requirements - 6 Credit Hours

Additional Required Courses - 27 Credit Hours

Shared Core Requirements (6 Credit Hours)

ATR 5612 Evidence Based Medicine in Athletic Training **Credit Hours: 3**
ATR 6116C Preventing Sudden Death in Sports Settings **Credit Hours: 3**

Additional Course Requirements (27 hours)

ATR 6236 Pediatric Sports Medicine **Credit Hours: 3**
ATR 6235 Motor Development and Skill Acquisition **Credit Hours: 3**
ATR 5605 Youth Injury Epidemiology **Credit Hours: 3**
ATR 5515 Administration of Injury Prevention Programs **Credit Hours: 3**
ATR 5508 Contemporary Issues in Athletic Training **Credit Hours: 3** *(Includes 5 days on campus in Tampa)*
ATR 5319 Rehabilitation Considerations for Children **Credit Hours: 3**
ATR 6626 Capstone Project 1 **Credit Hours: 3**
ATR 6446 Medical Conditions of Adolescents **Credit Hours: 3**
ATR 6627 Capstone Project 2 **Credit Hours: 3**

Non-Thesis

No thesis is required.

Comprehensive Exam: Capstone Project Requirement

The degree will be a non-thesis option, but will require a capstone project for each student, that will be completed during his or her Year 2 (ATR 6626 Capstone Project 1 & ATR 6627 Capstone Project 2). The capstone project will be in lieu of a comprehensive examination. The project could consist of items such as a comprehensive literature review, development of an injury prevention program, systematic review, development of a policies and procedures manual, etc.

Other Requirements

The major is designed to be completed in two years. The format of the major includes 10 courses, which are taught completely online, and one hybrid course that includes an online component and an on-campus (Tampa, FL) 5-day session in the summer.

Athletic Training, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 60
Level: Master's
CIP Code: 51.0913
Dept Code: OSM
Major/College Codes: ATR/MD

This major shares core requirements with the M.S. in Advanced Athletic Training.

Contact Information

College: Medicine
Department: Orthopedics and Sports Medicine

Contact Information: http://www.grad.usf.edu/majors
www.usfathletictraining.com
USF Athletic Training Admissions Office – Professional Degree Program
Attn: Angela Moore
13220 USF Laurel Drive, MDF 5th Floor, MDC106,
Tampa, FL 33612

The Master of Science in Athletic Training (M.S. in A.T.) major is built around 60 credit hours of required coursework to satisfy the eligibility requirements for the students to sit for the Board of Certification examination.

Major Research Areas:

Athletic Training, Rehabilitation, Biomechanics, Prevention of Sudden Death in Athletics

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Completion of GRE on record
Meet the technical standards for admission or show potential for accomplished tasks
Three (3) letters of Recommendation
Personal statement in 1000 words or less describe primary career goals, what has most directly influenced your choice to become an Athletic Trainer, your attributes related to the field of Athletic Training and why you should be selected in the Athletic Training major.
Interview (via Skype or on campus) with the Athletic Training faculty and staff
Must complete a secondary application with ATCAS: https://atcas.liaisoncas.com/applicant-ux/#/login
Prerequisite Courses

Anatomy and Physiology (2 semesters with lab)
Medical Terminology
Nutrition
Psychology
Exercise Physiology
Chemistry (lab preferred not required)
Physics (lab preferred not required)
Biology (lab preferred not required)
Statistics
Biomechanics/Kinesiology (Recommended not required)
Technical Writing (Recommended not required)

Curriculum Requirements

Total Minimum Hours: 60 credit hours

Shared Core Requirements – 6 Credit Hours
Additional Required Courses – 54 Credit Hours

Shared Core Requirements (6 Credit Hours)

ATR 5612 Evidence Based Medicine in Athletic Training **Credit Hours: 3**
ATR 6116C Preventing Sudden Death in Sports Settings **Credit Hours: 3**

Additional Course Requirements (54 hours)

ATR 5105C Athletic Training Techniques **Credit Hours: 3**
ATR 5125 Anatomical Basis of Clinical Practice in Sports Medicine **Credit Hours: 3**
ATR 5217C Physical Examination I **Credit Hours: 4**
ATR 5218C Physical Examination II **Credit Hours: 4**
ATR 5348C Health and Wellness Promotion Across the Lifespan III **Credit Hours: 1**
ATR 5306C Therapeutic Interventions I **Credit Hours: 4**
ATR 5307C Therapeutic Interventions II **Credit Hours: 4**
ATR 5308C Therapeutic Interventions III **Credit Hours: 1**
ATR 5346C Health and Wellness Promotion Across the Lifespan I **Credit Hours: 3**
ATR 5347C Health and Wellness Promotion Across the Lifespan II **Credit Hours: 1**
ATR 5435 Medical Conditions **Credit Hours: 3**
ATR 5534 Documentation in Athletic Training **Credit Hours: 1**
ATR 6226 Advanced Athletic Training **Credit Hours: 3**
ATR 6517 Professional Practice **Credit Hours: 3**
ATR 6616 Research in Athletic Training **Credit Hours: 3**
ATR 5815 Clinical Experience in Athletic Training I **Credit Hours: 1**
ATR 5825 Clinical Experience in Athletic Training II **Credit Hours: 1**
ATR 5835C Clinical Practicum in Athletic Training **Credit Hours: 1-3**
ATR 6835 Clinical Experience in Athletic Training III **Credit Hours: 4**

Non-Thesis

No thesis is required.

Comprehensive Exam: Capstone Exam Requirement

The major is a non-thesis option, but requires successful completion of a capstone exam for each student, that will be completed during the final semester of the program. The exam consists of a comprehensive written exam, a simulated patient interaction, and design/implementation of a treatment plan.

Other Information:

Graduation Requirements - Students will complete all 60 hours of didactic coursework with a minimum GPA of 3.00. Thirteen (13) of these hours will be in Clinical Experience/Clinical Practicum. Students will complete at least 1000 hours of clinical education under an approved Preceptor.

Sequence: http://health.usf.edu/medicine/orthopaedic/athletictraining/professional/curriculum

School of Biomedical Sciences

Medical Sciences, M.S.M.S.

This program is offered online. (Note: Only the Health Science Concentration is offered 100% online)

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 31
Level: Masters
CIP Code: 26.9999
Dept Code: MED
Major/College Codes: MSG MD
Approved: 1983

Aging and Neuroscience (ANS)
Anatomy (ANA)
Health Science (HSC)
Interdisciplinary Medical Sciences (IMS)
Molecular Medicine (MLM)
Women's Health (WSH)

Contact Information

College: Medicine
Department: Medical Sciences

Contact Information: http://www.grad.usf.edu/majors
Website: http://health.usf.edu/medicine/graduatestudies/index.htm

The major is designed to provide students with advanced training in either Anatomy, Biochemistry, Medical Microbiology, or Pharmacology. Students successfully completing the major will have a foundation that will prepare them for a professional degree in biomedical science such as a M.D. or Ph.D. or qualify them to work as teachers or research assistants in academia or in the private sector. The major will provide a solid core of training in the latest findings, concepts, and experimental techniques. Students will be allowed to individualize their training through elective courses and will have the opportunity to conduct laboratory research. The major is intended for students who wish training beyond a baccalaureate degree but do not wish to commit to a Ph.D. major or do not meet the qualifications required for admissions into a M.D. or Ph.D. major.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Minimum grade-point average of 3.00 in the sciences
GRE or MCAT
Completed pre-requisites in:
General biology (1 year)

General chemistry (1 year)
General physics (1 year)
Organic chemistry (1 year)
Quantitative analysis (1 course)
Mathematics including integral and differential calculus
Application Procedures:

https://health.usf.edu/medicine/graduatestudies/masters

Curriculum Requirements

Total Minimum hours - 31

Core - 5 hours

Pre-Professional Track or Concentration - 26 hours minimum

Core Requirements (5 Hours)

GMS 6871 Health Sciences Ethics **Credit Hours: 2**
GMS 6604 Human Structure and Function **Credit Hours: 3**

Select Pre-professional Track or Concentration

Students select either the Pre-Professional Track or one of the Concentrations:

Pre-Professional Track (27 hours)

Select from the following, in consultation with the advisor:

GMS 6605 Basic Medical Anatomy **Credit Hours: 3**
GMS 6630 Basic Medical Histology **Credit Hours: 3**
GMS 6201 Basic Medical Biochemistry **Credit Hours: 3**
GMS 6706 Basic Medical Neuroscience **Credit Hours: 3**
GMS 6012 Basic Medical Genetics **Credit Hours: 3**
GMS 6141 Basic Medical Immunology and Microbiology **Credit Hours: 3**
GMS 6440 Basic Medical Physiology **Credit Hours: 3**
GMS 6111 Basic Medical Pathology **Credit Hours: 3**
GMS 6505 Basic Medical Pharmacology **Credit Hours: 3**
GMS 6000 Medical Science Success Skills **Credit Hours: 1-3**
GMS 6671 A Brief History of Medical Sciences **Credit Hours: 2**

Aging and Neuroscience (ANS) (27 hours)

Complete the following:

GMS 6771 Aging and Neuroscience **Credit Hours: 3**

GMS 6708 Neuroimmunology **Credit Hours: 3**
GMS 6706 Basic Medical Neuroscience **Credit Hours: 3**
GMS 7939 Graduate Seminar **Credit Hours: 1** (Neurosurgery)
GMS 7910 Directed Research **Credit Hours: 1-19** (Aging and Neuroscience - neurosurgery) - 5 credit hours
GMS 6773 Stem Cells and Brain Repair **Credit Hours: 3** (Neurosurgery)

And select three courses from the following:
GMS 6091 Responsible Conduct in Research **Credit Hours: 1**
GMS 6404 Systems Neurophysiology **Credit Hours: 4**
GMS 6067 Current Topics in Molecular Medicine **Credit Hours: 1**
GMS 6610 Advanced Neuroanatomy **Credit Hours: 3-6**
(4 credit hours)
GMS 6200C Biochemistry, Molecular and Cellular Biology **Credit Hours: 5**
GMS 6735 Neuropharmacology **Credit Hours: 3**

Anatomy (ANA) (27 hours)

Complete the following:

GMS 6605 Basic Medical Anatomy **Credit Hours: 3**
GMS 6630 Basic Medical Histology **Credit Hours: 3**
GMS 6323 Pathology Case Studies 1 **Credit Hours: 3**
GMS 6610 Advanced Neuroanatomy **Credit Hours: 3-6** (3 credit hours)
GMS 6326 Pathology Case Studies 4 **Credit Hours: 3**
GMS 6352 Forensic Pathology **Credit Hours: 3**
GMS 6609C Advanced Human Gross Anatomy **Credit Hours: 3-6** (4 credit hours)
GMS 6612 Supervised Teaching in Human Anatomy **Credit Hours: 1-3** (1 credit hour)

GMS 6324 Pathology Case Studies 2 **Credit Hours: 2**
OR
GMS 6601 Introduction to Laboratory Medicine and Diagnosis **Credit Hours: 2**

And select one course from the following:
GMS 6908 Medical Sciences Independent Study **Credit Hours: 1-3** (2 credit hours)
GMS 6325 Pathology Case Studies 3 **Credit Hours: 2**
GMS 6608 Pathology Case Studies 5 **Credit Hours: 2**
GMS 6950 Biomedical Science Communication and Instructional Skills **Credit Hours: 2**

Health Science (HSC) (27 hours)

Complete the following:

GMS 6605 Basic Medical Anatomy **Credit Hours: 3**
GMS 6630 Basic Medical Histology **Credit Hours: 3**
GMS 6201 Basic Medical Biochemistry **Credit Hours: 3**
GMS 6706 Basic Medical Neuroscience **Credit Hours: 3**
GMS 6012 Basic Medical Genetics **Credit Hours: 3**
GMS 6141 Basic Medical Immunology and Microbiology **Credit Hours: 3**
GMS 6440 Basic Medical Physiology **Credit Hours: 3**
GMS 6111 Basic Medical Pathology **Credit Hours: 3**

GMS 6505 Basic Medical Pharmacology **Credit Hours: 3**

Interdisciplinary Medical Sciences (IMS) (26 hours)

Complete the following:

GMS 6418 Core Principles and the Musculoskeletal System **Credit Hours: 3-7** (3 credit hours)
GMS 6054 Cancer Biology **Credit Hours: 3**
GMS 6004 Introduction to Medical Sciences **Credit Hours: 1-8**
GMS 6707 Medical Neuroscience **Credit Hours: 3-7** (6 credit hours)
GMS 6067 Current Topics in Molecular Medicine **Credit Hours: 1**
Cardiovascular and Pulmonary Systems - 6 hours
GMS 6419 Excretory, Endocrine and Reproductive Systems **Credit Hours: 3-7**

Molecular Medicine (MLM) (27 hours)

Complete the following:

BCH 6627 Molecular Basis of Disease **Credit Hours: 4**
GMS 7910 Directed Research **Credit Hours: 1-19** (9 credit hours)
BCH 6135C Methods in Molecular Biology **Credit Hours: 4**
GMS 7939 Graduate Seminar **Credit Hours: 1** (2 credit hours)
GMS 6908 Medical Sciences Independent Study **Credit Hours: 1-3** (2 credit hours)

And select two courses from the following:
GMS 6101 Molecular and Cellular Immunology **Credit Hours: 3-4** (3 credit hours)
BCH 6746 Structural Biology **Credit Hours: 3**
BCH 6888 Bioinformatics **Credit Hours: 3** *(Fundamentals of Structural Bioinformatics)* (4 credit hours)
PHC 6050 Biostatistics I **Credit Hours: 3**
GMS 6067 Current Topics in Molecular Medicine **Credit Hours: 1** (1 credit hour)
GMS 6110 Microbial Pathogenesis and Host-Parasite Interactions **Credit Hours: 3**
GMS 6115 Medical Parasitology and Mycology **Credit Hours: 3**
BSC 6436 Introduction to Biotechnology **Credit Hours: 3**
GMS 6103 Foundations in Medical Microbiology and Immunology **Credit Hours: 4**
GMS 6107 Advances in Virology **Credit Hours: 2**
GMS 6114 Vaccines and Applied Immunology **Credit Hours: 2**
GMS 6066 Molecular Medicine **Credit Hours: 11** (4 credit hours)
GMS 6334 Pathobiology of Human Cancer **Credit Hours: 3**

Women's Health (WSH) (27 hours)

Complete the following:

GMS 6380 Medicine and Gender **Credit Hours: 3**
GMS 6505 Basic Medical Pharmacology **Credit Hours: 3**
GMS 6452 Clinical Nutrition **Credit Hours: 3**
GMS 7910 Directed Research **Credit Hours: 1-19** (Women's Health) (3 credit hours)
GMS 6067 Current Topics in Molecular Medicine **Credit Hours: 1**
Introduction to Clinical Research (3 credit hours) (proposed GMS 6106)

Epidemiology of Women's Health (3 credit hours) (proposed GMS 6385)
Complementary and Alternative Medicine (3 credit hours) (proposed GMS 6182)

And Select two courses from the following:
GMS 6605 Basic Medical Anatomy **Credit Hours: 3** (online)
GMS 6201 Basic Medical Biochemistry **Credit Hours: 3** (online)
GMS 6111 Basic Medical Pathology **Credit Hours: 3** (online)
GMS 6440 Basic Medical Physiology **Credit Hours: 3** (online)
GMS 6706 Basic Medical Neuroscience **Credit Hours: 3**
GMS 6012 Basic Medical Genetics **Credit Hours: 3** (online)
GMS 6630 Basic Medical Histology **Credit Hours: 3** (online)
GMS 6671 A Brief History of Medical Sciences **Credit Hours: 2** (online)
GMS 6870 Medical Ethics and Humanities: Tools and Foundations **Credit Hours: 3** (online)
GMS 6334 Pathobiology of Human Cancer **Credit Hours: 3**
GMS 6141 Basic Medical Immunology and Microbiology **Credit Hours: 3** (online)
GMS 6908 Medical Sciences Independent Study **Credit Hours: 1-3**
GMS 6101 Molecular and Cellular Immunology **Credit Hours: 3-4**

Non-Thesis

This is a non-thesis program.

Comprehensive Exam

The Capstone Paper completed in the core course GMS 6671 in the last semester of the program serves in lieu of a Comprehensive Exam.

Medical Sciences, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90 post bachelor's, 59 post master's
Level: Doctoral
CIP Code: 26.9999
Dept Code: MED
Major/College: MSG MD
Approved: 1974

Concentrations:

Allergy Immunology & Infectious Disease (AII)
Molecular Medicine (MLM)
Molecular Pharmacology and Physiology (MPY)
Neuroscience (NEU)
Pathology and Cell Biology ((PCB)

Also available as a Concurrent Degree.

Contact Information

College: Medicine
Department: Medical Sciences

Contact Information: http://www.grad.usf.edu/majors

Website: http://health.usf.edu/medicine/graduatestudies/index.htm

The Medical Sciences Ph.D. combines intensive biomedical sciences training and research opportunities in a variety of fields. Students enrolled in the Ph.D. program will participate in a common first semester curriculum that will provide an essential background for biomedical science research. Firsthand exposure to research areas such as cancer, neuroscience, and infectious and cardiovascular diseases is gained through laboratory rotations without restriction to any one area of focus.

Collaboration among laboratory scientists of all disciplines is encouraged. The PhD program thrives upon the participation from USF Health's world-class faculty and our successful collaborations with our research partners: the Moffitt Cancer Center, James A. Haley Veterans' Hospital, All Children's Hospital, and Tampa General Hospital. Students have a plethora of opportunities to participate in cutting-edge research projects on a multidisciplinary basis – from molecules to systems, from bench to bedside.

Successful USF graduates go on to be involved in research at academic, industrial and government institutions.

Major Research Areas:

Allergy, Immunology and Infectious Diseases Cancer Biology, Cardiovascular Research, Neuroscience & Neurodegenerative Diseases, Diabetes/Metabolic Disorders, Molecular Medicine

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Minimum grade-point average of 3.00 in the sciences
GRE- (preferred 70th percentile or above) The GRE may be waived with MCAT scores and Graduate Director approval.
Completed pre-requisites in:
General biology (1 year)
General chemistry (1 year)
General physics (1 year)
Organic chemistry (1 year)
Three (3) letters of recommendation
Personal Interview
One-two page personal statement
Research experience preferred
Application Procedures - http://health.usf.edu/medicine/graduatestudies/phd/apply_phd.htm

Curriculum Requirements

Total Minimum Hours: 90 hours post-bachelor's, 59 hours post-master's

Core - 13 hours

Concentration - 13 hours minimum

Lab Rotations - 1 hour minimum

Dissertation - 24 hours minimum

Remaining hours: Seminars, Lab Rotations, Directed Research, Dissertation, etc. - 41 hours

Core Course Requirements (13 hours)

Each student shall complete a minimum of 24 credit hours of didactic course work (excluding journal clubs, seminars, laboratory rotations, directed research, etc.). In addition to the required courses listed below (11 hours are didactic; GMS 6091 & GMS 6002 are not considered didactic, but are still required core courses), the student shall fulfill the 24 credit hour minimum by completing at least 13 additional hours of didactic coursework in their chosen concentration. A concentration is required, except in rare circumstances that may be approved by the Associate Dean.

All students are required to successfully complete the following didactic courses:

GMS 6001 Foundation in Biomedical Sciences **Credit Hours: 4-8 (6 credits in this program)**
GMS 6002 Success Skills in Biomedical Sciences **Credit Hours: 1**
GMS 6091 Responsible Conduct in Research **Credit Hours: 1**
GMS 6094 Experimental Design and Analysis **Credit Hours: 3**
BCH 6935 Grant Writing and Scientific Communication **Credit Hours: 2**

Concentration Requirements

Students select from the following concentrations.

Allergy, Immunology & Infectious Disease (14 hours minimum)

Interdisciplinary approaches to the study of how microbes interact with the host to cause disease and how the immune system responds to allergens, infection and neoplasms. Students in this concentration are currently pursuing research projects in areas including emerging infectious diseases, bacterial pathogenesis, cancer immunotherapy, microbial drug resistance, malaria, Lyme disease, Clostridium difficile infections, regulation of immunity and inflammation, oncogenic viruses and respiratory viruses in acute and chronic diseases.

Complete the following:

GMS 6103 Foundations in Medical Microbiology and Immunology **Credit Hours: 4**
GMS 6101 Molecular and Cellular Immunology **Credit Hours: 3-4** (3 credit hours)
GMS 7939 Graduate Seminar **Credit Hours: 1**

And complete at least 6 credit hours from the following list (or other graduate course approved by the Graduate Director):

BCH 6746 Structural Biology **Credit Hours: 3**
BCH 6135C Methods in Molecular Biology **Credit Hours: 4**
GMS 6107 Advances in Virology **Credit Hours: 2**
GMS 6114 Vaccines and Applied Immunology **Credit Hours: 2**
GMS 6110 Microbial Pathogenesis and Host-Parasite Interactions **Credit Hours: 3**
GMS 6940 Supervised Teaching in Molecular Medicine **Credit Hours: 1-3** (2 credit hours)
GMS 6115 Medical Parasitology and Mycology **Credit Hours: 3**

Molecular Medicine (14 hours minimum)

In this concentration, you will examine molecular mechanisms that underlie the cellular aberrations in clinical disorders and incorporate fundamental principles learned in coursework to medical research.

Complete the following:

BCH 6627 Molecular Basis of Disease **Credit Hours: 4**
GMS 7939 Graduate Seminar **Credit Hours: 1**

And complete at least 9 credit hours from the following list (or other graduate course approved by the Graduate Director):

BCH 6746 Structural Biology **Credit Hours: 3**
BCH 6886 Fundamentals of Structural Bioinformatics **Credit Hours: 4**
GMS 6706 Basic Medical Neuroscience **Credit Hours: 3**
GMS 6103 Foundations in Medical Microbiology and Immunology **Credit Hours: 4**
GMS 6101 Molecular and Cellular Immunology **Credit Hours: 3-4** (3 credit hours)
GMS 6110 Microbial Pathogenesis and Host-Parasite Interactions **Credit Hours: 3**
GMS 6115 Medical Parasitology and Mycology **Credit Hours: 3**
GMS 6334 Pathobiology of Human Cancer **Credit Hours: 3**
GMS 6610 Advanced Neuroanatomy **Credit Hours: 3-6**
GMS 6735 Neuropharmacology **Credit Hours: 3**
GMS 6940 Supervised Teaching in Molecular Medicine **Credit Hours: 1-3** (2 credit hours)
PCB 6230 Cancer Biology I - Basics of Molecular Oncology **Credit Hours: 3**
PCB 6231 Cancer Biology II - Immunology and Applied Biology **Credit Hours: 4**
PCB 6205 Cancer Biology III - Cancer Genomics and Drug Discovery **Credit Hours: 3**

Molecular Pharmacology & Physiology (13 hours minimum)

Focused on interdisciplinary approaches to the study of nervous and cardiovascular systems and related disorders, including Alzheimer's disease, neurodegenerative disorders, cardiovascular disease, stroke, diabetes, and neuropsychiatric disorders such as depression and drug addiction.

Complete the following:
GMS 6440 Basic Medical Physiology **Credit Hours: 3**
GMS 6505 Basic Medical Pharmacology **Credit Hours: 3**

And complete at least 7 credit hours from the following list (or other graduate course approved by the Graduate Director):
GMS 6404 Systems Neurophysiology **Credit Hours: 4**
GMS 6410 Cardiovascular Regulation **Credit Hours: 4**
GMS 6433 Membrane Physiology **Credit Hours: 4**
GMS 6707 Medical Neuroscience **Credit Hours: 3-7** (3 credit hours)
GMS 6067 Current Topics in Molecular Medicine **Credit Hours: 1**
(Advanced Medical Neurosciences - proposed GMS 6709 - 2 credit hours)
GMS 6735 Neuropharmacology **Credit Hours: 3**
GMS 7930 Selected Topics **Credit Hours: 1-3**
Either *Advanced Medical Physiology* OR *Advanced Medical Pharmacology* (2 credit hours)

Neuroscience (NEU) (14 hours minimum)

Approaches to the study of the nervous systems and related disorders, including Alzheimer's disease and other neurodegenerative disorders, stroke, and neuropsychiatric disorders such as depression and drug addiction. Areas of expertise include biochemistry and cellular and molecular neuroscience, neural systems and computational neuroscience, behavioral neuroscience, developmental neuroscience, neuroimmunology, and neuropsychopharmacology, among others.

Complete the following:
GMS 6707 Medical Neuroscience **Credit Hours: 3-7** (3 credit hours)
GMS 6067 Current Topics in Molecular Medicine **Credit Hours: 1**
(Advanced Medical Neurosciences - proposed GMS 6709 - 2 credit hours)

And complete at least 8 credit hours from the following list (or other graduate course approved by the Graduate Director):

Strongly Recommended:
GMS 6610 Advanced Neuroanatomy **Credit Hours: 3-6** (3 credit hours)
GMS 6708 Neuroimmunology **Credit Hours: 3**
GMS 6735 Neuropharmacology **Credit Hours: 3**

Other Course Options:
GMS 6440 Basic Medical Physiology **Credit Hours: 3**
GMS 6505 Basic Medical Pharmacology **Credit Hours: 3**
GMS 6404 Systems Neurophysiology **Credit Hours: 4**
GMS 6433 Membrane Physiology **Credit Hours: 4**
GMS 6771 Aging and Neuroscience **Credit Hours: 3**
GMS 7930 Selected Topics **Credit Hours: 1-3**
Options:
Advanced Medical Physiology - 2 credit hours
Advanced Medical Pharmacology - 2 credit hours
GMS 6773 Stem Cells and Brain Repair **Credit Hours: 3**

GMS 6772 The Spinal Cord: Development, Pathology and Therapy **Credit Hours: 3**

Pathology and Cell Biology (PCB) (20 hours minimum)

Focuses on interdisciplinary approaches to the study of cancer, reproductive pathobiology, neurological disease & injury and related diseases, including cancer biology, angiogenesis and morphogenesis, gene discovery, neurobiology, cell biology and new educational technologies.

Complete the following:
GMS 6334 Pathobiology of Human Cancer **Credit Hours: 3**
GMS 6630 Basic Medical Histology **Credit Hours: 3**
GMS 6604 Human Structure and Function **Credit Hours: 3**
GMS 6605 Basic Medical Anatomy **Credit Hours: 3**

And complete at least 8 credit hours from the following list (or other graduate course approved by the Graduate Director):
GMS 6111 Basic Medical Pathology **Credit Hours: 3**
GMS 6067 Current Topics in Molecular Medicine **Credit Hours: 1**
(Biochemical Pathology - propomsed GMS 6112 - 3 credit hours)
GMS 6601 Introduction to Laboratory Medicine and Diagnosis **Credit Hours: 2**
GMS 6323 Pathology Case Studies 1 **Credit Hours: 3**
GMS 6324 Pathology Case Studies 2 **Credit Hours: 2**
GMS 6325 Pathology Case Studies 3 **Credit Hours: 2**
GMS 6326 Pathology Case Studies 4 **Credit Hours: 3**
GMS 6608 Pathology Case Studies 5 **Credit Hours: 2**
GMS 6352 Forensic Pathology **Credit Hours: 3**
GMS 6609C Advanced Human Gross Anatomy **Credit Hours: 3-6** (4 credit hours)
GMS 6612 Supervised Teaching in Human Anatomy **Credit Hours: 1-3** (1 credit hour)
GMS 6610 Advanced Neuroanatomy **Credit Hours: 3-6** (3 credit hours)
BCH 6886 Fundamentals of Structural Bioinformatics **Credit Hours: 4**
GMS 6671 A Brief History of Medical Sciences **Credit Hours: 2**
GMS 6950 Biomedical Science Communication and Instructional Skills **Credit Hours: 2**
PCB 6230 Cancer Biology I - Basics of Molecular Oncology **Credit Hours: 3**

Lab Rotations (1 hour minimum)

Students are also required to complete at least one semester of lab rotations. One hour minimum required. Typically students take 12 hours.

GMS 6942 Laboratory Rotations in Biomedical Sciences **Credit Hours: 1-3** (1 credit hour)

Dissertation (24 hours minimum)

The final phase of the program emphasizes research and independent study, which leads to a written dissertation. Students will present their dissertation in a public seminar and will defend it to an examination committee of faculty members with appropriate expertise in the subject matter.

GMS 7980 Dissertation: Doctoral **Credit Hours: 2-19**
(24 credit hours)

Qualifying Exam and Doctoral Candidacy

To progress to doctoral candidacy, students must complete a written research proposal and present it in a formal public seminar. Students will defend the proposal to an examination committee of faculty members with appropriate expertise in the subject matter.

Remaining Hours and Other Requirements (41 hours minimum)

Students complete the remaining hours with lab rotations, directed research, or additional dissertation hours.

Other Requirements

Prior to the successful completion of all requirements for the Ph.D., students will be expected to publish a minimum of two peer-reviewed original research articles, at least one of which must be a first author publication related to their dissertation research.

Students must present an annual seminar outlining their research progress.

GMS 7910 Directed Research **Credit Hours: 1-19**

Concurrent Degree

Also available as a Concurrent Degrees

Clinical Investigation Graduate Certificate

This program is offered fully online.

Certificate Code: XCI
Approved 200501

This Distance Learning Graduate Certificate in Clinical Investigation offers students the opportunity to do graduate-level study that focuses on clinical investigation and advanced study in the field of clinical research. This coursework is designed to support the development and implementation of a clinical research education program for patient-oriented research. The curriculum will provide knowledge related to biostatistics, epidemiology, research methodology and bioethics. Students receive a graduate certificate upon completing the program.

Courses offered in the graduate certificate at or above the 6000 level may be applied toward a Master's or PhD program. The graduate certificate offers students flexibility in class scheduling and focused course work. Graduates will develop the specialized knowledge required in hospital, laboratory, industry, or university settings. It is anticipated that some students will apply for graduate Master's/PhD degrees offered by USF Health at the University of South Florida. In addition to medical residents, the certificate is also intended for students who are not yet committed to pursuing a graduate degree.

Location/Delivery

Offered both online, or in traditional format at the Tampa campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements. A personal interview may be required.

Application Process

To learn about the application process, and to access the application, please review our application process.

In addition to your completed application form, transcripts, resume and letter of interest, you will need to submit the following documents:

A two to three page essay.
Contact department for additional information.

Credit Toward Graduate Degree

Up to nine (9) hours, or three (3) courses of graduate certificate course credits at or above the 6000 level may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

The approximate time to complete the Certificate is two years.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

PHC 6000 Epidemiology **Credit Hours: 3**
PHC 6050 Biostatistics I **Credit Hours: 3**
GMS 6183 Clinical Research Methods **Credit Hours: 3**

Students with advanced standing are required to take electives. If required, one or more electives may be chosen from those listed below as well as from courses being developed by USF Health.
All students select at least one of the following to meet the hours required for the Certificate:

GMS 7939 Graduate Seminar **Credit Hours: 1**
PHC 6930 Public Health Seminar **Credit Hours: 1-3**
GMS 6843 Scientific Communication **Credit Hours: 2**
GMS 6906 Grantsmanship II **Credit Hours: 1**
BCH 6888 Bioinformatics **Credit Hours: 3**
GMS 6849 Approach Clinical and Behavioral Research Adolescent: Focus on HIV **Credit Hours: 3**
GMS 6875 Ethical and Regulatory Aspects of Clinical Research **Credit Hours: 2**
NGR 6737 Ethical, Legal, and Policy Issues in Advanced Nursing Practice **Credit Hours: 3**
GMS 6905 Grantsmanship I **Credit Hours: 1**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Health Informatics Graduate Certificate

This program is offered fully online.

Certificate Code: XHI
Approved 201008

Some of today's fastest growing healthcare careers are in the field of health informatics. Today's health information professionals are expected to know how to harvest technological innovations and improve healthcare delivery and operations.

As hospitals, health insurers and pharmaceutical companies continue to onboard health informatics professionals, those who obtain proper education and training are more likely to realize the benefits of having multiple employment opportunities.

The Graduate Certificate in Health Informatics clears the path for quick entry into this field, one of the fastest-growing careers in healthcare.

Location/Delivery

This certificate is offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Can be completed in 8 months.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

HIM 6217 Health Data Management **Credit Hours: 3**
HIM 6667 Foundation in Management Information Systems **Credit Hours: 3**
HIM 6118 Introduction to Health Informatics **Credit Hours: 3**

HIM 6114 Integrated Electronic Medical Records **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Pathology Graduate Certificate

Certificate Code: XPK
Approved 201701
The Graduate Certificate in Pathology offers a thorough study in human pathology using on-ground, traditional, hands-on and clinically-relevant learning tools. This certificate is targeted to students seeking to improve their academic credentials for future careers in biomedical careers or education.

Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Credit Toward Graduate Degree

Course credits earned in the certificate may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Can be completed in two years

Pre-Requisites

Coursework in General Biology, General Chemistry and General Physics

Curriculum Requirements (11 Credit Hours)

GMS 6323 Pathology Case Studies 1 **Credit Hours: 3**
GMS 6326 Pathology Case Studies 4 **Credit Hours: 3**
GMS 6352 Forensic Pathology **Credit Hours: 3**

And select one of the following:
GMS 6324 Pathology Case Studies 2 **Credit Hours: 2**
GMS 6601 Introduction to Laboratory Medicine and Diagnosis **Credit Hours: 2**

Contacts

Contact Information: http://www.grad.usf.edu/cert

School of Physical Therapy and Rehabilitation Sciences

Physical Therapy, D.P.T.

Degree Information

Priority Admission Application Deadlines: www.grad.usf.edu/majors

Level: Doctoral Professional
CIP Code: 51.2308
Dept Code: PHT
Major/College: MPT MD

Also offered as a Concurrent Degree

Contact Information

College Morsani College of Medicine
Department School of Physical Therapy and Rehabilitative Sciences

Contact information http://dpt.health.usf.edu/

As an integral part of the USF College of Medicine and USF Health system, the School of Physical Therapy & Rehabilitation Sciences offers you top-notch classroom and clinical experience in your entry-level preparation as a physical therapy practitioner.

Our innovative, integrated, interprofessional Doctor of Physical Therapy (DPT) curriculum, which places physical therapy students alongside medical students in foundational basic and clinical science courses during year 1 of studies, is one of the many reasons students are choosing to come to Tampa for their professional education. The School of Physical Therapy & Rehabilitation Sciences boasts an impressive and broadly experienced cadre of faculty who are engaged in teaching as well as scholarly and research activities contributing to our discipline's body of knowledge. As part of USF Health, our Doctor of Physical Therapy students receive instruction from physicians, nurses, public health professionals and basic science experts. Teaching and learning together form the basis for future successful collaborative practice so necessary in today's healthcare environment.

The major begins a new cohort each July.

Accreditation

Accredited by Commission on Accreditation in Physical Therapy Education (CAPTE)

Admission Information

Completed applications of qualified students with all supporting documentation, received by PTCAS by November 15 will be reviewed by the School of Physical Therapy and Rehabilitation Sciences DPT Student Selection Committee. The most qualified applicants will be offered enrollment as a member of the next DPT Class . Letters of offer will be mailed to selected students on or about February 1. A Waiting List will be maintained of otherwise qualified applicants in the event that a class opening should occur.

You must be a U.S. Citizen or Permanent Resident Alien (PRA) with a Green Card in your possession before we will consider your application;
Minimum 3.20 (out of 4.00) GPA overall and in upper division and prerequisite coursework;
Note: Level of prerequisite courses must be appropriate for science majors, and must have been completed within five (5) years of date of matriculation;

Twenty (20) total volunteer, observational or employment hours experience with a minimum of 8 hours in each type in order to appreciate the differences in physical therapists' responsibilities in each setting. Hours must be documented observational, volunteer or other work experiences in both hospital inpatient and outpatient physical therapy settings;

Two References from Licensed Physical Therapists with knowledge of the applicant's aptitude and potential for success in professional school

Application to be completed through PTCAS

Curriculum Requirements

Core Course Requirements

The DPT degree program is a 3 calendar year program including two summers.

Year 1 (36 weeks)

BMS 5005 Introduction to the Health Professions **Credit Hours: 1-19 (1 credit for this program)**
BMS 6206 Medical Biochemistry **Credit Hours: var. (1 credit for this program)**
BMS 6640 Medical Science 1: Musculoskeletal System **Credit Hours: var. (6 credits for this program)**
BMS 6641 Medical Science 2: Neurological System **Credit Hours: var. (6 credits for this program)**
BMS 6633 Medical Science 3: Cardiovascular and Pulmonary Systems **Credit Hours: var. (6 credits for this program)**
BMS 6639 Medical Science 4: Gastrointestinal, Renal, and Endocrine Systems **Credit Hours: var. (6 credits for this program)**
PHT 6174 - Movement Science 1 **Credit(s): 2** (total lab hours including enhanced anatomy=30)
PHT 6205 - Doctoring for Physical Therapists **Credit(s): 6** (Pass/Fail)
PHT 6274 - Clinical Reasoning for Physical Therapists **Credit(s): 5**
PHT 6284 - Scientific & Professional Foundations of Physical Therapy 1 **Credit(s): 5** (lab=60 hrs)
PHT 7864 - Integrated Clinical Experience 1 **Credit(s): 1**

Year 2 (42 weeks)

Fall

Contact hours @ 19 weeks = 26.6

PHT 6178 - Movement Science 2 **Credit(s): 3**
PHT 6285 - Scientific & Professional Foundations of Physical Therapy 2 **Credit(s): 3**
PHT 6352 - Pharmacology for Healthcare Professionals **Credit(s): 4**
PHT 6609 - Critical Assessment of the Literature/EBP **Credit(s): 3**
PHT 7264 - Neuromuscular Clinical Problem Solving **Credit(s): 3**
PHT 7265 - Cardiopulmonary & Integumentary Clinical Problem Solving **Credit(s): 0** (year-long, concludes in Spring)
PHT 7421 - Professional Issues 1 **Credit(s): 2**
PHT 7540A - Principles of Patient/Client Management & Seminar 1 **Credit(s): 1**
PHT 7866 - Integrated Clinical Experience 1 **Credit(s): 1**

Spring

Contact hours @ 15 weeks = 22.7

PHT 7265 - Cardiopulmonary & Integumentary Clinical Problem Solving **Credit(s): 3** (year-long, continued from Fall)
PHT 7328 - Pediatric Physical Therapy **Credit(s): 3**

PHT 7402 - Psychosocial Aspects of Physical Therapy Practice **Credit(s): 3**
PHT 7531 - Professional Issues 2 **Credit(s): 3**
PHT 7540B - Principles of Patient/Client Management & Seminar 2 **Credit(s): 2**
PHT 7777 - Musculoskeletal Clinical Problem Solving **Credit(s): 4**

Summer

Contact hours @ 8 weeks = 40

PHT 6841 - Clinical Education 1 **Credit(s): 5** (10 weeks @ 40 hours)

Year 3 (43 weeks)

Fall

Contact hours @ 15 weeks = 26.5

PHT 7151 - Health Promotion and Wellness **Credit(s): 2**
PHT XXXX - Seminar: Contemporary Issues in Physical Therapy **Credit(s): 3**
PHT 8179 - Movement Science 3 **Credit(s): 3**
PHT 8266 - Advanced Clinical Problem Solving **Credit(s): 5**
PHT 8550 - Professional Issues 3 **Credit(s): 3**
PHT 8702 - Prosthetics and Orthotics **Credit(s): 3**
*** Optional Elective Credit(s): 3**

Spring / Summer

PHT 7842 - Clinical Education 2 **Credit(s): 6** (12 weeks @ 40 hours)
PHT 8843 - Clinical Education 3 **Credit(s): 8** (16 weeks @ 40 hours)
Graduation in August of Year 3 Credit(s): 122

Comprehensive / Qualifying Exam information

Licensure Examination following graduation and prior to initiating practice – the National Physical Therapy Examination (NPTE)

Concurrent Degree

Also available as a Concurrent Degrees

Rehabilitation Sciences, Ph.D.

Degree Information

This program is currently suspended for admissions

Minimum Total Hours: 66
Level: Doctoral
CIP Code: 51.2314
Dept Code: SPTRS
Major/College Codes: RHS/MD

Concentrations

Veteran's Health/Reintegration (VHR)
Chronic Disease (CHD)
Neuromusculoskeletal Disability (NMD)

Contact Information

College: Medicine
Department: School of Physical Therapy and Rehabilitation Sciences

Contact Information:
www.grad.usf.edu
http://health.usf.edu/medicine/dpt/

The Ph.D. in Rehabilitation Sciences will prepare faculty researchers and leaders with content expertise in rehabilitation sciences who will contribute to the development of rehabilitation practice, research and education in an emerging 21st century health care environment. Graduates of the Ph.D. in Rehabilitation Sciences are expected to demonstrate advanced knowledge and productivity relative to one area of concentration: Veteran's Health/Reintegration, Chronic Disease, or Neuromusculoskeletal Disability. Students will complete a core set of rehabilitation sciences courses, statistics/research methodology courses and then select an area of content expertise where independent research will be conducted.

Major Research Areas:

Rehabilitation Science, Veteran's Health/Reintegration, Chronic Disease, Prosthetics, Neuromusculoskeletal Disability, Physical Therapy

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

At least a Master's degree or first-professional doctoral degree in a rehabilitation or rehabilitation sciences related discipline
Minimum of 3.00 GPA or equivalent in prior graduate and/or professional degree studies
GRE required, with preferred minimum scores of 70% V, Q, AW
Interview to determine professional goals
Three Letters of Recommendation

Personal Statement – in 750 to 1000 words, state your professional plans and career objectives (Goal statement). Please include personal qualifications, qualities and professional development and how they have influenced your career path; reasons for this particular degree in relation to academic background, professional work experience, and career goals. Describe prior experiences and accomplishments in a rehabilitation or rehabilitation sciences related discipline.

Curriculum Vitae

Curriculum Requirements

Total Minimum Hours: 66 credit hours (post-masters)

Core Requirements (15 Credit Hours)

RSD 6111 Introduction to Rehabilitation Sciences **Credit Hours: 3**
RSD 6112 Advanced Rehabilitation Sciences **Credit Hours: 3**
RSD 7930 Research Proseminar in Rehabilitation Sciences **Credit Hours: 2**
RSD 7300 - Rehabilitation Ethics **Credit(s): 3**
RSD 7910 - Mentored Research Apprenticeship 1 and 2 **Credit(s): 1-2**
RSD 6921 Colloquium in Rehabilitation Sciences 2 **Credit Hours: 1**

Statistics/Research Methods Core (15 Credit Hours)

PHC 6051 Biostatistics II **Credit Hours: 3**
PHC 7936 Seminar in Health Care Outcomes Measurement **Credit Hours: 3**

Students choose from the following for the remaining 9 hours:

HSC 6054 - Design & Analysis of Experiments for Health Researchers **Credit(s): 3**
GMS 6102 - Experimental Design & Analysis **Credit(s): 3**
PHC 6020 Clinical Trials: Design, Conduct, and Analysis **Credit Hours: 3**
PHC 6060 Biostatistical Case Studies and Collaboration I **Credit Hours: 3**
PHC 7709 - Case Studies in Quantitative Analysis of Public Health Data **Credit(s): 3**
GMS 6840 Cultural and Diversity Issues in Clinical Research **Credit Hours: 2**
GMS 6843 Scientific Communication **Credit Hours: 2**
PHC 7054 - Advanced Biostatistical Methods **Credit(s): 3**
PHC 7053 - Generalized Linear Models **Credit(s): 3**
PSY 6217 Research Methods and Measurement **Credit Hours: 2-4 (3 credits for this program)**
SYA 6437 - SPSS and Social Research **Credit(s): 3**
PHT 6609 - Critical Assessment of the Literature & Evidence-based Practice **Credit(s): 3**

Concentrations (15 Credit Hours)

Veteran's Health/Reintegration (VHR)

Students in consultation with their committee will select courses for the Concentration.

Potential courses:

RSD 7933 Special Topics in Veteran's Health/Reintegration **Credit Hours: 3**

SOW 6126 Health, Illness, and Disability **Credit Hours: 2**
PET 6388 Physical Activity, Health, and Disease **Credit Hours: 3**
PHT 7540 - Principles in Patient/Client Management Seminar **Credit(s): 3**
GMS 6771 Aging and Neuroscience **Credit Hours: 3**
MHS 6210 - Wraparound Interventions and the System of Care **Credit(s): 3**
MHS 6311 Online Services in Counseling and Helping Professions **Credit Hours: 3**
PHC 6501 - Homelessness: Implications for Behavioral Healthcare **Credit(s): 3**
PHT 8702 - Advanced Prosthetics and Orthotics **Credit(s): 3**

Chronic Disease (CHD)

Students in consultation with their committee will select courses for the Concentration.

Potential courses:

RSD 7931 Special Topics in Chronic Disease **Credit Hours: 3**
GEY 7602 Ph.D. Seminar in Health and Aging **Credit Hours: 3**
GEY 7604 Biomedical Aging **Credit Hours: 3**
GEY 7610 Psychological Issues of Aging: Interdisciplinary Perspective **Credit Hours: 3**
GEY 7622 Ph.D. Seminar in Policy and the Elderly **Credit Hours: 3**
GEY 7623 Social and Health Issues in Aging **Credit Hours: 3**
GEY 7649 Population Aging **Credit Hours: 3**
GMS 6334 Pathobiology of Human Cancer **Credit Hours: 3**
SOW 6126 Health, Illness, and Disability **Credit Hours: 2**
PHC 6410 Social and Behavioral Sciences Applied to Health **Credit Hours: 3**
PHC 6522 Nutrition in Health and Disease **Credit Hours: 3**
PHC 6931 - Advanced Seminar in Social and Behavioral Sciences Applied to Health **Credit(s): 3**
PET 6388 Physical Activity, Health, and Disease **Credit Hours: 3**
GMS 6500C - Core Physiology **Credit(s): 4-6**
PET 6369 - Cardiorespiratory Aspects of Exercise Physiology **Credit(s): 3**
PHT 7540 - Principles in Patient/Client Management Seminar **Credit(s): 3**
PHC 6418 - Public Health and Aging **Credit(s): 3**
RCS 5035 Rehabilitation Counseling: Concepts and Applications **Credit Hours: 3**
RCS 5080 Medical Aspects of Disability **Credit Hours: 3**

Neuromusculoskeletal Disability (NMD)

Students in consultation with their committee will select courses for the Concentration.

Potential Courses:

RSD 7932 Special Topics in Neuromusculoskeletal Disability **Credit Hours: 3**
GMS 6440 Basic Medical Physiology **Credit Hours: 3**
GMS 6431 Cell Physiology **Credit Hours: 4**
GMS 6770 A Metabolic Approach to Pain Management **Credit Hours: 3**
HSC 6556 Pathobiology of Human Disease I **Credit Hours: 3**
HSC 6557 - Pathobiology of Human Disease II **Credit(s): 3**
PET 6388 Physical Activity, Health, and Disease **Credit Hours: 3**
PET 6084 - Body Composition: Assessment and Management **Credit(s): 3**
PET 6098 Topics in Strength and Conditioning **Credit Hours: 3**

PET 6339 - Neuromuscular Aspects of Exercise Physiology **Credit(s): 3**
PET 6351 - Occupational Medicine for Health Professionals **Credit(s): 3**
PHT 7450 - Principles in Patient/Client Management Seminar **Credit(s): 3**
PHT 7264 - Neuromuscular Clinical Problem Solving **Credit(s): 3**
PHT 7777 - Musculoskeletal Clinical Problem Solving **Credit(s): 3**
PHT 8724 - Anatomical Basis of Physical Therapy and Rehabilitation **Credit(s): 3**

Electives (3-12 Credit Hours)

Electives may be selected in consultation with student's committee.

Potential Courses:

GMS 6020 Neuroscience **Credit Hours: 5-6**
GMS 6541 Pharmacology for Health Professionals **Credit Hours: 4**
GMS 6706 Basic Medical Neuroscience **Credit Hours: 3**
GMS 6843 Scientific Communication **Credit Hours: 2**
GMS 6875 Ethical and Regulatory Aspects of Clinical Research **Credit Hours: 2**
GMS 6890 Medicine and the Arts **Credit Hours: 3**
GMS 6891 Medicine and the Movies **Credit Hours: 3**
GMS 6840 Cultural and Diversity Issues in Clinical Research **Credit Hours: 2**
PHT 7151 - Health Promotions and Wellness **Credit(s): 3**
RSD 7900 Directed Readings in Rehabilitation Sciences **Credit Hours: 3**
RSD 6941 Teaching Practicum in Rehabilitation Sciences **Credit Hours: 3**

Doctoral Qualifying Exam

As soon as the substantial majority of the course work is completed, the student must pass a written qualifying examination covering the subject matter in the major and related fields. This examination may be supplemented by an oral examination.

Dissertation (12 Credit Hours)

RSD 7980 Dissertation - Directed Research in Rehabilitation Sciences **Credit Hours: 3-12 (12 credits for this program)**

BA - Updates for 2019-20

The USF Graduate Council approved the following on the date noted.

Majors

Business Administration	M.B.A.	Change curriculum for compliance; shares core with Exec MBA	3/4/19
Business Administration	D.B.A.	Change curriculum for compliance; shares core with PhD	3/4/19
Business Administration	Ph.D.	Change curriculum for compliance; shares core with DBA	3/4/19
Executive MBA	M.B.A	Change curriculum for compliance; shares core with MBA	3/4/19
Executive MBA	M.B.A.	Change from regular admissions to direct receipt	1/14/19
Real Estate	M.S.R.E.	Terminate Degree Program	2/4/19
Saturday MBA	M.B.A.	Terminate Major in existing CIP	4/1/19
Supply Chain Management	M.S.	New Degree Program in CIP 52.0203; effective Spring 2020; BOG approved 9/3/19	3/18/19

Muma College of Business

BA - Updates for 2019-20

BA - Programs

University of South Florida
Muma College of Business
4202 E. Fowler Ave., BSN 3403 (loc BSN 103)
Tampa, FL 33620

Web address: http://business.usf.edu
Email: mba@coba.usf.edu
Phone: 813-974-3335
Fax: 813-974-4518

College Dean: Moez Limayem, Ph.D.
Associate Deans: Jacqueline Reck, Ph.D. and Gert-Jan de Vreede, Ph.D.
Graduate Coordinators: Eric Douthrit (M.B.A. programs) and Irene Hurst (discipline)

Accreditation:

The Ph.D., D.B.A., M.B.A., M.S. in Business Analytics and Information Systems, M.S. in Management, M.S. in Finance, Master of Accountancy, M.S. in Marketing, M.S. in Entrepreneurship, and M.S. in Sport and Entertainment Management majors in the Muma College of Business are accredited by the AACSB International – The Association to Advance Collegiate Schools of Business. The College also is a member of the Graduate Management Admission Council (GMAC).

Mission Statement:

We emphasize creativity and analytics to promot student success, produce scholarship with impact, and engage with all stakeholders in a diverse global environment.

College Requirements

Non-Degree Seeking Students

The Muma College of Business will approve, on a space available basis, non-degree seeking student status for transient students (degree-seeking students at another AACSB accredited institution) or for students with valid reasons to register in this status and who meet all admission requirements. Contact the College for additional requirements.

Business Administration, D.B.A

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 72
Level: Doctoral
CIP Code: 52.0201
Dept. Code: DEA
Major/College Codes: BUD BA
Effective date Summer 2014

This major shares core requirements with the Ph.D. in Business Administration.

Contact Information

College: Muma College of Business

Contact Information: http://www.grad.usf.edu/majors

The DBA degree program offered by the Muma College of Business provides its graduates with the skills needed to conduct rigorous research with the objective of applying the findings to real-world decision-making in industry and government. The Program provides for intellectual growth as students work closely with faculty in seminars, research projects, and other assignments that develop their research skills and ability to communicate their findings to a broad audience of both practitioners and researchers. It also offers students the opportunity to develop a portfolio of skills that, when combined with the extensive experience that they bring into the program, uniquely qualifies them to serve in clinical faculty positions.

The curriculum is designed to build upon the breadth of business understanding that they have previously achieved as successful executives. This is achieved by offering substantive coverage of a broad variety of qualitative and quantitative research techniques and by allowing students the flexibility to focus more deeply on their personal areas of interest during the dissertation phases of the program. The degree conferred is a Doctor of Business Administration (DBA), a terminal degree so-named to differentiate it from the Ph.D. degree that specifically focuses on preparing students for an academic research career within a specific discipline. Students will complete the 3-year program in a cohort with other executives. Classes are scheduled all day for two consecutive days approximately one weekend a month for six 5-month semesters. Each semester is divided into 2 quarters, with a one-month break between semesters. Face-to-face classes are heavily supplemented by online activities between face-to-face classes. The weekend format allows participants to continue carrying their careers while they master a range of applied research skills.

Accreditation:
Accredited by the AACSB International –The Association to Advance Collegiate Schools of Business.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

master's degree or under exceptional circumstances, candidates with an undergraduate degree from a regionally accredited, or equivalent, institution with a minimum US GPA of 3.00 or equivalent. In some situations, additional preparatory course work may be required.
at least 12 years of professional work experience, at least 5 of which must be at a senior managerial, senior technical or executive level

personal statement
interview

Curriculum Requirements

Minimum Hours: 72 Credit Hours post-bachelors

Shared Core Requirements – 5 Credit Hours
Additional Required Courses – 28 Credit Hours
Publication courses – 9 Credit Hours
Issue courses – 10 Credit Hours
Dissertation Proposal I- 4 Credit Hours
Dissertation or Doctoral Project – 16 Credit Hours

Shared Core Requirements (5 Credit Hours)

QMB 7557 Research and Writing Skills for Doctoral Students **Credit Hours: 1** (2 credit hours required)
QMB 7565 Introduction to Research Methods **Credit Hours: 3**

Addiitional Required Courses (28 Credit Hours)

Provides students with exposure to research methods and research in the multi-disciplinary topics that represent the current areas of focus of the Muma College of Business.

These required courses consist of:

QMB 6375 Applied Linear Statistical Models **Credit Hours: 3**
QMB 7566 Applied Multivariate Statistical Methods **Credit Hours: 3**
ISM 7406 Business Analytics **Credit Hours: 3**
MAN 7298 Creativity and Innovation **Credit Hours: 2-4**
GEB 6930 Selected Topics **Credit Hours: 1-3**
Required Selected Topics Courses:
Qualitative Research Methods in Business (3 credit hours) (Proposed GEB 7911)
Advanced Research Skilles (1 credit hour)

The final category is proposed by faculty members based upon their areas of interest and expertise as well as student interests. Four of the following courses would be offered so as to provide exposure to a variety of research-related topics and activities.
ACG 7936 Seminar in Special Topics in Accounting **Credit Hours: 1-4**
FIN 7930 Selected Topics in Finance **Credit Hours: 3**
GEB 6457 Ethics, Law and Sustainable Business Practices **Credit Hours: 3**
Informing Science (3 credit hours) (Proposed as ISM 7386)
ISM 7930 Selected Topics in MIS **Credit Hours: 1-3** (3 credit hours)
MAN 6930 Selected Topics **Credit Hours: 1-4** (3 credit hours)
MAR 7931 Seminar on Selected Marketing Topics **Credit Hours: 1-3** (3 credit hours)

Publication Courses (9 Credit Hours)

These courses have a substantial distance learning and collaboration component between class meetings, with members of the cohort being required to peer review each other's work and make revisions. They represent an extension of previous courses, and require the students to create publishable documents, such

as journal, conference and book chapter submissions. Depending upon the particular publication project, each course will have one of the following designations:

ACG 6915 Directed Research **Credit Hours: 1-19 (3 credits for this program)**
GEB 6930 Selected Topics **Credit Hours: 1-3 (3 credits for this program)**
FIN 6915 Directed Research **Credit Hours: var.** (3 credit hours)
ISM 7931 Directed Research **Credit Hours: 1-12 (3 credits for this program)**
MAN 6911 Directed Research **Credit Hours: 1-19 (3 credits for this program)**
MAR 6916 Directed Research **Credit Hours: 1-19 (3 credits for this program)**

Issues Courses (10 Credit Hours)

These courses are intended to run in parallel with proposal and dissertation activities. Although meeting according to the same schedule as regular courses, issues courses offer fewer credits than regular or publication courses, and therefore have commensurately reduced outside workloads to avoid interfering with the dissertation process. Members of the cohort select the topics from a list of proposals made by faculty members and other members of the cohort. Students may also elect to facilitate issues courses under the direction of a faculty supervisor, who acts as the instructor of record. Depending on the topic being taught, these courses may be any of the following:

ACG 7939 Executive Issues in Accounting **Credit Hours: 2-4 (2 credits for this program)**
FIN 7939 Executive Issues in Finance **Credit Hours: 2-4 (2 credits for this program)**
GEB 7939 Executive Issues in Business **Credit Hours: 2-4 (2 credits for this program)**
ISM 7939 Executive Issues in MIS **Credit Hours: 2-4 (2 credits for this program)**
MAN 7939 Executive Issues in Management **Credit Hours: 2-4 (2 credits for this program)**
MAR 7939 Executive Issues in Marketing **Credit Hours: 2-4 (2 credits for this program)**
QMB 7939 Executive Issues in Operations Research and Operations Management **Credit Hours: 2-4 (2 credits for this program)**

With the approval of the DBA Major Committee, students may be permitted to substitute up to four (4) credits of independent study/directed research (e.g., ACG 6905 , FIN 6915 , ISM 7931, MAN 6905 , MAR 7910) for selected issues courses during their final year of the major.

Dissertation Proposal Course (4 credit Hours)

The proposal course requires the student be matched to a four (4) person Dissertation Committee and submit a dissertation proposal for approval by the Committee. For the purpose of the DBA degree program, the course requirements for both dissertation and doctoral project proposals are the same. Prior to the proposal course, students will take the university-mandated qualifying exam, whose results will be assessed by the DBA Committee. Proposal courses are graded Pass/Fail, and must be passed.

GEB 7981 Dissertation Preparation **Credit Hours: 4**

Qualifying Exam and Doctoral Candidacy

Dissertation/Doctoral Project (16 credit hours)

Students are required to complete a dissertation or doctoral project, as approved by his or her committee.

All students take eight (8) hours of Directed Research and then either eight (8) hours of Dissertation or Doctoral Project.

Dissertation

Dissertation courses are offered every quarter throughout the student's last year, upon satisfactory completion of at least 44 course credits, four (4) proposal credits, and Admission to Doctoral Candidacy. These courses require the student to work towards the completion of the Dissertation approved by his or her committee. Dissertation courses are graded Pass/Fail, and must be passed.

Because the DBA degree is designed to be responsive to the needs of the Candidate, there is some flexibility in the form that the Dissertation can take—subject to approval by the Committee. University policy allows for two variations in the format:

1. A traditional research dissertation

2. Collection of articles/papers

The Candidate will meet with members of the Committee during each residency of the final year of the major, and will present his or her dissertation to the Committee in the final semester of the major. Upon successful completion of the dissertation defense presentation, the Dissertation Committee will then approve the awarding of the Degree, subject to all remaining curriculum program requirements being met, including submission of the Dissertation to the Office of Graduate Studies.

ACG 7980 Dissertation in Accounting **Credit Hours: 2-21**
FIN 7980 Dissertation **Credit Hours: 2-19**
GEB 7980 Dissertation **Credit Hours: 1-8**
ISM 7980 Dissertation **Credit Hours: 2-21**
MAN 7980 Dissertation **Credit Hours: 2-21**
MAR 7980 Dissertation **Credit Hours: 2-21**

Doctoral Project

Or, a student may opt to complete a doctoral project in lieu of the Dissertation. Examples that could be approved might include:

a practice-focused book submitted for publication,
a write-up of a substantial work-related project in which the principles of evidence-based research were applied
a portfolio of related research products/activities that demonstrate knowledge creation or innovative application in a given area. Such a portfolio might include journal, book, magazine articles, conference papers and presentations.

Students completing the Doctoral Project earn their required 8 credit hours by taking courses specifically designated as doctoral project courses by the program. In the event such courses are not available in the catalog, special topics courses designated "Selected Topics: Doctoral Project" may be substituted. These courses are graded Pass/Fail, and must be passed. Confirmation of successful completion of the Doctoral Project must be submitted to the Office of Graduate Studies.

ACG 6936 Selected Topics in Accounting **Credit Hours: 1-4**
Doctoral Project
FIN 7930 Selected Topics in Finance **Credit Hours: 3**
Doctoral Project
GEB 6930 Selected Topics **Credit Hours: 1-3**
Doctoral Project
ISM 7930 Selected Topics in MIS **Credit Hours: 1-3**
Doctoral Project
MAN 6930 Selected Topics **Credit Hours: 1-4**
Doctoral Project
MAR 7931 Seminar on Selected Marketing Topics **Credit Hours: 1-3**
Doctoral Project

External Activity Requirements

In addition to the major's course requirements, each student is required to participate in three external activities that involve meeting with academics and/or doctoral students from other institutions. Examples of such activities could include academic conferences, workshops, colloquiums, doctoral symposiums or academic association annual or regional meetings. At least one of these should include a substantial proportion of international attendees.

Grading Requirements

Proposal, Dissertation, and Directed Research courses are graded Pass/Fail, and must be passed. Students must complete all remaining courses with a grade of "B" or better. Should a student fail to pass or complete a course with the required grade, the DBA Degree Program Committee may offer an alternative activity as a substitute.

Other Requirements

As a result of the program's cohort structure, normally all doctoral coursework must be completed at the University of South Florida within the DBA degree program. Students seeking to transfer from other majors should contact the DBA Academic Graduate Director prior to applying. All program requirements will normally be completed in three (3) years, as part of a cohort. In the event of unavoidable interruptions to a student's progress, the student may petition the DBA Graduate Committee for an extension up to a maximum of five (5) years from the student's original starting date. Any student not completing all program requirements within the five (5) year time period will be dropped from the program and the student would need to re-apply for admission to the major in the event he or she wishes to continue.

Business Administration, M.B.A.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 32
Level: Masters
CIP Code: 52.0201
Dept. Code: DEA
Major/College Codes: BUS/BA
Approved: 1965

Concentrations:

Compliance, Risk Management and Anti-Money Laundering (RAM)*
Cybersecurity (CYS)*
Data Analytics (DAT)*
Sport Business (SEM)**
Supply Chain Management (SCMG)

**This concentration is currently only available online*
***Sport Business is not available to start in Spring*

Also offered as a Concurrent Degree

This major shares core requirements with the Executive M.B.A.

Contact Information

College: Muma College of Business
Contact Information: http://www.grad.usf.edu/majors
Other Resources: www.mba.usf.edu
The Master of Business Administration (M.B.A.) is a professional degree designed to prepare graduates for managerial roles in business and not-for-profit organizations. Graduates will develop the necessary skills and problem-solving techniques that will permit them to make an early contribution to management and eventually to move into broad, general management responsibilities at the executive level. This major offers several concentrations in an online format.

Accreditation:
Accredited by the AACSB International. (The Association to Advance Collegiate Schools of Business).

Major Research Areas:
Contact coordinator for department

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below. The USF MBA admission committee uses a portfolio approach: the strength of each applicant is determined based on the entire application. The admission committee will consider the following:

Prior college-level academic performance
GMAT (preferred), GRE, MCAT, LSAT, and PCAT (submitted scores must be within five (5) years of the term of entry)
A statement of purpose or corporate approval form
Interview may be required
A resume detailing relevant professional work experience
Any other information that helps in ensuring the potential success of the applicant in the program (e.g. community/volunteer service, etc.)
Applicants may request a waiver of GMAT if they meet one of the following requirements:
Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from the University of South Florida-Tampa
Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from any State of Florida University that is a Preeminent institution (i.e., University of Florida-Gainesville, or Florida State University-Tallahassee)
Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from Association of American Universities (AAU); or
Have five (5) or more years of managerial or professional experience
For applicants with a 3-year Bachelor's Degree from a regionally-accredited institution, the following requirements need to be met in addition to those listed above: Minimum GMAT score of 650 or a minimum GRE score of at least 321 (combined verbal and quantitative), and a minimum of 25th percentile in the verbal portion of the test. When the 3-year Bachelor's Degree is less than 120 hours from Non-Bologna Accord Institutions, a transcript evaluation from A NACES member is required to confirm equivalency.

Curriculum Requirements

The full time student will need at least four semesters and can complete all work within a reasonable time—approximately three years. Part time students are encouraged to take two courses per semester and must complete 12 hours per calendar year to remain on active status as a degree-seeking student. Students entering the major are expected to have sufficient competency in mathematics (college algebra), communication skills (written and verbal), basic computer skills, high-speed internet acccess, and a business foundation.

Total Minimum hours -32 credit hours

Students entering with a bachelor's in business from a regionally-accredited institution complete a minimum of 32 hours:

Shared Core Requirements – 8 Credit Hours
Additional Required Courses - 6 Credit Hours
Concentration or Electives/Individualized Area of Emphasis– 18 credit hours
Total 32 hours minimum

Students entering without a bachelor's in business from a regionally-accredited institution complete a minimum of 48 hours:

Business Foundation Courses– 16 credit hours
Shared Core Requirements - 8 Credit Hours
Additional Required Courses - 6 credit hours
Concentration or Electives/Individualized Area of Emphasis – 18 credit hours
Total 48 hours minimum required

Business Foundation (16 Credit Hours)

Students are expected to have a common body of business knowledge as demonstrated with a four-year undergraduate degree in business from a regionally accredited program or completion of business foundation courses, either of them taken within the last 7 years. Students needing to fulfill this requirement may

either complete foundation coursework before applying to the MBA degree program or complete them as part of the curriculum requirements. NOTE: Foundation courses may not be counted as electives.

Business Decision Making

MAN 6055 Organizational Behavior and Leadership **Credit Hours: 2-3 (2 credits for this program)**
ISM 6021 Management Information Systems **Credit Hours: 2**

Business Measurement

ACG 6026 Accounting Concepts for Managers **Credit Hours: 3**
QMB 6305 Managerial Decision Analysis **Credit Hours: 2**
FIN 6406 Financial Management **Credit Hours: 2-3 (2 credits for this program)**

Market Orientation

MAR 6815 Marketing Management **Credit Hours: 2-3 (2 credits for this program)**
ECO 6005 Introduction to Economic Concepts for Managers **Credit Hours: 3**

Shared Core Requirements (8 Credit Hours)

GEB 6445 Social, Ethical, Legal Systems **Credit Hours: 2**
QMB 6603 Operations Management and Quality Enhancement **Credit Hours: 2**
QMB 6358 Data Analytics for Business **Credit Hours: 2**
GEB 6215 Communication Skills for Managers **Credit Hours: 2**

Additional Required Courses (6 credit hours)

MAN 6147 Leadership/Management Concepts **Credit Hours: 2**
FIN 6466 Financial Analysis **Credit Hours: 2**
MAN 6726 Strategic Business Analysis **Credit Hours: 2**

Concentration Requirements (18 credit hours minimum)

Students select either a Concentration or develop an individualized "Area of Emphasis" with MBA Academic Services Administrator Approval – 18 credit hours min

Compliance, Risk Management and Anti-Money Laundering Concentration (RAM) (18 credit hours)

This is an online concentration that prepares graduates for a career in compliance, risk management and anti-money laundering, especially pertinent to the financial services sector.

BUL 5842 Risk Management and Legal Compliance **Credit Hours: 3**
ACG 6936 Selected Topics in Accounting **Credit Hours: 1-4**
Proposed as: ACG 6688 Forensic Accounting and Legal Compliance (3 credit hours)
ACG 6457 Accounting Systems Audit, Control, and Security **Credit Hours: 3**

Plus two courses from the following list:

ISM 6217 Database Administration **Credit Hours: 3**
ISM 6930 Selected Topics in MIS **Credit Hours: 1-6**
Decision Process for Business Continuity and Disaster Recovery (3 credit hours)
Other Course as approved by the MBA Academic Administrator.

Compliance, Risk Management & Anti-Money Laundering Concentration requires completion of the capstone course:
GEB 6898 MBA Capstone for Analytics, Compliance & Cybersecurity **Credit Hours: 3**

Cybersecurity Concentration (CYS) (18 Credit Hours)

This is an online concentration that prepares graduates for a career in information security management and business continuity. This concentration is fairly technical, given the nature of cybersecurity.

ISM 6328 Information Security & Risk Management **Credit Hours: 3**
ISM 6577 Decision Processes for Business Continuity and Disaster Recovery **Credit Hours: 3**
ISM 6225 Distributed Information Systems **Credit Hours: 3**
EEL 6787 Data Network, Systems, and Security **Credit Hours: 3**

Plus at least two courses from the following list:
ISM 6217 Database Administration **Credit Hours: 3**
CIS 6930 Special Topics **Credit Hours: 1-5**
Cryptology (3 credit hours) (proposed as CIS 5362)
BUL 5842 Risk Management and Legal Compliance **Credit Hours: 3**
Other course as approved by the MBA Academic Administrator.

Cybersecurity concentration requires the completion of the capstone course:
GEB 6898 MBA Capstone for Analytics, Compliance & Cybersecurity **Credit Hours: 3**

Data Analytics Concentration (DAT) (18 Credit Hours)

This is an online concentration that prepares graduates with the necessary skill set to draw insights from data for decision making in different functional areas of business. Courses in the concentration will provide hands-on experience with analytical tools and database software.

ISM 6136 Data Mining **Credit Hours: 3**
ISM 6642 Statistical Programming for Business Analytics **Credit Hours: 3**

Plus at least three courses from the following list:
MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4**
Marketing Analytics (3 credit hours)
ACG 5841 Analytics in Accounting **Credit Hours: 3**
ISM 6217 Database Administration **Credit Hours: 3**
Other course as approved by the MBA Academic Administrator.

Data Analytics Concentration requires the completion of the capstone course:
GEB 6898 MBA Capstone for Analytics, Compliance & Cybersecurity **Credit Hours: 3**

Sport Business Concentration (SEM) (19 Credit Hours)

This concentration complements the solid grounding in the applied fundamentals of accounting, finance, information systems, management and marketing provided by a recognized, high-quality MBA with coursework focused on the business of sport—human capital, organization resources and development, innovation and technology in sport, culture and business relationships, sport and law and emerging issues in global sport.

SPB 6719 Sport and Entertainment Marketing Strategy **Credit Hours: 3**
SPB 6406 Sport and Entertainment Law **Credit Hours: 3**
SPB 6816 Contemporary Issues in Sport and Entertainment Management **Credit Hours: 3**
SPB 6706 Sport Business Analytics **Credit Hours: 3**
SPB 6946 Internship in Sport and Entertainment Management **Credit Hours: 3**

The Sport Business Concentration requires the following Capstone Course;
GEB 6895 Integrated Business Applications **Credit Hours: 3-4 (4 credits for this program)**

Supply Chain Management Concentration (SCMG) (19 Credit Hours)

This concentration focuses on supply chain management which involves the coordination of physical, informational, and financial flows across companies in a supply chain network for the purpose of improving performance for individual companies and the supply chain as a whole.

MAR 6466 Supply Chain Management **Credit Hours: 3**
MAR 6216 Logistics and Physical Distribution Management **Credit Hours: 3**
MAN 6599 Logistics Systems and Analytics **Credit Hours: 3**

Plus two courses from the following list:
CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4**
Green Infrastructure for Sustainable Communities (3 credit hours)
ESI 6324 Engineering the Supply Chain **Credit Hours: 3**
GEB 6527 Lean Six Sigma **Credit Hours: 3**
ISM 6156 Enterprise Resource Planning & Business Process Management **Credit Hours: 3**
ISM 6217 Database Administration **Credit Hours: 3**
ISM 6436 Operations & Supply Chain Processes **Credit Hours: 3**
MAN 6448 Negotiating Agreement and Resolving Conflict **Credit Hours: 3**
MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4**

Supply Chain Management Concentration requires the completion of the capstone course:
GEB 6895 Integrated Business Applications **Credit Hours: 3-4**
(4 credit hours required)

Elective Options (18 Credit Hours Minimum)

Students may complete electives in a General Pathway or may develop an individualized area of emphasis with MBA Academic Services AdministratorApproval. Examples of individualized areas of emphasis include, but are not limited to Finance, Creativity & Innovation in Business, Marketing Strategy, among others.

The Elective option requires the completion of this capstone course:

GEB 6895 Integrated Business Applications **Credit Hours: 3-4**

Practicum Option (3 Credit Hours)

The practicum option requires investigation of business issues. The project typically occurs in the student's place of employment and is jointly supervised by a faculty member and a manager in the company. Three credits could be earned by taking one of the following: ACG 6905, FIN 6906, ISM 6905, MAR 6907, or MAN 6905 as part of the practicum option. The practicum option would count for three hours of MBA electives.

Internship Option

Internships are available with some of the concentrations and specializations. Check with the MBA Academic Services Administrator for options.

Thesis Option (6 Credit Hours)

Students may elect a six (6) hour thesis in any of the areas of the business disciplines subject to departmental approval. Thesis hours serve in lieu of elective hours.

ISM 6971 Thesis: Master's **Credit Hours: 2-6**
(6 credits required)

Comprehensive Exam

The successful completion of the capstone course GEB 6895 (4 credits required) or GEB 6898 (3 credits required) serves in lieu of the Comp Exam.

Concurrent Degree

Also available as a Concurrent Degrees

Business Administration, Ph.D.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 90
Level: Doctoral
CIP Code: 52.0201
Dept. Code: DEA
Major/College Codes: BUD BA
Approved: 1986

Concentrations:

Accounting (ACC)
Finance (FIN)
Information Systems (IST)
Marketing (MKT)

This major shares core requirements with the D.B.A. in Business Administration.

Contact Information

College: Muma College of Business

Contact Information: http://www.grad.usf.edu/majors

The Ph.D. degree program offered by the Muma College of Business provides its graduates with preparation for careers as college and university professors and as research and staff personnel in industry and government. The doctoral degree program provides for intellectual growth as students work closely with faculty in seminars, research projects, and other assignments, which develop their teaching and research skills. The curriculum offers breadth of understanding of the integral components of business administration as well as depth of field specialization sufficient to permit the student to make a meaningful contribution to their discipline. The program is sufficiently flexible to allow each student to build upon his or her strengths and to accommodate students with various levels of preparation in a wide variety of fields, and in areas outside the college. However, the degree conferred is Ph.D. in Business with a concentration in one of the departmental areas.

Accreditation:
Accredited by AACSB International – The Association to Advance Collegiate Schools of Business.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Competitive based on GPA, GMAT or GRE
Personal statement
Recommendations

Interview

Curriculum Requirements

Total Minimum Hours: 90

Foundation- 0-18* credit hours
Shared Core Requirements – 5 credit hours
Research Methods - 12 credit hours

Concentration –minimum 15 credit hours
Support Field Hours - 9 credit hours
Dissertation- 21 credit hours
Additional Hours- 10 credit hours**

**Students who are eligible to waive foundation courses will need to replace those credit hours either with additional coursework determined in conjuction with the area coordinator or if the student has a completed master's degree, relevant courses can be considered for transfer.*

*** These hours will be determined by consultation with the concentration area coordinator. For students who have a completed master's degree, relevant coursework can be considered for transfer credit.*

A minimum of 90 semester hours beyond the bachelor's degree is required. This includes 21 hours of dissertation. A minimum of 45 hours of coursework must be completed at the University of South Florida.

Foundation Courses (0-18 Credit Hours)

These courses are designed to develop an appreciation of the institution of business and to help students see how their areas of specialization fit into this general picture. With the approval of the student's major committee, a student may satisfy these requirements in any of the following ways:

By completing one approved undergraduate or graduate course from an AACSB (or equivalent) accredited institution with a grade of "B" or better in each of the functional areas no more than 5 years prior to admission to the PhD program: Accounting, Finance, Information Systems, Management, Marketing, and Economics.
By successfully petitioning the doctoral Committee to accept previous coursework from an institution without AACSB or equivalent accreditation in fulfillment of all or part of this requirement. Such a petition must be initiated during the first semester of the major.
Students who do not meet A or B above must take a course at the 6000 level or above in each of the functional areas in which they were not waived.

Shared Core Requirements (5 Credit Hours)

The core courses are designed to develop the student's research skills. These courses are required of all students in the major. The College will waive a course only if the student has passed the same or equivalent course with a grade of "B" or better within the preceding five years.

QMB 7557 Research and Writing Skills for Doctoral Students **Credit Hours: 1** (2 credits required)
QMB 7565 Introduction to Research Methods **Credit Hours: 3**

Research Methods (12 credit hours)

The research methods courses are meant to provide a strong background in quantitative and statistical research skills. Three courses from the list below are required and will be chosen in consultation with the student's program committee.

ECO 6424 Econometrics I **Credit Hours: 3**

ECO 6425 Econometrics II **Credit Hours: 3**
ECO 7426 Econometrics III **Credit Hours: 3**
ECO 7427 Econometrics IV **Credit Hours: 3**
QMB 6375 Applied Linear Statistical Models **Credit Hours: 3**
QMB 7566 Applied Multivariate Statistical Methods **Credit Hours: 3**
GEB 6930 Selected Topics **Credit Hours: 1-3**

Empirical Methods (3 credit hours)

In addition, students are required to take an additional 3 credit research elective approved by their advisory committee.
Any substitution of appropriate mathematics, statistical and quantitative coursework must be approved by the Doctoral Program Committee, preferably at the time of acceptance, or definitely before the student takes a substitute course.

Concentration Requirements (15 Credit Hours Minimum)

Students select from the following concentrations: **Accounting, Finance, Information Systems, or Marketing**

All students will take at least five (5) courses at the 6000 or 7000 graduate level in an area designated as the student's Concentration. Students are encouraged to identify courses in the concentration field that will provide experience in applying current research techniques to problems in that field. To accomplish this, the student may propose a combination of formal classroom courses and independent directed-research courses. This combination may include a year-long research seminar in which the groundwork is laid for the student's dissertation. The specific agenda of courses will be determined by the student's program committee.

The following fields are offered: Accounting, Finance, Information Systems, and Marketing. Courses taken as part of the Foundation or Core sections may not be counted as part of the hours required for a concentration field.

Accounting Concentration (ACC) (15 Credit Hours)

The Accounting concentration emphasizes:

The mastery of one or more specialized areas of accounting, such as accounting information systems, auditing, or financial accounting
The development of requisite skills to engage in respected applied, practical and scholarly research
The development of effective teaching skills

ACG 7156 Seminar in Financial Accounting **Credit Hours: 3**
ACG 7646 Seminar in Auditing **Credit Hours: 3**
ACG 7356 Seminar in Management Accounting **Credit Hours: 3**
ACG 7415 Seminar in Accounting Information Systems **Credit Hours: 3**
ACG 7936 Seminar in Special Topics in Accounting **Credit Hours: 1-4**

Finance Concentration (FIN) (18 Credit Hours)

FIN 6804 Theory of Finance **Credit Hours: 3**
FIN 7808 Advanced Micro Finance **Credit Hours: 3**
FIN 7817 Financial Markets **Credit Hours: 3**
FIN 7930 Selected Topics in Finance **Credit Hours: 3** (taken two semesters)
FIN 7935 Finance Research Seminar **Credit Hours: 3**

Information Systems Concentration (IST) (18 Credit Hours)

ISM 6124 Advanced Systems Analysis and Design **Credit Hours: 3** *
ISM 6218 Advanced Database Management **Credit Hours: 3** *
ISM 6225 Distributed Information Systems **Credit Hours: 3** *
ISM 6930 Selected Topics in MIS **Credit Hours: 1-6**

Computational Methods in Business (3 credit hours)
ISM 7911 MIS Research Seminar II **Credit Hours: 3**

Seminar in Technical IS Research
ISM 7912 Seminar on Behavioral IS Research **Credit Hours: 3**

Marketing Concentration Requirements (MKT) (18 Credit Hours)

Students will be required to successfully complete a minimum of 6 doctoral-level Marketing seminars.

The six required courses may be selected from the following list:

MAR 7555 Consumer Behavior Theory **Credit Hours: 3**
MAR 7635 Advanced Marketing Research: Design and Technique **Credit Hours: 3**
MAR 7667 Marketing Models and Strategy Applications **Credit Hours: 3**
MAR 7787 Marketing Theory and Thought **Credit Hours: 3**
MAR 7910 Independent Study in Marketing **Credit Hours: 1-12** *S/U only*
MAR 7931 Seminar on Selected Marketing Topics **Credit Hours: 1-3**

Topics include:
Buyer-Seller Interaction
Marketing Channels, Logistics and Supply Chain Management
Marketing Management
Marketing Strategy
Readings in Marketing
Sales Management

In addition, students will complete a "Pro-Seminar" every Fall semester of the first year of the major.
Note: The Professional Seminar does not count as one of the six required Ph. D. seminars.

Support Field (9 Credit Hours)

The support area will consist of a minimum of three graduate level courses (9 hours) from one or more of the fields listed under the concentration field, or elsewhere in the university. The support field and the concentration field cannot be taken in the same department. Courses within the support field can be selected to complement the concentration field and in special cases may include courses outside the Muma College of Business. The nature and number of the support area courses will be determined by the Student's Program Committee in consultation with the Ph.D. coordinator of the support field department. Courses taken as part of the Foundation or Core courses may not be counted as part of the 9 hours required for support fields.

Grade Requirement:
Should a student earn a grade of "C" or lower in a course, the case will be brought before the Doctoral Committee for review. After reviewing the case, the Committee will take one of the following steps:

a) Require the student to pass an examination that covers the material relevant to the subject. A student who fails the exam on the first attempt may retake it within one year. A student who fails the exam on the second attempt will be subject to dismissal.

b) Require the student to retake the course. If the student retakes the course and fails to receive a grade of "B" or better, the student is subject to dismissal.

Comprehensive Qualifying Examinations:

Upon completion of all coursework, students must pass the equivalent of a comprehensive examination in the concentration area. The student's performance on these "exams" should reflect familiarity with the literature, as well as with current issues and problems related to these fields. A student who fails either of the examss may retake it within one year. A second failure disqualifies the student from continuing the Ph.D. degree program. If the degree is not conferred within 5 calendar years of the comprehensive qualifying examination, a second and different examination must be taken. Students passing the qualifying examination are eligible for admission to candidacy for the Ph.D. degree program.

The decision to administer a separate comprehensive exam for a support area will be made by the department in which the support area is taken. In the event that an interdisciplinary support area is selected, any department represented by six (6) or more semester hours may require a qualifying examination. In the event that no single department represents six semester hours or more, the student's graduate committee will solicit input from the faculty teaching the courses in the support area. If a majority of those polled take the position that a separate comprehensive examination in the support area is not appropriate, the exam will not be administered. If a separate comprehensive examination is not administered in a support area, material from the support area will be integrated into the comprehensive exam in the concentration area.

Dissertation (21 Credit Hours Minimum)

ACG 7980 Dissertation in Accounting **Credit Hours: 2-21**
FIN 7980 Dissertation **Credit Hours: 2-19** (Finance)
ISM 7980 Dissertation **Credit Hours: 2-21** (Information Systems)
MAR 7980 Dissertation **Credit Hours: 2-21** (Marketing)

Residency Requirement:

Ph.D. students in the College are required to complete a minimum of 15 hours per calendar year. Failure to meet this requirement will result in the student being placed on conditional status.

Executive, M.B.A.

Degree Information

Priority Admission Application Deadlines: www.grad.usf.edu/majors

Minimum Total Hours: 48
Level: Masters
CIP Code: 52.0201
Dept. Code: DEA
Major/College Codes: MBA BA
Approved: 1982
Application tracks: Management Finance

This major shares core requirements with the M.B.A. in Business Administration.

Contact Information

College: Muma College of Business

Contact Information: www.grad.usf.edu/majors
Other Resources:

The weekend Executive M.B.A. is a lock-step, 21-month, AACSB accredited program designed to meet the unique needs of both mid-career managers who have demonstrated the potential to reach senior management positions, and senior managers who desire to significantly increase their personal and organizational effectiveness. The major provides an opportunity to broaden and enrich management skills, to extend knowledge of modern business techniques, and to further develop understanding of the social, political, and economic forces that shape the business environment and influence decision making. Classes are scheduled all day on two Saturdays and one Friday a month for four semesters. The weekend format allows participants to continue carrying their careers while they master a range of managerial skills.

Accreditation:
AACSB International –The Association to Advance Collegiate Schools of Business.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below. The USF MBA admission committee uses a portfolio approach: the strength of each applicant is determined based on the entire application. The admission committee will consider the following:

Prior college-level academic performance;
GMAT (preferred) , GRE, MCAT, LSAT, and PCAT (submitted scores must be within five (5) years of the term of entry);
A statement of purpose or corporate approval form;
Interview may be required;
A resume detailing relevant professional work experience;
Any other information that helps in ensuring the potential success of the applicant in the program (e.g. community/volunteer service, etc.);

Applicants may request a waiver of GMAT if they meet one of the following requirements:

Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from the University of South Florida Tampa;
Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from any State of Florida University that is a Preeminent institution (i.e., University of Florida-Gainesville, or Florida State University-Tallahassee
Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from Association of American Universities (AAU); or;
Have five (5) or more years of managerial or professional experience
For applicants with a 3-year Bachelor's Degree from a regionally-accredited institution, the following requirements need to be met in addition to those listed above: Minimum GMAT score of 650 or a minimum GRE score of at least 321 (combined verbal and quantitative), and a minimum of 25th percentile in the verbal portion of the test. When the 3-year Bachelor's Degree is less than 120 hours from Non-Bologna Accord Institutions, a transcript evaluation from a NACES member is required to confirm equivalency.

Curriculum Requirements

Total Minimum Hours: 48

Shared Core Requirements - 8 Credit Hours
Additional required courses - 17 credit hours
Electives - 18 credit hours
Directed Research - 2 credit hours
Capstone - 3 credit hours

Shared Core Requirements (8 Credit Hours)

GEB 6445 Social, Ethical, Legal Systems **Credit Hours: 2**
QMB 6603 Operations Management and Quality Enhancement **Credit Hours: 2**
GEB 6215 Communication Skills for Managers **Credit Hours: 2**
QMB 6358 Data Analytics for Business **Credit Hours: 2**

Additional Required Courses (17 credit hours)

ACG 6026 Accounting Concepts for Managers **Credit Hours: 3**
MAN 6055 Organizational Behavior and Leadership **Credit Hours: 2-3 (2 credits for this program)**
QMB 6305 Managerial Decision Analysis **Credit Hours: 2**
ECO 6005 Introduction to Economic Concepts for Managers **Credit Hours: 3**
FIN 6406 Financial Management **Credit Hours: 2-3 (2 credits for this program)**
MAR 6815 Marketing Management **Credit Hours: 2-3 (2 credits for this program)**
(Marketing Strategy)
ISM 6021 Management Information Systems **Credit Hours: 2**

Electives (18 credit hours)

Directed Research (2 credit hours)

MAN 6911 Directed Research **Credit Hours: 1-19**

Overseas Study Module

During the interim summer session, each student participates in the annual ten-day Overseas Study Module, which involves on-site study of international business practices. A different country/region is selected each year. Past modules have included visits to such cities as Moscow, London, Zurich, Geneva, Brussels, Tokyo, Beijing, Shanghai, Mexico City, Buenos Aires, Rio de Janeiro, Hong Kong, Milan, and Paris.

Comprehensive Exam

Executive EMBA students take the capstone course instead of a comprehensive exam.

Capstone Course (3 credit hours)

MAN 6930 Selected Topics **Credit Hours: 1-4**
Business Problems Analysis (3 credit hours)

Analytics and Business Intelligence Graduate Certificate

This program is offered fully online.

Certificate Code: **XIN**

Description

Analytics and business intelligence skills are in great demand today. This certificate prepares students to acquire necessary skills in analytics and business intelligence as needed in the marketplace. Graduate students who take four of the five required courses, and earn a GPA of 3.0 or higher in these courses, will receive a will receive a SAS approved Certificate in Analytics and Business Intelligence when they use a SAS analytics package as part of some of these courses.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Student should meet the statistics and database prerequisites as outlined in the graduate catalog for the MS/MIS program:

A course in database or significant work experience related to databases in order to take Advanced Database and Data Warehousing courses
A course in statistics to take all the data mining and statistics classes

Requirements of this Certificate (12 Credit Hours)

12 credit hours. Choose four courses from the list below:

ISM 6136 Data Mining **Credit Hours: 3**
ISM 6218 Advanced Database Management **Credit Hours: 3**
ISM 6208 Data Warehousing **Credit Hours: 3**
ISM 6137 Statistical Data Mining **Credit Hours: 3**
ISM 6642 Statistical Programming for Business Analytics **Credit Hours: 3**
ISM 6562 Big Data for Business Applications **Credit Hours: 3**

QMB 7566 Applied Multivariate Statistical Methods **Credit Hours: 3** *(not available online)

Electives

none

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Business Analytics Graduate Certificate

*** This program is offered online.**

Certificate Code: **XBA**

Description

Business analytics skills are much in demand today. Many companies are hiring professionals who are trained in data analytics tools and also have domain knowledge of some functional area of business such as accountancy or marketing. This certificate prepares students for business analytics positions in organizations.

Course Location/Delivery

The certificate is offered at the Tampa campus and online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Tuition and Fees

Normal tuition and fees apply for on campus courses. Students who elect to take the certificate in the online format will pay a $900 credit opposed to normal tuition.

Pre-Requisites

A course in statistics
A graduate course in accounting or the equivalent
A course in marketing

Requirements

12 credit hours are required for the certificate. There are 6 hours of required core classes:

ISM 6136 Data Mining **Credit Hours: 3**
ISM 6930 Selected Topics in MIS **Credit Hours: 1-6**
Statistical Program for Business (3 Credit Hours)

Electives

Students will also select two of the following three courses:

ISM 6217 Database Administration **Credit Hours: 3**
ACG 5841 Analytics in Accounting **Credit Hours: 3**
MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4**

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit and Average Time to Completion

Per University Policy, all certificates have a five-year time limit; however, the approximate time to complete the certificate is three years.

Business Foundations Graduate Certificate

This program is offered fully online.

Certificate Code: **XBF**

Description

The Graduate Certificate in Business Foundations (CBF) provides an intensive, graduate level introduction to business concepts, tools, and techniques across three critical dimensions: decision making, measurement, and market orientation. The 16 credit hour program prepares current and aspiring managers to effectively contribute to strategic and operating decisions within their organizations and professions; it also fulfills prerequisite requirements for entry into the MBA program.

Course Location/Delivery

Online, Partial, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (16 Credit Hours)

ACG 6026 Accounting Concepts for Managers **Credit Hours: 3**
ECO 6005 Introduction to Economic Concepts for Managers **Credit Hours: 3**
MAN 6055 Organizational Behavior and Leadership **Credit Hours: 2-3**
ISM 6021 Management Information Systems **Credit Hours: 2**
QMB 6305 Managerial Decision Analysis **Credit Hours: 2**
MAR 6815 Marketing Management **Credit Hours: 2-3**
FIN 6406 Financial Management **Credit Hours: 2-3**

Electives

none

Time Limit

3 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Compliance, Risk, & Anti-Money Laundering Graduate Certificate

This program is offered fully online.

Curriculum Code: **XAM**

Description

This certificate program is targeted to meet the needs of students seeking a career in the growing field of business risk assessment, compliance, and anti-money laundering. The four courses in the certificate program will provide students with a strong foundation in risk identification, assessment and management techniques. The program also focuses on providing students with knowledge regarding compliance with various rules, laws, and regulations affecting businesses. The forensic accounting course in the program specifically focuses on fraud prevention, detection, and investigation, including the litigation aspect of fraud. The information technology control and audit course is designed to equip students with the knowledge and skills necessary to add value to organizations as an auditor of IT-intensive accounting systems. The statistical data mining course will equip students with the skills necessary to apply advanced statistical techniques to "mine" data to glean actionable insights relating to meet anti-money laundering objectives. Completion of this graduate certificate program will help prepare students to take the exam for the Certified Anti-Money Laundering Specialist (CAMS) certification. USF students qualify for a discounted price of $1,000 for the exam and two years of membership (regular price $1,890).

Course Location/Delivery

Online, Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements. In addition, must also meet the following:

B.S. or M.S. in any business discipline from an AACSB-accredited or equivalent (EQUUS) or admit to M.S./Ph.D. Program in CoB or cyber-security

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Applicants who have not taken an undergraduate or graduate course in financial accounting and business law must pass a 30 question proficiency exam covering topics in accounting and business law administered by the Lynn Pippenger School of Accountancy, and have completed an undergraduate or graduate in statistics from a regionally accredited institution.

Requirements of this Certificate (12 Credit Hours)

BUL 5842 Risk Management and Legal Compliance **Credit Hours: 3** -offered Summer, Fall and Spring semesters

ACR 6936 - Forensic accounting and legal issues **Credit(s): 3** -Offered Fall smester
ACG 6457 Accounting Systems Audit, Control, and Security **Credit Hours: 3** -Offered Spring semester
ISM 6137 Statistical Data Mining **Credit Hours: 3** -Offered Summer and Spring semesters

Electives

None

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Entrepreneurship Graduate Certificate

Certificate Code: XET
Approved 200501

Description

The Graduate Certificate in Entrepreneurship, offered in an inter-disciplinary framework through the Center for Entrepreneurship in conjunction with the Colleges of Business Administration, Engineering, and Health Sciences, offers students the opportunity to do graduate-level study that focuses on the various aspects of Entrepreneurship. Students study the various areas of Entrepreneurship including identification of new technology opportunities, development of strategies to commercialize new innovations, critical skills in business planning for new ventures, various frameworks for new venture formation and development of financing strategies and frameworks to provide capital to create and grow new ventures and how these topics relate to knowledge and technology-based business opportunities. A particular focus will be provided for students interested in the entrepreneurial aspects of Life Sciences and Biotechnology businesses.

The graduate certificate offers students flexibility in class scheduling and focused course work. Graduates will develop the specialized skills needed to create and grow new business ventures and to work effectively in leadership roles in new business ventures as a part of an inter-disciplinary management team. In addition to Business and Engineering students, the certificate is also intended for graduate students from other disciplines who are interested in broadening their perspectives in entrepreneurship. Participation is open to all graduate students admitted to Graduate Studies at the University of South Florida.

Course Location/Delivery

USF Tampa

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

The following courses are crosslisted with the Muma College of Business and the College of Engineering.

ENT 6016 New Venture Formation **Credit Hours: 3** OR EIN 6934 Taken as Technology Venture Strategies (3 Credit Hours)
ENT 6116 Business Plan Development **Credit Hours: 3** OR EIN 6154
ENT 6415 Fundamentals of Venture Capital and Private Equity **Credit Hours: 3** OR EIN 6934 taken as Venture Capital and Private Equity (3 Credit Hours)
ENT 6186 Strategic Market Assessment **Credit Hours: 3** OR EIN 6934 taken as Strategic Marketing Assess (3 Credit Hours)

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval

Contacts

Contact Information: http://www.grad.usf.edu/cert

Human Resources Graduate Certificate

This program is offered fully online.

Curriculum Code: **XHU**

Description

Human Resource Management skills were always needed in organizations. However, in the era of increasing skills shortage and war for talent, innovative strategies for Human Resources departments are more critical than ever to acquire and retain the right talent in the organization. This certificate offers courses that enable managers and other HR professionals to be on the cutting edge of the industry by infusing analytics into the classical management domain. With an offering of courses in negotiation, analytics, creativity, and collaboration, this certificate offers a unique skill-set for those seeking management positions.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

MAN 6305 Human Resource Management **Credit Hours: 3**
MAN 6380 - People Analytics **Credit(s): 3**

Electives

Please select two from the following courses

ISM 6316 Project Management **Credit Hours: 3**
MAN 6149 Leadership and Teams **Credit Hours: 3**
MAN 6601 International Management **Credit Hours: 3**
MAN 6448 Negotiating Agreement and Resolving Conflict **Credit Hours: 3**
MAN 6160 - Principles of Collaboration **Credit(s): 3**

Time Limit

5 Years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Project Management Graduate Certificate

This program is offered fully online.

Curriculum Code: **XPO**

Description

Project management skills are increasingly gaining prominence in organizations. Getting projects done right, in time, and within budget can make a difference between organizational success and failure. Management skills are bolstered by project management expertise result in increased efficiency and competence. With an offering of courses in project management, analytics, creativity, and collaboration, this certificate offers a versatile skill-set for those seeking management positions.

Course Location/Delivery

Campus

Admissions Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Prerequisites

Requirements of this Certificate (12 Credit Hours)

MAN 6930 Selected Topics **Credit Hours: 1-4** (Managing Creative Projects) **(3 credits for this program)**
ISM 6316 Project Management **Credit Hours: 3**

Electives

Please select two from the following courses

MAN 6149 Leadership and Teams **Credit Hours: 3**
MAN 6607 Managing International Cultural Differences **Credit Hours: 3**
MAN 6448 Negotiating Agreement and Resolving Conflict **Credit Hours: 3**
MAN 6930 Selected Topics **Credit Hours: 1-4** (People Analytics) **(3 credits for this program)**
MAN 6930 Selected Topics **Credit(s): 1-4** (Principles of Collaboration)

Time Limit

2 years

Credit Toward Graduate Degree

The certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Department of Finance

Finance, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 52.0801
Dept. Code: FIN
Major/College Codes: FIN BA
Approved: 2006

Contact Information

College: Muma College of Business
Department: Finance (FIN)

Contact Information: http://www.grad.usf.edu/majors

The M.S. in Finance offers a curriculum that concentrates on both finance and economics concepts. Students who complete the M.S. in Finance will be better prepared to succeed in careers in the financial world, especially in positions that require specialized knowledge about various finance topics.

Accreditation - AACSB International -The Association to Advance Collegiate Schools of Business.

Major Research Areas: Finance

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

GMAT score of 550 or higher (or equivalent GRE score)
Applicants with lower GMAT (GRE) scores may be admitted if the application as a whole convinces the committee that the applicant warrants an admission to the major.
For applicants with a three-year Bachelor's Degree from a regionally accredited institution, the following requirements need to be met in addition to those listed above:
Minimum GMAT score of 650 with a minimum score of 25 on the verbal portion, or a minimum GRE score of 321 with minimum score of 150 on verbal reasoning.
When the three-year Bachelor's Degree is less than 120 hours from Non-Bologna Accord Institutions, a transcript evaluation from a NACES member is required to confirm equivalency.

Curriculum Requirements

A student who does not have an undergraduate degree in business must complete the following tools before taking courses for which they are prerequisites

Total Minimum Hours 30 hours

Pre-requisite Tools Courses (10 Credit Hours)

Students must successfully (a grade of A or B) complete equivalent courses in each of these areas prior to taking MSF courses. Tools course can be waived, with the permission of the program director, if the student earned an A or B in these courses or equivalent courses at an AACSB accredited institution within five years of entering the MSF major.

ACG 6026 Accounting Concepts for Managers **Credit Hours: 3** *
ECO 6005 Introduction to Economic Concepts for Managers **Credit Hours: 3** *
FIN 6406 Financial Management **Credit Hours: 2-3 (2 credits for this program)**
QMB 6305 Managerial Decision Analysis **Credit Hours: 2**

Core Finance (15 Credit Hours)

(FIN 6445 must be taken at the end of the program after the other core courses are completed.)

Core finance courses may be waived for students who graduated with finance majors from AACSB accredited programs within five years of entering the M.S. in Finance major. Only courses with the same content as the core finance courses can be used to satisfy the M.S. in Finance course requirements, and students must have earned grades of A or B to have such courses waived. Advanced finance courses must be substituted for waived courses.

FIN 6416 Advanced Financial Management **Credit Hours: 3**
FIN 6465 Financial Statement Analysis **Credit Hours: 3**
FIN 6515 Investments **Credit Hours: 3**
FIN 6455 Financial Modeling and Analytics **Credit Hours: 3**
FIN 6425 Financial Policy **Credit Hours: 3**

Advanced Finance Electives (15 Credit Hours)

To satisfy the 15 hours of electives, students can complete any of the graduate courses offered in the Department of Finance or approved graduate courses offered in the Economics Department or other Departments at Muma College of Business (a list of approved courses will be posted each year). Students can satisfy up to six credit hours of electives by taking graduate courses offered in other departments and colleges as long as the courses are approved in advance.

Comprehensive Exam

Additional Information Regarding Curriculum

Leadership, teamwork, communication skills and organizational change are emphasized. Much of the curriculum is delivered through case studies, class discussion, exercises, group projects, video taped role-playing, simulations, and prominent guest speakers from the local business and non-profit community. Emphasis is placed on student participation and teamwork. All courses include writing, presentation, and critical thinking skills.

Department of Information Systems and Decision Sciences

Business Analytics and Information Systems, M.S.

This program is offered partially online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 11.0501
Dept. Code: QMB
Major/College Codes: BAI BA
Approved: 2002

Concentrations:

Analytics and Business Intelligence (ABI)
Information Assurance (CIA)

Also offered as:

Track under Business Administration (Ph.D.) and application area in Business Administration (M.B.A.)
an Accelerated Major

Contact Information

College: Muma College of Business
Department: Information Systems/Decision Sciences (QMB)

Contact Information: http://www.grad.usf.edu/majors

The Master of Science (M.S.) in Business Analytics and Information Systems (BAIS) meets the needs of the marketplace for expertise in analytics, information technology and management. Highly qualified individuals with motivation for leadership in information technology and analytics are encouraged to apply for admission to this program. The major meets the needs of organizations in information services, software development, management consulting, and other sectors wherer data analytics is used in industry. An Advisory Board consisting of senior business analytics and information systems executives works closely with the department to ensure that the program stays relevant and maintains high standards.

The major is offered in two forms – an on-campus option and a weekend executive option.

The on-campus option is designed for students who need flexibility in their course work. Students will work with faculty to design the most effective course sequence and optional thesis/practicum /independent studies to meet the major curriculum requirements and accomplish their career goals.

Alternately, the weekend executive option is intended for full-time working Information Technology/Information Systems/Business professionals who will pursue this degree while remaining employed. The weekend executive option is offered on a cohort basis with a pre-determined set of courses and independent study options selected by faculty based on market needs and student profiles. Students will benefit from an accelerated curriculum with a managerial and leadership approach. To get the full benefit, applicants are expected to have a minimum of 5 years of relevant work experience.

Accreditation
Accredited by the AACSB International – The Association to Advance Collegiate Schools of Business.

Admission Information

Must meet University Admission and English Proficiency requirements , as well as requirements for admission to the major, listed below. Students are admitted to the M.S./BAIS program based on the evaluation of their application in its entirety, including:

GMAT, GRE or other standardized scores for graduate programs (e.g. MCAT, LSAT).
For students with 5 years or more of relevant full-time work experience in Information Technology/ Information Systems/ Business Analytics in U.S., the requirement of standardized scores may be waived.
Students requesting such waivers should provide information justifying such waivers based on the above criteria. Additional documentation may be sought when deemed appropriate by the program.
letters of recommendations.
statement of purpose, and
relevant work experience.
For applicants with a 3-year Bachelor's Degree from a regionally-accredited institution, the following requirements need to be met in addition to those listed above: Minimum GMAT score of 650 or a minimum GRE score of at least 321 (combined verbal and quantitative), and a minimum of 25th percentile in the verbal portion of the test. When the 3-year Bachelor's Degree is less than 120 hours from Non-Bologna Accord Institutions, a transcript evaluation from A NACES member is required to confirm equivalency.

Curriculum Requirements

The major requires 33 hours of coursework and may be taken either full-time or part-time. Full-time students with appropriate prerequisites may be able to complete the major in one full year (3 semesters) of study. Part-time students and full-time students who need prerequisites will typically need from 1 ½ to 3 years to complete the degree.

Prerequisites
Incoming students are expected to have the following as prerequisites

A course in high-level, object oriented programming language (e.g., C#, C++, Java and Python) or substantial programming experience;
A course in Information Systems Analysis and Design or equivalent experience;
A course in Database Systems or equivalent experience;
A course in Statistics or equivalent professional qualification or experiences
A course in economics, or equivalent professional qualification or experiences and
A course in financial accounting.
These required prerequisite courses may be taken simultaneously with courses in the M.S./BAIS major. Prerequisiite courses do not count toward the 33 credit hours of course requirements in the M.S./BAIS major.

Students have the choice of two options:

On-Campus Option:
Designed for students who need flexibility in their course work, students will work early in the first semester with their major advisor to complete a formal Major Curriculum of Study meeting the Major Curriculum Requirements that will define a coherent sequence of courses to accomplish the student's objectives. Students have choice of electives as well as the option to complete a master's thesis or practicum project, depending upon the availability and approval of a faculty sponsor.

Executive Weekend Option:
Intended for full-time working Information Technology/Information Systems/Business professionals who will pursue this degree while remaining employed. Offered on a cohort basis, students will meet the Major Curriculum Requirements through a pre-determined set of courses, electives, and independent study

options selected by faculty and noted on the formal Major Curriculum of Study, based on market needs and student profiles. Students will benefit from an accelerated curriculum with a managerial and leadership approach. To get the full benefit, applicants are expected to have a minimum of 5 years of relevant work experience.

Total Minimum Hours: 33 credits

Core – 12 credits
Capstone – 3 credits
Concentration or Electives – 18 credits

Technical Core (12 Credit Hours)

The following four courses provide an understanding of the state-of-the-art in research and practice in technical areas of Information Systems Management.

ISM 6124 Advanced Systems Analysis and Design **Credit Hours: 3**
ISM 6218 Advanced Database Management **Credit Hours: 3**
ISM 6225 Distributed Information Systems **Credit Hours: 3**
QMB 6302 - Analytical Methods for Business **Credit(s): 3**

Capstone Course (3 Credit Hours)

This course is considered the capstone of the M.S./BAIS major and as such it must be taken during one of the last two semesters of the student's major.

ISM 6155 Enterprise Information Systems Management **Credit Hours: 3**

Concentration Option Requirements

Students select from the following concentrations or complete 18 hours of electives.

Analytics & Business Intelligence Concentration (18 Credit Hours)

In addition to the Technical Core and Capstone courses, students must complete the following:

Required Courses (12 Credit Hours)

In addition, graduate students who take the required four courses for this concentration and earn an average GPA of 3.00 or higher in these courses, will receive a SAS approved Certificate in Analytics and Business Intelligence, when they use a SAS analytics package as part of some of these courses.

Specifically, graduate students will need to use, among other tools, SAS Enterprise Miner or an equivalent SAS analytics package in the Data Mining, Statistical Data Mining and Statistical programming for Business Analytics courses. If students take at least one of the courses marked with a * as part of the analytics and business intelligence concentration, they will receive a SAS approved Certificate in Analytics and Business Intelligence.

Students will have to complete four out of the following seven courses:

ISM 6136 Data Mining **Credit Hours: 3** *
ISM 6218 Advanced Database Management **Credit Hours: 3**
ISM 6208 Data Warehousing **Credit Hours: 3**
ISM 6137 Statistical Data Mining **Credit Hours: 3** *
QMB 7566 Applied Multivariate Statistical Methods **Credit Hours: 3**

ISM 6930 Selected Topics in MIS **Credit Hours: 1-6 (3 credits for this program)** (Statistical Programming for Business Analytics) *
ISM 6930 Selected Topics in MIS **Credit(s): 1-6 (3 credits for this program)** (Big Data and Ecommerce)

Electives (6 Credit Hours)

To complete the Analytics and Business Intelligence concentration, students will need to meet the 33 credit hour requirement for the MS in BAIS degree program by taking graduate level electives for the program. Other electives from across the campus may also be taken to meet the 33 credit hour requirement with prior approval of the academic advisor of the program.

Information Assurance Concentration (18 Credit Hours)

In addition to the Technical Core and Capstone courses, students must complete the following:

Required Courses (6 Credit Hours)

ISM 6328 Information Security & Risk Management **Credit Hours: 3**
ISM 6930 Selected Topics in MIS **Credit Hours: 1-6 (3 credits for this program)** (Decision Analysis for Business Continuity and Disaster Recovery)

Electives (6 Credit Hours)

Any two elective courses from the set of courses listed below

ISM 6145 Seminar on Software Testing **Credit Hours: 3**
ISM 6316 Project Management **Credit Hours: 3**
ISM 6124 Advanced Systems Analysis and Design **Credit Hours: 3**
ISM 6218 Advanced Database Management **Credit Hours: 3**
ISM 6266 Software Architecture **Credit Hours: 3**

Electives (6 Credit Hours)

To complete the Information Assurance concentration, students will need to meet the 33 credit hour requirement for the MS in BAIS degree by taking graduate level electives for the major. Other electives from across the campus may also be taken to meet the 33 credit hour requirement with prior approval of the academic advisor of the program.

Electives (18 Credit Hours)

Up to eighteen graduate level credits may be selected from additional Information Systems courses or (with prior approval by the academic advisor) other areas of specialization such as areas of Management, Decision Sciences, Computer Science, Logistics, etc. Existing Course Offerings:

ISM 6124 Advanced Systems Analysis and Design **Credit Hours: 3**
ISM 6266 Software Architecture **Credit Hours: 3**
ISM 6145 Seminar on Software Testing **Credit Hours: 3**
ISM 6155 Enterprise Information Systems Management **Credit Hours: 3**
ISM 6218 Advanced Database Management **Credit Hours: 3**
ISM 6225 Distributed Information Systems **Credit Hours: 3**
ISM 6305 Managing the Information System Function **Credit Hours: 3**
ISM 6442 International Aspects of Information Science **Credit Hours: 3**
ISM 6405 Informatics and Business Intelligence **Credit Hours: 3**

ISM 6485 Electronic Commerce **Credit Hours: 3**
ISM 6905 Independent Study **Credit Hours: 1-6**
ISM 6930 Selected Topics in MIS **Credit Hours: 1-6**
ISM 6316 Project Management **Credit Hours: 3**
ISM 6136 Data Mining **Credit Hours: 3**
ISM 6208 Data Warehousing **Credit Hours: 3**
ISM 6056 Web Application Development **Credit Hours: 3**
ISM 6156 Enterprise Resource Planning & Business Process Management **Credit Hours: 3**
ISM 6328 Information Security & Risk Management **Credit Hours: 3**

In addition, the following Special Topics are being offered:

ISM 6930 Selected Topics in MIS **Credit Hours: 1-6** (Multimedia Applications)
ISM 6930 Selected Topics in MIS **Credit(s): 1-6** (Mainframe Technologies)
ISM 6137 Statistical Data Mining **Credit Hours: 3**

Thesis Option (6 Credit Hours)

The master's thesis option requires six credits of ISM 6971, which count as six of the 18 BAIS elective credits. The thesis must make a well-defined contribution to the research and development in an area of Information Systems.

ISM 6971 Thesis: Master's **Credit Hours: 2-6**

Practicum Option (1-6 Credit Hours)

The practicum option requires an investigation of a new information technology artifact. The project typically occurs in the student's place of employment and is jointly supervised by a faculty member and a manager in the company. One credit of ISM 6905 would be taken for each semester that the student works on a project. The practicum would count for one to six hours of the 18 hours of BAIS electives.

Research/Project Option (1-3 Credit Hours)

The research/ project option requires working on an BAIS related project that involves research or community engagement. The project is supervised by a faculty member. One to two credits of ISM 6905 would be taken for each semester that the student works on a project. The research/ project option would count for one to three hours of the 18 hours of BAIS electives.

Comprehensive Exam

In lieu of a comprehensive exam, assessments comprising the capstone course (ISM 6155) fulfill the requirements for the comprehensive assessment in the program.

Graduate Certificate Options

Note that students in the Program can also obtain graduate certificates in (1) Compliance, Risk and Anti-Money Laundering and/or (2) Information Assurance by selecting elective courses suitably.

Accelerated Major

Also available as an Accelerated Majors

Management, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 52.0101
Dept. Code: QMB
Major/College Codes: MAN BA
Approved: 1970

Concentrations:

Human Resource (HRM)
Project Management (PMT) (201608)
Management Information Systems (GIS) (201808)

Contact Information

College: Muma College of Business
Department: Information Systems and Decision Sciences

Contact Information: http://www.grad.usf.edu/majors

Contemporary organizations widely recognize the strategic impact of project management. Project Management provides a system for aligning strategic and business goals that focus on meeting client expectations and producing desired outcomes. The foundation of this program is project management theory, project applications, manager skills and methods, and the tools required to successfully manage and navigate organization projects.

The purpose of this major is to provide management leaders with principles of project management; leadership and strategic analysis; creativity and analytics; organizational behavior, decision making, design and change; collaboration; agile development and scrum methodology. The major specifically focuses on project management leadership requirements, such as facilitating teamwork in diverse groups; empowering others; recognize and adapt to the constraints and opportunities of a global economy, and develop centers of excellence.

This dynamic, well-focused, progressive program provides a broad range of project management concepts and skills. Much of the curriculum is delivered through case studies, class discussion, exercise, group project, videotaped role-playing, simulations, and prominent guest speakers from local and national business and non-profit organizations. Emphasis is placed on student participation and teamwork. All courses include writing, presentations, critical thinking, analytics and creativity.

Accreditation: AACSB International -The Association to Advance Collegiate Schools of Business.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

The MS in Management admission committee uses a portfolio approach: the strength of each applicant is determined based on the entire application. The committee will consider the following:

Prior college-level academic performance (bachelor's degree from a regionally accredited institution required); For applicants with a 3-year Bachelor's Degree from a regionally accredited institution, the following requirements need to be met:
Minimum GMAT score of 600 or a minimum GRE score of at least 321, and a minimum of 25th percentile in the verbal portion of the test.
When the 3-year Bachelor's Degree is less than 120 hours from Non-Bologna Accord Institutions, a transcript evaluation from a NACES member is required to confirm equivalency.
GMAT, (preferred), GRE, MCAT, LSAT, and PCAT (submitted scores must be within five (5) years of the term of entry);
Applicants from Preeminent and Emerging Universities within the State of Florida (University of Florida, Florida State University, and University of South Florida-Tampa) and a cumulative GPA of 3.50 or greater may request waiver of GMAT;
Applicants with three (3) or more years of managerial or professional experience may request a GMAT/GRE waiver;
A statement of purpose,
Recommendation letters,
Resume,
Relevant professional work experience
Any additional information that helps to ensure the potential success of the applicant in the program

Curriculum Requirements

Total Minimum Hours - 30 credit hours

Common Core Courses -14 hours
Concentration or Electives– 12 hours
Additional Electives – 4 hours minimum
Optional Practicum (counts within electives) – 1-3 hours
Optional Research Paper (counts within electives) – 3 hours

The major requires a minimum of 30 hours of coursework and may be taken either full-time or part-time. Early in the first semester, a student and the program advisor will work together to complete a formal Program of Study that will define a coherent sequence of courses to satisfy the students objectives. Students may choose the concentration or the general path with completion of electives.

Common Core Courses (14 Credit Hours)

Core (11 Credit Hours)

The following four courses provide a solid understanding of state-of-the-art research and practice covering the primary areas in the domain of Management.

MAN 6055 Organizational Behavior and Leadership **Credit Hours: 2-3 (2 credits for this program)**
MAN 6289 Organizational Change and Development **Credit Hours: 3**
MAN 6347 People Analytics **Credit Hours: 3**
ISM 6316 Project Management **Credit Hours: 3**

Core Capstone Course (3 Credit Hours)

This course is considered to be the capstone of the M.S. in Management program and as such it must be taken during one of the last two semesters of the student's program. It integrates the topics covered in the four other core courses.

MAN 6950 Capstone Experience in Leading Organizations **Credit Hours: 3**

Concentration Requirements

Students may select from one of the following Concentrations:

Project Management Concentration (12 Credit Hours)

Select 12 credit hours from the following:

MAN 6448 Negotiating Agreement and Resolving Conflict **Credit Hours: 3**
MAN 6601 International Management **Credit Hours: 3**
MAN 6145 Managing Creative Projects **Credit Hours: 3**
MAN 6165 Principles of Collaboration **Credit Hours: 3**
MAN 6435 Contract Management **Credit Hours: 3**
ACG 6026 Accounting Concepts for Managers **Credit Hours: 3**

Human Resources Concentration (12 Credit Hours)

MAN 6305 Human Resource Management **Credit Hours: 3**
MAN 6930 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Employment Law)

Choose 6 credits from the following courses:

MAN 6448 Negotiating Agreement and Resolving Conflict **Credit Hours: 3**
MAN 6601 International Management **Credit Hours: 3**
MAN 6204 Organization Design and Structure **Credit Hours: 3**
MAN 6165 Principles of Collaboration **Credit Hours: 3**

Management Information Systems Concentration (12 Credit Hours)

ISM 6124 Advanced Systems Analysis and Design **Credit Hours: 3**
ISM 6218 Advanced Database Management **Credit Hours: 3**

Choose 6 credits from the following courses:

ISM 6156 Enterprise Resource Planning & Business Process Management **Credit Hours: 3** (Pre-req: ISM 6021)
ISM 6436 Operations & Supply Chain Processes **Credit Hours: 3**
ISM 6136 Data Mining **Credit Hours: 3** (Pre Req QMB 6305)
Or any elective pre-approved by the Director of the Muma College of Business Masters in Management.

Electives (4 Credit Hours Minimum)

Elective courses may be selected from additional management courses or (with prior approval by the academic advisor) other areas of specialization such as sociology, information systems, psychology, or communication. The following courses are potential electives, depending on semester and offerings. Any course offered in the concentrations not selected by the student may also be taken as an elective.

MAN 6930 Selected Topics **Credit Hours: 1-4 (3 credits for this program)** (Management Internship)
GEB 6445 Social, Ethical, Legal Systems **Credit Hours: 2**

MAN 6147 Leadership/Management Concepts **Credit Hours: 2**
MAN 6726 Strategic Business Analysis **Credit Hours: 2**
GEB 6457 Ethics, Law and Sustainable Business Practices **Credit Hours: 3**
ISM 6328 Information Security & Risk Management **Credit Hours: 3**
ISM 6436 Operations & Supply Chain Processes **Credit Hours: 3**
MAN 6256 Politics and Control in Organizations **Credit Hours: 3**
MAN 6905 Independent Study **Credit Hours: 1-19 (1-3 credits for this program)**
MAR 6216 Logistics and Physical Distribution Management **Credit Hours: 3**
MAN 6599 Logistics Systems and Analytics **Credit Hours: 3**

Comprehensive Exam

Practicum Option (1 to 3 Credit Hours)

The practicum option requires students to work on an applied project related to management/project management. Typically this can occur at the student's place of employment and is jointly supervised by a faculty member and a manager in the company. One credit of MAN 6905 would be taken for each semester to a maximum of three credits over three semesters. The practicum would count for 1-3 hours of electives.

Research Paper Option (3 Credit Hours)

The research paper option requires students to work on an scholarly publication related to management. Typically this means that the student picks an academic supervisor, picks a scholarly research topic, conducts literature survey, designs a research method, collects data, analyzes the data, and writes a research paper. The student then presents it to a committee and uses their feedback to revise the paper and submit to one of the peer reviewed conferences in the management or related disciplines. The research paper option (MAN 6905) will count for 3 credit hours of electives.

MAN 6905 Independent Study **Credit Hours: 1-19 (3 credits for this program)**

Information Assurance Graduate Certificate

This program is offered fully online.

Certificate Code: XIA
Approved 201408

Description

The graduate certificate in information assurance provides you with a core foundation of knowledge and applied expertise in information security controls, the regulatory environment, and information risk management and incident response.

Learn how to balance defenses and risks to secure the integrity of information in storage; ensure its accessibility to authorized personnel and inaccessibility to unauthorized personnel; and maintain the confidentiality of an organization or agency's sensitive, identifying and personal data.

Course Location/Delivery

Fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

ISM 6328 Information Security & Risk Management **Credit Hours: 3**
ISM 6577 Decision Processes for Business Continuity and Disaster Recovery **Credit Hours: 3**

ISM 6145 Seminar on Software Testing **Credit Hours: 3**
ISM 6217 Database Administration **Credit Hours: 3**
ISM 6124 Advanced Systems Analysis and Design **Credit Hours: 3**

And two courses from the following:

BUL 5842 Risk Management and Legal Compliance **Credit Hours: 3**
ACG 6457 Accounting Systems Audit, Control, and Security **Credit Hours: 3**

Time Limit / Average Time to Completion

Five years.

Credit Toward Graduate Degree

Credit hours from this Certificate may be eligible to apply toward a graduate degree. Check with the department for information.

Department of Marketing

Entrepreneurship in Applied Technologies, M.S.

This program is offered partially online.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 52.0701
Dept. Code: MAN
Major/College Codes: EAT BA
Approved: 2005

Also offered as a Concurrent Degree

Contact Information

College: Muma College of Business
Department: Marketing (MKT)

Contact Information: http://www.grad.usf.edu/majors
Other Resources:
https://www.usf.edu/entrepreneurship/programs/masters/
entrepreneurship@usf.edu

The Center for Entrepreneurship at the University of South Florida, in partnership with the Colleges of Business and Engineering, Morsani College of Medicine and the Patel College of Global Sustainability, has established a novel, innovative, and unique major in interdisciplinary Entrepreneurship in Applied Technologies. The Master's of Science Degree Program in Entrepreneurship in Applied Technologies is a 30 credit-hour major and consists of courses that will consolidate the Entrepreneurship education and training for successful opportunity recognition and development, technology and market assessment, technology commercialization, new venture formation, and new venture financing into a single inter-disciplinary program curriculum utilizing faculty and courses in the Colleges of Business, Engineering, Medicine, and Global Sustainability.

The major is designed such that a student may complete it in a concentrated 12-month period of study or in an 18-month period. In addition, the Masters of Science Degree in Entrepreneurship is designed so that it can be completed as part of a concurrent degree in with a traditional M.A., M.S., M.B.A., M.D., or Ph.D. program. Concurrent degrees include the following: Master in Business Administration (MBA), Biotechnology (M.S.), Information Systems (M.S.), Public Health (MPH), Global Sustainability (M.S.) Environmental Science (M.S.), Civil Engineering (M.S.and Ph.D.), Industrial Engineering (M.S.), Medicine (M.D.), and Biomedical Engineering (M.S. B.E. & Ph.D). The concurrent degrees must be completed by the student within a 5-year period following initiation.

Accreditation:
Accredited by the the Association to Advance Collegiate Schools of Business

Admission Information

Must meet University requirements (see Graduate Admissions) as well as requirements for admission to the major, listed below.

Two (2) letters of recommendation
Letter of interest
Statement of purpose
Personal interview
GRE, GMAT may be required on individual basis; MCAT or LSAT may be substituted
Competence in Statistics, Accounting, and Finance must be demonstrated

Curriculum Requirements

Total Minimum Hours: 30 credit hours

Core requirements – 15 credits
Electives – 15 credits

Program of Study

Course Requirements – Graduation will require successful completion of the 30 hour curriculum, with a minimum GPA of 3.00 (no grades below "C"), within a five (5) year period.

Stipends – N/A

Core Requirements (15 Credit Hours)

Must complete all five courses. *Crosslisted course, choose 1

ENT 6016 New Venture Formation **Credit Hours: 3** *
or
EIN 6935 Special Industrial Topics II **Credit Hours: 1-3 (3 credits for this program)** (Technology Venture Strategies) *

ENT 6116 Business Plan Development **Credit Hours: 3** *
or
EIN 6324 - Technical Entrepreneurship **Credit(s): 3** *

ENT 6126 Strategies in Technology Entrepreneurship **Credit Hours: 3** *
or
EIN 6936 Special Industrial Topics III **Credit Hours: 1-3 (3 credits for this program)** (Strategies in Entrepreneurship Tech) *

ENT 6186 Strategic Market Assessment **Credit Hours: 3** *
or
EIN 6935 - Strategic Market Assessments **Credit(s): 3** *

ENT 6415 Fundamentals of Venture Capital and Private Equity **Credit Hours: 3** *
or
EIN 6934 Special Industrial Topics I **Credit Hours: 1-3 (3 credits for this program)** (Venture Capital & Private Equity) *

Electives (15 Credit Hours)

Select five (3hr) courses

ENT 6606 New Product Development **Credit Hours: 3** *

or

EIN 6934 Special Industrial Topics I **Credit Hours: 1-3** *

ENT 6930 Special Topics in Entrepreneurship **Credit Hours: 3** *

or

MAN 6930 Selected Topics **Credit Hours: 1-4** (Management) *

ENT 6947 Advanced Topics in Entrepreneurship **Credit Hours: 3**
MAN 6930 Selected Topics **Credit(s): 1-4** (Global Entrepreneurship)
EIN 5201 Creativity in Technology **Credit Hours: 3**
EIN 6430 Overview of Regulated Industries **Credit Hours: 3**
GEB 6457 Ethics, Law and Sustainable Business Practices **Credit Hours: 3**
GMS 6095 - Principles of Intellectual Property
GMS 6436 - Introduction to Biotechnology
GMS 6873 Biomedical Ethics **Credit Hours: 3**
GMS 7930 Selected Topics **Credit Hours: 1-3** (Principles of Biochemistry and Genetics)
MAN 6456 - Improvisation in Organizations
ENT 6155 - Mergers and Acquisitions: An Entrpreneurial Perspective
Or other graduate courses which may be approved by the Graduate Director

Comprehensive Exam

Concurrent Degree

Also available as a Concurrent Degrees

Marketing, M.S.M.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 33
Level: Masters
CIP Code: 52.1401
Dept. Code: MKT
Major/College Codes: MKT BA
Approved: 2007

Also offered as:

Concentration under Business Administration (Ph.D.)

Contact Information

College: Muma College of Business
Department: Marketing (MKT)

Contact Information: http://www.grad.usf.edu/majors

Accreditation
Accredited by AACSB International - The Association to Advance Collegiate Schools of Business.

Admission Information

Must meet University Admission and English Proficiency requirements (see Graduate Admissions) as well as requirements for admission to the major, listed below.

The M.S. in Marketing admission committee uses a portfolio approach: the strength of each applicant is determined based on the entire application. The admission committee will consider the following:

GMAT (preferred), GRE, MCAT, LSAT, and PCAT (submitted scores must be within five (5) years of the term of entry);
Applicants may request a waiver of GMAT if they meet one of the following requirements:
Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from the University of South Florida-Tampa
Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from any State of Florida University that is a preeminent institution (i.e., University of Florida-Gainesville, Florida State University-Tallahassee)
Have a Bachelor's degree with a cumulative GPA of 3.50 or greater from an AAU school (American Association of Universities).
Have three (3) or more years of managerial or professional experience
A statement of purpose;
Resume
Relevant professional work experience;
Any additional information that helps to ensure the potential success of the applicant in the degree program

For applicants with a 3-year Bachelor's Degree from a regionallly-accredited institution, the following requirements need to be met in addition to those listed above: Minimum GMAT score of 650 or a minimum GRE score of at least 321 (combined verbal and quantitative), and a minimum of 25th percentile in the verbal portion of the test. When the 3-year Bachelor's Degree is less than 120 hours from Non-Bologna Accord Institutions, a transcript evaluation from A NACES member is required to confirm equivalency.

Curriculum Requirements

Total Minimum Hours: 30 credit hours

Core classes – 15 hours
Specialization – 9 hours
Electives – 6 hours

Prerequisites

These courses may be waived if taken within the last five years from an AACSB accredited program.

During the first year of the major, students who are unable to waive the prerequisites will be required to take:

MAR 6815 Marketing Management **Credit Hours: 2-3 (2 credits for this program)**
QMB 6305 Managerial Decision Analysis **Credit Hours: 2**

Core Course Requirements (15 Credit Hours)

MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4 (3 credits for this program)** (Creativity in Marketing)
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (Marketing Analytics)
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (Consumer Behavior Insights)
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (Digital Marketing)
MAR 6816 Marketing Strategy **Credit Hours: 3**

Specialization in the MS (9 Credit Hours)

Take three courses in any area of specialization:

Marketing Analytics

MAR 6646 Research for Marketing Managers **Credit Hours: 3**
MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4 (3 credits for this program)** (Data Visualization)
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (Logistical System Analytics)
ISM 6217 Database Administration **Credit Hours: 3**
ISM 6316 Project Management **Credit Hours: 3**
SPB 6706 Sport Business Analytics **Credit Hours: 3**

Digital Marketing and Brand Management

MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4 (3 credits for this program)** (Digital Media and E-Commerce)
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (Brand Management)

MAR 6336 Promotional Management **Credit Hours: 3**
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (Digital Marketing)
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (New Product Development)
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (Innovations in Marketing)

Supply Chain Management

MAR 6216 Logistics and Physical Distribution Management **Credit Hours: 3**
SCM 6006 - Supply Chain Management **Credit(s): 3**
MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4 (3 credits for this program)** (Logistical Systems and Analytics)

Two Electives

Two electives from the following list or from any of the specializations above:

MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4 (3 credits for this program)**
GEB 6527 Lean Six Sigma **Credit Hours: 3**
ISM 6217 Database Administration **Credit Hours: 3**
ISM 6156 Enterprise Resource Planning & Business Process Management **Credit Hours: 3**
MAN 6448 Negotiating Agreement and Resolving Conflict **Credit Hours: 3**
ESI 6324 Engineering the Supply Chain **Credit Hours: 3**

Electives (6 Credit Hours)

GEB 6527 Lean Six Sigma **Credit Hours: 3**
GEB 6224 Improvisation in Business Organizations **Credit Hours: 3**
MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4 (3 credits for this program)** (Sales Force Management)
MAR 6936 Selected Topics in Marketing **Credit(s): 1-4 (3 credits for this program)** (courses offered periodically)

Courses from Other Specializations

Outside electives – any 6000 level graduate course for 3 hours (e.g., appropriate courses from Anthropology, Psychology, etc.)

Practicum

Comprehensive Exam

MAR 6816 Marketing Strategy, is the capstone course in the MS program. Students will be required to do one or more comprehensvie case analyses in this course that will test their ability to integrate and synthesize various facets of marketing.

Other Requirements

To be granted an M.S. in Marketing degree, a student must have completed all of the required and elective courses with a GPA of 3.00 or higher.

Sport and Entertainment Management, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 36
Level: Masters
CIP Code: 31.0504
Dept. Code: MKT
Major/College Codes: SMG /BA
Approved: 2014

Contact Information

College: Muma College of Business
Department: Marketing

Contact Information: http://www.grad.usf.edu/majors

Accreditation
Accredited by the the Association to Advance Collegiate Schools of Business (AACSB)

Major Research Areas
Sport Management, Entertainment, Sport Business Analytics, Sport Marketing, Sport and Social Issues, American Sport Industry, Global Sport Industry, Sport Law, Sport and Entertainment Finance

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

Personal Interview with a committee of program faculty
Personal Statement addressing career focus and aspirations
Admission to and completion of the USF MBA or other MBA with a Concentration in Sport Business
Minimum of 3.00/4.00 average for all graduate work completed

Curriculum Requirements

Total Minimum Hours - 36

Course Requirements (30 Credit Hours)

Students complete the three courses indicated with an asterisk as part of the requirements for the MBA with a Concentration in Sport Business. Because these nine hours of coursework are "shared" by the two majors, the 36 credit-hour MS in Sport and Entertainment Management requires an additional 24 hours to complete.

SPB 6719 Sport and Entertainment Marketing Strategy **Credit Hours: 3** *
SPB 6406 Sport and Entertainment Law **Credit Hours: 3** *
SPB 6706 Sport Business Analytics **Credit Hours: 3** *
SPB 6605 Sport and Social Issues **Credit Hours: 3**
SPB 6116 Sport and Entertainment Finance **Credit Hours: 3**
SPB 6735 Global Environment of Sport **Credit Hours: 3**
SPB 6807 Social Media in Sport **Credit Hours: 3**
SPB 6608 Issues in the American Sport Industry **Credit Hours: 3**
SPB 6715 Sales and Fundraising in the Sport Industry **Credit Hours: 3**
SPB 6930 - Sport Business Project I **Credit(s): 3**

Comprehensive Exam

Internship (6 Credit Hours)

Option to complete thesis in lieu of internship.

SPB 6946 Internship in Sport and Entertainment Management **Credit Hours: 3** (II)
SPB 6946 Internship in Sport and Entertainment Management **Credit(s): 3** (III)

Sequence

Students should consult with the Graduate Director for advising on course sequencing requirements.

Concurrent Degree

Also available as a Concurrent Degrees

Supply Chain Management, M.S.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 32 Credit Hours
Level: Masters
CIP Code: 52.0203
Dept. Code: MKT
Major/College Codes: SCX BA
Effective: Spring 2020

Contact Information

College: Muma College of Business
Department: Finance (FIN)

Contact Information: http://www.grad.usf.edu/majors

The M.S. in Supply Chain Management provides advanced training to working professionals in the supply chain industry who want to advance their supply chain knowledge and skills. The target market is managers who currently hold a bachelor's degree and work in operational areas such as procurement, transportation, information systems, production planning, and inventory management who need the knowledge and tools from the supply chain discipline to advance in their careers.

Major Research Areas
Supply chain management, sustainability, logistics, transportation, distribution, procurement

Accreditation
Accredited by AACSB International - The Association to Advance Collegiate Schools of Business.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

The M.S. in Supply Chain Management admission committee uses a portfolio approach. The strength of each applicant is determined based on the entire application. The admission committee will consider the following:

Resume
1-2 page personal statement of purpose
2 letters of recommendation.
Minimum of three years of managerial work experience in the discipline.

Curriculum Requirements

Total Minimum Hours: 32 Credit Hours

Core Requirements - 29 Credit hours

Capstone Project - 3 Credit Hours

The M.S. in Supply Chain Management is a 32-credit-hour program. Students will earn a graduate certificate in supply chain management upon completion of the initial 15 credit hours indicated below.

Core Requirements (29 Credit Hours)

SCM 6006 Supply Chain Management **Credit Hours: 3** *
SCM 6200 Logistics and Physical Distribution Management **Credit Hours: 3** *
ISM 6156 Enterprise Resource Planning & Business Process Management **Credit Hours: 3** *
ISM 6436 Operations & Supply Chain Processes **Credit Hours: 3** *
GEB 6527 Lean Six Sigma **Credit Hours: 3** *
MAN 6930 Selected Topics **Credit Hours: 1-4** (3 Credit hours taken in each of the courses below)
Sustainable Supply Chain Management and Reverse Logistics (3 Credit Hours) (Proposed as SCM 6169)
Seminar in Supply Chain Management (3 Credit Hours) (Proposed as SCM 6939)
SCM 6206 Logistics Systems and Analytics **Credit Hours: 3**
BUL 5842 Risk Management and Legal Compliance **Credit Hours: 3**
MAN 6147 Leadership/Management Concepts **Credit Hours: 2**

**Courses for 15-credit-hour graduate certificate in Supply Chain Management*

Capstone Project (3 Credit Hours)

SCM 6919 Supply Chain Capstone Project (3 Credit Hours)

Comprehensive Qualifying Exam

The SCM 6919 Supply Chain Capstone Project will serve as the Comprehensive Exam, which is required for the M.S. in Supply Chain Management for all USF students.

Lynn Pippenger School of Accountancy

Accountancy, M.Acc.

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 52.0301
Dept. Code: ACC
Major/College Codes: MAC BA
Effective: 1970

Concentrations:

Assurance(ASR)

Corporate(COR)

Tax(TAX)

Also offered as:

Concentration under Business Administration (Ph.D.)

Contact Information

College: Muma College of Business
Department: Lynn Pippenger School of Accountancy (ACC)

Contact Information: http://www.grad.usf.edu/majors

The objective of the Master of Accountancy (M.Acc.) Degree Program is to provide candidates with greater breadth and depth of knowledge in accountancy than is possible in the baccalaureate program. The major is designed to meet the increasing needs of business, government, and public accounting. Students entering the Accountancy major must already have the equivalent of an undergraduate degree in accounting from a regionally-accredited school. The major may also be structured to satisfy the requirements to sit for the CPA Examination in Florida.

Accreditation:

Accredited by The Association to Advance Collegiate Schools of Business (AACSB International).

Major Research Areas: Visit the Faculty Research page under Faculty in the Lynn Pippenger School of Accountancy website.

Admission Information

Must meet University Admission and English Proficiency requirements as well as requirements for admission to the major, listed below.

3.00 GPA in all upper-level accounting courses (minimum of 21 hours at a U.S. regionally accredited program generally within the past 5 years; OR completion of the following "foundation" courses with a minimum grade of B in each course:
Intermediate Financial Accounting I (ACG 3103),
Intermediate Financial Accounting II (ACG 3113),
Cost Accounting and Control I (ACG 3341),
Accounting Information Systems (ACG 3401),
Auditing I (ACG 4632), and
Concepts of Federal Income Taxation (TAX 4001).

Students with undergraduate degrees with majors other than accounting are encouraged to contact Undergraduate advising at the Muma College of Business.
Minimum GMAT score of 500 or higher, or equivalent GRE score of 305. Students may apply for a GMAT waiver if the student has obtained an undergraduate degree from USF Tampa and earned a GPA of at least 3.30 in the 6 core accounting major courses
Admission to the M.Acc. Degree Program is competitive. Meeting minimum requirements does not guarantee admission. For full consideration, please submit your application by the deadlines shown above.

Curriculum Requirements

For the student who has the equivalent of an undergraduate major in accounting at USF (including 21-24 hours of upper-level accounting coursework taken within the last 5 years), the program consists of 30 hours. Most (24 hours) of the program is devoted to the study of accounting. The remaining six (6) graduate level hours consist of study in other business areas including economics, entrepreneurship, finance, business analytics and information systems, management and marketing. These six (6) graduate level hours are elected by the student in consultation with the M.Acc. Advisor. At least 70% of the coursework must be at the 6000 level, with 100% being graduate level.

The M.Acc. curriculum has a set of two required common core accounting courses. Students may elect a concentration (12 hours) in Assurance, Corporate, or Tax. The sequencing of courses will be determined in consultation with the M.Acc. Advisor.

Total Minimum hours - 30 hours
At least 21 hours must be in 6000-level courses.

Core – 6 hours
Concentration – 12 hours
Electives – 6 hours
Non-Accounting Electives – 6 hours

Core Requirements (6 Credit Hours)

ACG 6875 Financial Reporting and Professional Issues **Credit Hours: 3**
ACG 6841C Innovation and Analytics in Accounting **Credit Hours: 3**

Concentrations (12 Credit Hours Minimum)

Students select from the following Concentrations:

Assurance (12 Credit Hours)

ACG 6457 Accounting Systems Audit, Control, and Security **Credit Hours: 3**

Select three (3) course from:

ACG 5675 Internal and Operational Auditing **Credit Hours: 3**
ACG 6636 Contemporary Issues in Auditing **Credit Hours: 3**
ACG 6688 Forensic Accounting and Legal Environment **Credit Hours: 3**
ISM 6328 Information Security & Risk Management **Credit Hours: 3**
ISM 6156 Enterprise Resource Planning & Business Process Management **Credit Hours: 3**

Corporate (12 Credit Hours)

ACG 6346 Contemporary Issues in Managerial Accounting **Credit Hours: 3**
ACG 5675 Internal and Operational Auditing **Credit Hours: 3**
TAX 5015 Federal Taxation of Business Entities **Credit Hours: 3**

Select one (1) course from:

FIN 6416 Advanced Financial Management **Credit Hours: 3**
FIN 6465 Financial Statement Analysis **Credit Hours: 3**

Tax (12 Credit Hours)

TAX 5015 Federal Taxation of Business Entities **Credit Hours: 3**
TAX 6134 Advanced Corporate Taxation **Credit Hours: 3**
TAX 6005 Advanced Partnership Taxation **Credit Hours: 3**
TAX 6065 Contemporary Issues in Taxation **Credit Hours: 3**

Accounting Electives (6 Credit Hours)

Students select electives in the area of the Concentration in consultation with the Graduate Advisor.

Non-Accounting Electives (6 Credit Hours)

Graduate level electives must be approved in advance by M.Acc. Advisor

Note: 5000 level courses may count in the M.Acc. Program only if not counted towards the Bachelor's Degree.

Comprehensive Exam

Students will prepare an oral presentation on a case that integrates program concepts in their last semester. The presentation will be graded by the Graduate Committee of the Lynn Pippenger School of Accountancy. Students must earn a passing grade to graduate.

CS - Updates for 2019-2020

Graduate Council approved the changes on the date noted.

Graduate Certificates

Coastal Sustainability	Terminate Certificate	4/15/19
Coastal Sustainable Management	Terminate Certificate	4/15/19
Sustainable Tourism Leadership	Terminate Certificate	4/15/19

Patel College of Global Sustainability

CS - Updates for 2019-2020

CS - Programs

University of South Florida
Patel College of Global Sustainability
4202 E. Fowler Ave., CGS 101
Tampa, FL 33620

Web address: www.patel.usf.edu
Phone: 813-974-9694

College Dean: Govindan Parayil, Ph.D.

College Information:

Our mission is achieving sustainable development, both locally and globally, by fostering social, economic and environmental sustainability; we accomplish this through teaching, research, student mentoring and community outreach, as well as by generating practical knowledge and developing innovative technologies, skills and policies.

The College employs an elite core faculty and staff, with its real strength being its ability to serve as the hub for a network of scholars and professional experts interested in working together to generate new knowledge and prepare a new generation of sustainability professionals. These professionals will provide their expertise to assist communities, companies, and governments maximize their productivity, reduce their ecological and carbon footprint, practice social responsibility and enhance resilience

Global Sustainability, M.A.

This program is offered fully online. *(NOTE: The Entrepreneurship and Sustainable Business Concentrations are not offered online)*

Degree Information

Priority Admission Application Deadlines: http://www.grad.usf.edu/majors

Minimum Total Hours: 30
Level: Masters
CIP Code: 30.3301
Dept Code: CS
Major/College Codes: GBS / CS
Approved 2010

Concentrations:

Climate Change and Sustainability (CLT)
Entrepreneurship (ETR)
Food Sustainability and Security (FOO)
Sustainable Business (SBU)
Sustainable Energy (SUSE)
Sustainability Policy (SUS)
Sustainable Tourism (SUT)
Sustainable Transportation (STN)
Water Sustainability (WSR)

Also offered as a Concurrent Degree

Contact Information

College: Patel College of Global Sustainability

Contact Information:
http://www.grad.usf.edu/majors
www.patel.usf.edu

The Patel College of Global Sustainability fosters sustainable urban communities and environments through collaborative research, education, and community engagement Its research generates innovations and new knowledge that help communities and nations around the world, including those in developing countries, to reduce their ecological footprint while improving their social, economic, and environmental sustainability parameters to make them healthier, more livable, equitable and more resilient

In this innovative 30 credit hour graduate major, the students will apply their passion for the environment with hands-on experiential learning through internships to find sustainability solutions. The major offers a multidisciplinary study of the environment and social and economic dimensions of sustainability, as well as training in research methodology to enable practitioners to make informed decisions and to create tangible change toward sustainable futures. All students are required to perform a mandatory internship in the public or private sector. Upon graduation, the students will be ready for careers in global

sustainability that require a systems approach, teamwork, program planning, and policy development skills to solve sustainability issues in developing and developed nations.

Major Research Areas: Sustainable development, sustainability policy, environmental policy, green communities, ecotourism.

Admission Information

Must meet University Admission and English Proficiency requirements, as well as requirements for admission to the major, listed below.

GPA of at least 3.25 or greater; alternatively a GPA of at least 3.00 along with a GRE Verbal score of 153 (61 percentile) or higher, Quantitative of 153 (51 percentile) or higher and Analytical Writing of 3.5 or higher, all taken within 5 years of application.
At least two letters of recommendation from professors or supervisors (signed, dated, and on official letterhead). Resume
Letter of Interest (up to 350 words explaining why the student is interested in Sustainability)

Curriculum Requirements

Total Minimum Hours - 30 credits

The M.A. in Global Sustainability degree offers a number of concentrations. Students are required to complete 30 credit hours as follows:

Core courses – 12 credit hours
Concentration courses – 9 credit hours
Electives – 6 credit hours
Internship/Research – 3 credit hours
Comprehensive Exam

Core Courses (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**
IDS 6234 Systems Thinking: The Key to Sustainability **Credit Hours: 3**
IDS 6225 - Research Methods for Sustainability **Credit(s): 3**

Concentration Requirements (9 Credit Hours Minimum)

Students select at least one concentration.

Climate Change and Sustainability (CLT)

Choose three of the following courses:

IDS 6208 Renewable Power Portfolio **Credit Hours: 3**
IDS 6210 Bioresources for a Sustainable Future **Credit Hours: 3**
IDS 6222 - Navigating the Sustainable Food Energy Water Nexus **Credit(s): 3**
IDS 6223 - Waste Not, Want Not: Reconsidering Waste, Re-purposing Wasted Resources **Credit(s): 3**
IDS 6247 Water Resources Planning **Credit Hours: 3**
EVR 6216 Advances in Water Quality Policy and Management **Credit Hours: 3**
PHI 6680 - Climate Change and Civil Evolution **Credit(s): 3**

Entrepreneurship (ETR)

Choose three of the following courses:

ENT 6116 Business Plan Development **Credit Hours: 3**
ENT 6186 Strategic Market Assessment **Credit Hours: 3**
ENT 6706 - Global Entrepreneurship **Credit(s): 3**
ENT 6930 Special Topics in Entrepreneurship **Credit Hours: 3** (Social Entrepreneurship)
or
IDS 6239 - Entrepreneurship with a Social Impact **Credit(s): 3**

Food Sustainability and Security (FOO)

Choose three of the following courses:

IDS 6210 Bioresources for a Sustainable Future **Credit Hours: 3**
IDS 6222 - Sustainable Food Energy Water Nexus **Credit(s): 3**
IDS 6223 - Waste Not, Want Not: Reconsidering Waste, Re-purposing Wasted Resources **Credit(s): 3**
IDS 6270 Sustainable Food Production **Credit Hours: 3**
IDS 6271 The Future of Food: Environment, Health and Policy **Credit Hours: 3**
PHC 6515 Food Safety **Credit Hours: 3**
URP 6444 Global & Community Food Systems **Credit Hours: 3**

Sustainable Business (SBU)

GEB 6457 Ethics, Law and Sustainable Business Practices **Credit Hours: 3**

Choose two of the following courses:

GEB 6527 Lean Six Sigma **Credit Hours: 3**
MAR 6336 Promotional Management **Credit Hours: 3**
MAR 6466 Supply Chain Management **Credit Hours: 3**
MAR 6936 Selected Topics in Marketing **Credit Hours: 1-4 (3 credits for this program)** (Sustainable Marketing)

Sustainable Energy (SUSE)

Choose three of the following courses:

IDS 6207 Renewable Transportation Fuels **Credit Hours: 3**
IDS 6208 Renewable Power Portfolio **Credit Hours: 3**
IDS 6210 Bioresources for a Sustainable Future **Credit Hours: 3**
IDS 6222 - Navigating the Sustainable Food Energy Water Nexus **Credit(s): 3**
ECH 5931 Special Topics IV **Credit Hours: 1-4 (3 credits for this program)** (Solar Energy and Applications)
EEL 6935 Selected Electrical Topics **Credit Hours: 1-3 (3 credits for this program)** (Sustainable Energy)

Sustainability Policy (SUS)

Choose three of the following courses:

IDS 6239 - Implementing the United Nations Sustainable Development Goals **Credit(s): 3**
EVR 6937 Seminar in Environmental Policy **Credit Hours: 3**
PAD 6307 Policy Design and Implementation **Credit Hours: 3**
URP 6403 - Planning for Resilient Communities **Credit(s): 3**
URP 6406 Urban Environmental Policy **Credit Hours: 3**

Choose two of the following courses:

Other courses may be considered by concentration Director and PCGS Academic Program Director.

IDS 6247 Water Resources Planning **Credit Hours: 3**
URP 6316 Land Use Planning **Credit Hours: 3**
URP 6422 Environmental & Planning Issues in Coastal Communities **Credit Hours: 3**
URP 6444 Global & Community Food Systems **Credit Hours: 3**
URP 6439C Disaster Resilient Community **Credit Hours: 3**

Sustainable Tourism (SUT)

IDS 6236 Sustainable Tourism Development: Principles & Practices **Credit Hours: 3**
IDS 6237 Ecotourism and Sustainable Tourism Management for Coastal Habitat and Marine Protection **Credit Hours: 3**

Choose one of the following courses:

IDS 6239 - Implementing the United Nations Sustainable Development Goals **Credit(s): 3**
IDS 6247 Water Resources Planning **Credit Hours: 3**

Choose two of the following courses:

Other courses may be considered by concentration Director and PCGS Academic Program Director.

IDS 6223 - Waste Not, Want Not: Reconsidering Waste, Re-purposing Wasted Resources **Credit(s): 3**
HMG 6246 - Organizational Effectiveness in Hospitality **Credit(s): 3**
OCE 6085 Ocean Policy **Credit Hours: 2**

Sustainable Transportation (STN)

Choose three of the following courses:

IDS 6207 Renewable Transportation Fuels **Credit Hours: 3**
TTE 5501 Transportation Planning and Economics **Credit Hours: 3**
TTE 6651 Public Transportation **Credit Hours: 3**
TTE 6655 Transportation and Land Use **Credit Hours: 3**
URP 6711 Multimodal Transportation Planning **Credit Hours: 3**

Choose two of the following courses:

Other courses may be considered by concentration Director and PCGS Academic Program Director.

CGN 6933 - Sustainable Transportation **Credit(s): 3**
TTE 5205 Traffic Systems Engineering **Credit Hours: 3**
TTE 6507 Travel Demand Modeling **Credit Hours: 3**
TTE 6315 Transportation Safety **Credit Hours: 3**

Water Sustainability (WSR)

Choose three of the following courses:

IDS 6222 - Navigating the Sustainable Food Energy Water Nexus **Credit(s): 3**
IDS 6245 Sustainable Water Resource Management: Doing More with Less **Credit Hours: 3**
IDS 6246 Water Sensitive Urban Design for Sustainable Communities **Credit Hours: 3**
IDS 6247 Water Resources Planning **Credit Hours: 3**
EVR 6216 Advances in Water Quality Policy and Management **Credit Hours: 3**

Additional Requirements

An additional 6 graduate hours is required. Any other concentration's courses are preferred electives. Other courses may be considered by concentration Director and PCGS Academic Program Director.

Internship/Research Requirement (3 Credit Hours)

The required 3 credit Internship or Research Project will be completed in the student's last semester

Note- for Returned Peace Corps Volunteers (RPCV) in the Peace Corps Coverdell Fellows Program, the required 3 credit hour internship will be fulfilled by completing part or all of the required internship course (IDS 6946) locally or nationally.

Choose one of the following:

IDS 6946 Sustainability Internship **Credit Hours: 3-6 (3 credits for this program)**
IDS 6935 Capstone Research Project **Credit Hours: 3-6 (3 credits for this program)**

Comprehensive Exam

The Internship or research report serves as the program's comprehensive exam. As part of this process students write a final report and deliver a presentation based on their internship work or research project.

Concurrent Degree

Also available as a Concurrent Degrees

Building Sustainable Enterprise Graduate Certificate

Certificate Code: XBU
Approved 201501

Description

This graduate certificate will provide a foundation for designing sustainable organizations and businesses and related concepts pertaining to sustainability. Organizations and businesses from all sectors need to develop sustainable practices and models to minimize their environmental footprint and maximize their social responsibility to all stakeholders to meet the requirements of a sustainable, low carbon economy. The goal of this certificate is to provide participants with the knowledge, literacy, skills and tools they need to create more sustainable organizations.

Course Location/Delivery

The Certificate is offered both partially online and on campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our **application process** .
* Portfolio applications will be considered.

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**
GEB 6457 Ethics, Law and Sustainable Business Practices **Credit Hours: 3**

MAR 6336 Promotional Management **Credit Hours: 3**
MAR 6466 Supply Chain Management **Credit Hours: 3**
GEB 6527 Lean Six Sigma **Credit Hours: 3**

EIN 6936 Special Industrial Topics III **Credit Hours: 1-3**
Advanced Lean Six Sigma (3 Credit Hours)

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is three years.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Climate Change and Sustainability Graduate Certificate

This program is offered partially online.

Certificate Code: XCU
Approved 201601

Description

The certificate program in Climate Change and Sustainability will provide a strong foundation for students to advance their career by providing the knowledge and skills necessary to address regional, national and global challenges related to climate change. The program will employ an interdisciplinary approach to explore climate vulnerability, mitigation measures, and pathways to adaptation and resilience. The course will also focus on the translation of policy and research into climate-smart mitigation and adaptation strategies for building sustainable and resilient communities through urban planning and sustainable urban development.

Course Location/Delivery

The Certificate is offered both partially online and on campus

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Tn addition to your completed application form, transcripts, resume and letter of interest, you will need to submit the following documents:

Two letters of recommendation, one academic and one professional
Contact the department for additional requirements

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**

And select two of the following:

IDS 6210 Bioresources for a Sustainable Future **Credit Hours: 3**
IDS 6247 Water Resources Planning **Credit Hours: 3**
IDS 6208 Renewable Power Portfolio **Credit Hours: 3**
IDS 6938 Special Topics/Seminars **Credit Hours: 1-6**

Sustainable Food Energy Water Nexus (3 Credit Hours)

PHI 6686 Climate Change and Societal Evolution **Credit Hours: 3**

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is two years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Energy Sustainability Graduate Certificate

This program is offered fully online.

Certificate Code: XEN
Approved 201601

Description

Concerns about future economic growth, standards of living, and environmental quality have made sustainable energy a top priority worldwide. The goal of this certificate program is to provide students with a solid understanding of the key principles of sustainability, its economics, and how it is practiced by the energy industry in the form of sustainable transportation fuels and electricity from natural resources with a small carbon footprint.

Course Location/Delivery

The Certificate is offered both fully online and on campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

You will be asked to provide two letters of recommendation, one academic and one professional.

Application Process

Application Process

To learn about the application process, and to access the application, please review our application process

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**

And select two of the following:
ECH 5931 Special Topics IV **Credit Hours: 1-4**
EEL 6289 Sustainable Energy **Credit Hours: 3**
IDS 6207 Renewable Transportation Fuels **Credit Hours: 3**
IDS 6208 Renewable Power Portfolio **Credit Hours: 3**
IDS 6210 Bioresources for a Sustainable Future **Credit Hours: 3**

IDS 6938 Special Topics/Seminars **Credit Hours: 1-6**
Navigating the Sustainable Food Energy Water Nexus (3 Credit Hours)

Time Limit / Average Time to Completion

Three years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Food Sustainability and Security Graduate Certificate

This program is offered partially online.

Certificate Code: XFS
Approved 201601

Description

Concerns about population growth, human health, and environmental quality have made food sustainability and security a top priority worldwide. The goal of this program is to provide students with a general foundation of sustainable principles and economics and, within this context, with a specialized analysis of food systems, policy, and public health issues.

This certificate program will provide a general foundation in sustainability and a solid understanding of key issues in food systems and safety/security. The program will cover (1) the concepts, principles, economics, and finance of sustainability, as well as transition towards a green economy; (2) food production, distribution, marketing, disposal, and policy; and (3) food safety and security regarding biological, chemical, and physical threats.. It is designed for an audience of a wide range of backgrounds with career interests in the field of food sustainability and security.

Course Location/Delivery

Partially online and at USF Tampa.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

Pre-Requisites

None.

Curriculum Requirements (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**

And select two of the following:
IDS 6271 The Future of Food: Environment, Health and Policy **Credit Hours: 3**

IDS 6270 Sustainable Food Production **Credit Hours: 3**
IDS 6938 Special Topics/Seminars **Credit Hours: 1-6**
Navigating the Sustainable Food Energy Water Nexus (3 Credit Hours)
PHC 6515 Food Safety **Credit Hours: 3**
URP 6444 Global & Community Food Systems **Credit Hours: 3**

Time Limit / Average Time to Completion

The approximate time to complete the Certificate is two years.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Global Strategy and Decision-Making Graduate Certificate

This program is offered partially online.

Certificate Code: XGM
Approved 201008

The Graduate Certificate in Global Strategy and Decision-Making is a unique certificate program designed to prepare students to become effective and exemplary decision makers on the global stage who have vision, know how to formulate sustainable strategy, and are equipped with necessary skills related to economics, finance and international affairs. The Certificate is specifically designed to introduce students to various theories of decision-making and strategy.

Location/Delivery

The Certificate is offered both partially online and on campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process.

1. Official transcripts
2. Resume
3. Letter of interest
4. Two support letters, including one from faculty

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

LIS 6700 Information Strategy and Decision-Making **Credit Hours: 3**
INR 6690 Research Seminar in Globalization **Credit Hours: 3**
IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**

And one of the following:

IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**
INR 6007 Seminar in International Relations **Credit Hours: 3**
INR 6107 American Foreign Policy **Credit Hours: 3**

Other electives may be used as approved by the program.

Contacts

Contact Information: http://www.grad.usf.edu/cert

Global Sustainability Graduate Certificate

This program is offered fully online.

Certificate Code: XGL
Approved 201601

The certificate program in Global Sustainability ensures understanding of the principles of sustainability and the interdependence of the environment, the economy, and social systems to become effective stewards of natural resources and the environment. The program seeks to advance students' ability to understand and address real-world environmental problems; apply systems approach to manage social ecological systems; and develop critical thinking skills for affecting decisions involving environmental policy, resource management, biodiversity conservation and human health.

Location/Delivery

This certificate is offered both at USF Tampa and offered fully online.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process. Please submit:

to provide two letters of recommendation, one academic and one professional.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**
IDS 6234 Systems Thinking: The Key to Sustainability **Credit Hours: 3**

IDS 6247 Water Resources Planning **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Sustainable Tourism Graduate Certificate

This program is offered fully online.

Certificate Code XSU
Approved 201601
The certificate program will provide a general foundation for sustainable tourism and related concepts of sustainability. It is designed to appeal to an audience with a wide range of backgrounds and interest in the tourism and hospitality industry. The program will be of particular interest to those related to global tourism movements such as the U.N. World Tourism Organization, The International Ecotourism Society, and the Global Sustainability Tourism Council.

Location/Delivery

The Certificate is offered both fully online and on campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process. You will be asked to provide two letters of recommendation, one academic and one professional.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Three years

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**

And select two of the following:
IDS 6236 Sustainable Tourism Development: Principles & Practices **Credit Hours: 3**
IDS 6237 Ecotourism and Sustainable Tourism Management for Coastal Habitat and Marine Protection **Credit Hours: 3**
OCE 6085 Ocean Policy **Credit Hours: 2**
IDS 6938 Special Topics/Seminars **Credit Hours: 1-6**

Organizational Effectiveness (3 Credit Hours (HMG 6246)
Climate Change Adaptation and Mitigation (3 Credit Hours) (IDS 6247)
OCE 6934 Selected Topics in Oceanography **Credit Hours: 1-3**
Port Sustainability (3 Credit Hours)

Contacts

Contact Information: http://www.grad.usf.edu/cert

Sustainable Transportation Graduate Certificate

This program is offered partially online.

Certificate Code: XTN
Approved 201601

The predominant focus on automobile transportation has led to a variety of consequences that are less than sustainable such as urban sprawl, rising rates of obesity, growth in green house gas emissions, habitat degradation, dependence on fossil fuels, and equality concerns. The goal of this certificate is to provide students with the knowledge, literacy, skills and tools they need to develop plans for sustainable transportation.

Location/Delivery
This certificate is offered partially online and at the USF Tampa.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process
To learn about the application process, and to access the application, please review our application process.
* Portfolio applications will be considered.

Credit Toward Graduate Degree
Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion
The approximate time to complete the Certificate is three years.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**

And select two of the following:

TTE 6655 Transportation and Land Use **Credit Hours: 3**
TTE 6651 Public Transportation **Credit Hours: 3**
URP 6711 Multimodal Transportation Planning **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Water Sustainability Graduate Certificate

This program is offered fully online.

Certificate Code: XWT
Approved 201601

This certificate program is based on a multidisciplinary approach to sustainable water management. It will present water management issues from a technological, economics and policy perspective. The program will provide students with general knowledge on sustainability and deeper understanding of water management in a sustainable manner. It is open to students from multiple disciplines (Engineering, natural sciences and social sciences) and will build knowledge and skills for holistic and integrated approached to water management in the face of complex global challenges.

Location/Delivery

The Certificate is offered both fully online and on campus.

Admission Requirements

Must meet University Graduate Admissions and English Proficiency requirements.

Application Process

To learn about the application process, and to access the application, please review our application process. You will be asked to provide two letters of recommendation, one academic and one professional.

Credit Toward Graduate Degree

Up to 12 hours of certificate course credits may be applied to a graduate degree with departmental approval.

Time Limit / Average time to Completion

Two years.

Pre-Requisites

None

Curriculum Requirements (12 Credit Hours)

IDS 6233 Concepts and Principles of Sustainability **Credit Hours: 3**
IDS 6235 Economics and Finance for Sustainability **Credit Hours: 3**

And select two of the following:
CGN 6933 Special Topics in Civil and Environmental Engineering **Credit Hours: 1-4**

IDS 6938 Special Topics/Seminars **Credit Hours: 1-6**

Navigating the Sustainable Food Energy Water Nexus (3 Credit Hours)

IDS 6245 Sustainable Water Resource Management: Doing More with Less **Credit Hours: 3**

IDS 6246 Water Sensitive Urban Design for Sustainable Communities **Credit Hours: 3**

IDS 6247 Water Resources Planning **Credit Hours: 3**

Contacts

Contact Information: http://www.grad.usf.edu/cert

Course Descriptions

ACG 5007 MBA Essentials: Accounting

Credit Hours: 0

A survey course related to both financial accounting and managerial accounting. An examination of accounting concepts for presentation of financial information to interested users as well as information generated for internal management.

St. Petersburg | Kate Tiedemann College of Business | Business Administration

ACG 5205 Advanced Financial Accounting

Credit Hours: 3

Accounting for business combinations, preparation of consolidated financial statements, home office/branch relationships, foreign operations and transactions, partnerships.

Prerequisite(s): ACG 3113
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 5505 Governmental/Not-For-Profit Accounting

Credit Hours: 3

Application of financial and managerial accounting, and auditing, principles and theory to both governmental and not-for-profit entities.

Prerequisite(s): ACG 3113
Corequisite(s): ACG 4632
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 5675 Internal and Operational Auditing

Credit Hours: 3

The objective of Internal and Operational Auditing is to provide students with an opportunity to learn about the theory and practice of internal and operational auditing and to apply relevant audit principles and techniques to selected audit problems.

Prerequisite(s): ACG 3113, ACG 3401
Corequisite(s): ACG 4632
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 5841 Analytics in Accounting

Credit Hours: 3

This course deals with analytics, understood as the discovery and communication of meaningful patterns. The focus is on accounting applications of analytics, after first understanding statistical techniques and data manipulation processes and tools.

Prerequisite(s): ACG 4632, or admission to Muma COB MBA program
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 6025 Financial Accounting for Managers

Credit Hours: 2

Study of (1) accounting concepts and standards applicable to presentation of financial information to interested users, (2) structure and interpretation of financial statements, especially issues of income determination and assessment measurement.

Tampa | Muma College of Business | Accounting

ACG 6026 Accounting Concepts for Managers

Credit Hours: 3

A graduate level introduction to the role of accounting information in the decisions of internal and external users of financial information and statements; requires admission to the Certificate in Business Foundations.

Tampa | Muma College of Business | Accounting

ACG 6028 Measuring Organizational Effectiveness

Credit Hours: 3

This course provides a graduate level introduction to financial and non-financial performance measures. The course considers how stakeholders of private and public sector organizations use financial and non-financial measures to access how well, and at what cost, these organizations are able to achieve strategic/operating goals and objectives.

Tampa | Muma College of Business | Accounting

ACG 6075 Management Accounting and Control

Credit Hours: 2

Deals with management accounting systems for different types of entities, cost behavior patterns, cost-volume-profit analysis, relevant information for decision making, and budgets and standard costs for planning and control.

Prerequisite(s): ACG 6025
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 6346 Contemporary Issues in Managerial Accounting

Credit Hours: 3

The evolution of cost accounting systems, and the impact of new managerial accounting philosophies in the modern international manufacturing environment, including a discussion of current issues and controversies involving managerial accounting.

Prerequisite(s): ACG 3341
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 6405 Advanced Accounting Information Systems

Credit Hours: 3

This course focuses on business process modeling techniques for creating advanced enterprise-wide accounting systems. The course also focuses on information systems risks, controls and auditing, and enterprise resource planning systems.

Tampa | Muma College of Business | Accounting

ACG 6457 Accounting Systems Audit, Control, and Security

Credit Hours: 3

An in-depth study of contemporary systems control security from an audit perspective. Course topics will include: IS audit standards, contemporary AIS technologies, and the development and maintenance of AIS integrity.

Prerequisite(s): ACG 3401 or BUL 5842
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 6476 Contemporary Issues in Accounting Information Systems

Credit Hours: 3

An in depth study of current accounting information systems issue confronting the accounting profession. Graduate students research and study contemporary and emerging topics in the field.

Tampa | Muma College of Business | Accounting

ACG 6636 Contemporary Issues in Auditing

Credit Hours: 3

This course explores contemporary auditing issues and advanced topics concerning the changing role of the audit assurance function and

changing audit processes. Topics include audit reporting, auditing in advanced computerized environments, audit judgment, quality control, and regulation of the profession.

Prerequisite(s): ACG 4632
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 6678 Legal Aspects of Fraud and Information Assurance

Credit Hours: 3

This course covers various aspects of the detection, investigation and prevention of complex financial crimes including accounting fraud, corporate fraud, economic fraud, public corruption, white-collar crimes, cybercrimes, and the related legal issues.

Prerequisite(s): BUL 5842 with a minimum grade of C+
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 6688 Forensic Accounting and Legal Environment

Credit Hours: 3

Designed to further the student's knowledge of the contemporary legal environment faced by forensic accountants.

Prerequisite(s): ACG 2021
St. Petersburg | Kate Tiedemann College of Business | Accounting

ACG 6835 Accounting Skills, Values, and Information Technology

Credit Hours: 3

This course is designed to introduce Master of Accountancy students to the basic skills, competencies, and technologies of accounting.

Tampa | Muma College of Business | Accounting

ACG 6841C Innovation and Analytics in Accounting

Credit Hours: 3

Topics covered include the latest innovations in accounting and application of contemporary analytics to discover value-adding insights for a range of organizations in various accounting related settings.

Prerequisite(s): ACG 3401 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 6875 Financial Reporting and Professional Issues

Credit Hours: 3

A study and evaluation of the evolution of current financial accounting theory. An examination of financial accounting objectives, measurement models, and controversial issues, from both a financial reporting and professional (auditing) perspective.

Tampa | Muma College of Business | Accounting

ACG 6905 Independent Study

Credit Hours: 1-19

Independent Study. Student must have a contract with an instructor.

Tampa | Muma College of Business | Accounting

ACG 6915 Directed Research

Credit Hours: 1-19

Tampa | Muma College of Business | Accounting

ACG 6932 Integrative Accounting Seminar

Credit Hours: 3

Use of case studies to explore the interaction of accounting and business topics that have been previously emphasized in separate courses.

Tampa | Muma College of Business | Accounting

ACG 6936 Selected Topics in Accounting

Credit Hours: 1-4

The course content will depend on student demand and instructor's interest.

Tampa | Muma College of Business | Accounting

ACG 7156 Seminar in Financial Accounting

Credit Hours: 3

This course investigates advanced research and methodological issues in financial accounting. It focuses primarily on research which uses financial information in contexts external to the firm.

Prerequisite(s): ACG 6875
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 7356 Seminar in Management Accounting

Credit Hours: 3

Review and critical analysis of management accounting foundation with emphasis on the current research methods in organizational behavior aspects and multiple criteria decision methods.

Prerequisite(s): ACG 6346
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 7415 Seminar in Accounting Information Systems

Credit Hours: 3

Review and critical analysis of major topics and research methods in accounting information systems.

Prerequisite(s): ACG 6405
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 7646 Seminar in Auditing

Credit Hours: 3

This course involves a study of state-of-the-art research techniques as applied to major auditing issues and a critical analysis of the reported research findings.

Prerequisite(s): ACG 6636
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

ACG 7936 Seminar in Special Topics in Accounting

Credit Hours: 1-4

Coverage of particular topics of interest to doctoral faculty and students during any given semester.

Tampa | Muma College of Business | Accounting

ACG 7939 Executive Issues in Accounting

Credit Hours: 2-4

A research seminar for executives that explores contemporary issues in accounting. The specific theme of the seminar will be determined through consultations between the instructor and the students prior to the first class meeting.

Tampa | Muma College of Business | Accounting

ACG 7980 Dissertation in Accounting

Credit Hours: 2-21

Research and writing of a dissertation on an accounting topic.

Tampa | Muma College of Business | Accounting

ADE 6070 International Adult Education

Credit Hours: 3

Provides a survey of the field of international adult education. Current practices and historical efforts internationally will be explored.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6080 Adult Education in the United States

Credit Hours: 4

A study of the adult education movement in the United States from its beginnings to the present lifelong learning enterprise it has become. Economic and cultural factors of the past are examined with a view toward implications for the future.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6160 Program Management in Adult Education

Credit Hours: 3

An examination of the methods for establishing a productive adult education program, and the principles and procedures involved in designing, organizing, operating, and evaluating comprehensive adult education programs.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6161 Curriculum Construction in Adult Education

Credit Hours: 4

Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation. Concentrates on basic principles affecting the planning of Adult Education activities, including an overview of the human forces that both impinge on and motivate human behavior in an adult learning environment.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6197 Adult Basic Education

Credit Hours: 4

An overview of adult basic education with an emphasis on current issues and problems of curriculum and instruction in program development and on culturally different adults.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6198 Effective Continuing Education for Professionals

Credit Hours: 3

This course will provide a description, explanation and critique of the goals, processes, outcomes, and issues related to the continuing education of professionals. The design, development and administration of these programs will be explored.

Prerequisite(s): ADE 6385 and ADE 6080
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6287 Supervision of Local Adult Education Programs

Credit Hours: 4

A study of the factors involved in the supervision of instruction including plans for teacher education, improvement of instruction, coordination of activities, and personnel relations.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6360 Methods of Teaching Adult Education

Credit Hours: 3

An exploration of different methods, techniques, and materials available to help adults learn. Concentration on the process of designing effective learning experiences for adults and developing the competencies of self-directed learning.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6370 Human Resource Development

Credit Hours: 3

A study of learning, training, and education as it is practiced in the public, private and the non-profit sectors. Course covers HRD history, key competencies, and relevant theory.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6385 The Adult Learner

Credit Hours: 3

An investigation of the physiological and psychological changes in the adult life span and the implications these have for adult learning capabilities. Concentration on the identification of principles of adult learning, differences between adults and youth as learners, and a review of research on adult learning.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6389 Adult Learning and Cognitive Styles

Credit Hours: 3

The course focuses on a foundational knowledge of brain-based learning and its impact on adult learners, including critique and assessment of learning styles.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6906 Independent Study

Credit Hours: 1-19

Independent Study in which students must have a contract with an instructor.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6931 Selected Topics in ADE and HRD

Credit Hours: 1-5

Each topic is a course under the supervision of a faculty member. The title and content will vary according to the topic.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6946 Practicum in Adult Education

Credit Hours: 2-6

A problem-centered field study in the local community, school, government, office, social agency, business, or industry setting.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6966 Final Master's Seminar

Credit Hours: 4

This course is designed to provide in-depth review of various areas of adult education. It is designed to prepare individuals for the comprehensive exams. Emphasis also will be on developing familiarity with formal research literature.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 6971 Thesis: Masters/Education Specialist

Credit Hours: 2-19

Thesis/Specialist project hours.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7076 Continuing Education in Higher Education

Credit Hours: 3

This course will explore the history, relevant research and the current practices in community college and higher education continuing education program and administrative units.

Prerequisite(s): ADE 6385 and ADE 6080
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7169 Instructional Development Using Adult Education

Credit Hours: 3

This course is designed to develop competencies in a systematic approach to instructional improvement including the knowledge and application of developing curriculum models applied to ACE and HRD.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7268 Leadership in Adult Continuing Education and HRD

Credit Hours: 3

This course is a study of leadership theory, public policy analysis, best practices and related leadership research in adult continuing education and human resource development.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7269 Organization and Administration of ACE and HRD

Credit Hours: 3

This course provides knowledge and examples of the organization of ACE and HRD and also examines management principles and practices applied to ACE and HRD units including the tasks, responsibilities and guidelines used to manage these units effectively.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7388 Adult Development and Learning

Credit Hours: 3

This is an advanced, in-depth study of the distinctive characteristics of adult life and learning.

Prerequisite(s): ADE 6385 or equiv
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7676 Human Resource Development Policy Seminar

Credit Hours: 3

This course emphasizes complex skills, concepts and strategies related to the adult teaching/learning component and policy formation of human resource development in business, industry, government, education, and voluntary organizations.

Prerequisite(s): ADE 6370
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7677 Emerging Trends in Adult Education: Critical Race Theory

Credit Hours: 3

Seminar for doctoral students(master's students by permission of the professor) where we critically examine and explore critical race theory regarding the degree of its theoretical relevance and contribution to educational practice.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7910 Directed Research in Adult Education

Credit Hours: 1-4

Directed research on topics related to adult education.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7930 Seminar in Adult Education

Credit Hours: 4

This is an intensive induction into doctoral studies in adult education stressing scholarly inquiry, professionalism, collegiality, and the doctoral degree process.

Prerequisite(s): ADE 6385 and ADE 6080
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7937 Seminar in Adult Education

Credit Hours: 1-4

Seminar in advanced topics in Adult Education.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7947 Advanced Internship: Adult Education

Credit Hours: 2-4

Practical application in a clinical setting of knowledge acquired in the classroom. Hours may vary. May vary within an institution.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADE 7980 Dissertation

Credit Hours: 2-30

Dissertation hours.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ADV 5005 Advertising Planning

Credit Hours: 3

Introduction to the process of developing advertising strategy, emphasizing theory and research methods. Applied research course to bridge research methods with execution of creative messaging strategies that drive business success.

Tampa | College of Arts and Sciences | Mass Communications

ADV 5508 Return on Advertising Investment

Credit Hours: 3

An in-depth analysis of the performance metrics required to determine the success of advertising and marketing in fiscally accountable business practice. Metrics will include both quantitative and qualitative measures of advertising planning.

Tampa | College of Arts and Sciences | Mass Communications

ADV 5825 Advertising Proseminar

Credit Hours: 3

Students will learn the basic concepts of advertising, public relations, promotion, branding, and direct marketing and their applications for integrated marketing campaigns.

Tampa | College of Arts and Sciences | Mass Communications

ADV 6305 Advertising Media Strategy

Credit Hours: 3

Advanced knowledge of brand media strategy development across traditional, digital, and social media. Students will become acquainted with the practices, tools, and theory of media planning, media relations, and how they fit into the marketing process.

Tampa | College of Arts and Sciences | Mass Communications

ADV 6505 Advertising Research

Credit Hours: 3

Designed to teach normal campaign research through various methods, including: copy testing, survey content development, sample frame development, consumer insights, brand triggers, and purchase intent.

Tampa | College of Arts and Sciences | Mass Communications

ADV 6602 Advanced Advertising Management

Credit Hours: 3

Focuses on application of management principles and practice to effective development of advertising plans. The course includes case studies and discussion of current problems in research, planning, operations, administration, and evaluation.

Tampa | College of Arts and Sciences | Mass Communications

AFA 6108 Social Construction of Race and Racism

Credit Hours: 3

Examinations of the social construction of race, racism, racial identities and cross-racial relationships in the US from the colonial period to present.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6120 Social Theory and Social Thought

Credit Hours: 3

Course examines the nature of social theory as an analytical tool and its relevance for understanding social thought and the historical and contemporary experiences of peoples of African descent in Africa and the Diaspora.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6207 African American Historiography

Credit Hours: 3

This course introduces graduate students to some of the major topics and texts in African American history. Readings will include both classic studies and recent innovative works in the field. The course is open to majors and non-majors.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6355 African American Community Research: Ethnography

Credit Hours: 3

This course is designed to assist students in understanding the dynamics of African American communities and community research in urban settings.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6387 Seminar on Genocide and Human Rights

Credit Hours: 3

Examines "genocide" and "human rights" as concepts and crimes; the debates that have developed around them and the circumstances in which perpetrators of these crimes deprive particular groups of people of their "right to life."

Tampa | College of Arts and Sciences | Africana Studies

AFA 6805 African Historiography

Credit Hours: 3

The course deals with the history of the writing of African history. It pays attention to the sources and methods that Africanists use to study Africa and major themes in the continent's history, and the debates and interpretations they have generated.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6905 Independent Study

Credit Hours: 1-19

Course consists of advanced graduate research on Africana studies topics selected by student and professor. The topics vary. The course allows students to develop research skills and independent work disciplines.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6910 Directed Research

Credit Hours: 1-12

Course consists of directed research on Africana studies topic selected by student and professor. The topics vary. The course allows students to develop research skills and independent work disciplines.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6932 Topics in Africana Studies

Credit Hours: 3

Variable topics course focusing on the history, culture, and lived experiences of African, African-American, and/or other peoples of African descent worldwide. Rpt. Up to 12 hours as topics may vary.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6945 Internship

Credit Hours: 1-3

This course involves working with a local agency (gov't., NGO, private, etc.) on topic related to the theme of the MA degree, researching and documenting the process and preparing the data for writing the masters thesis.

Tampa | College of Arts and Sciences | Africana Studies

AFA 6971 Thesis

Credit Hours: 2-19

Thesis.

Tampa | College of Arts and Sciences | Africana Studies

AFH 6300 Roman North Africa

Credit Hours: 3

An overview of the material evidence and archeology of Roman North Africa that explores cultural identity, religion, imperialism, and politics, in the most important cities of the Africa Proconsularis, including Libya, Tunisia, Algeria, and Morocco.

Tampa | College of Arts and Sciences | History

AMH 6199 Nineteenth-Century United States History

Credit Hours: 3

The history of the United States from the end of the American Revolution through the end of the nineteenth-century. Topics include: cultures of liberalism and democracy; slavery and freedom; emancipation and Reconstruction, and immigration.

Tampa | College of Arts and Sciences | History

AML 6017 Studies in American Literature to 1860

Credit Hours: 3

Selected focused studies in American literature before 1860: the Puritans, Franklin, Cooper, Irving, Poe, Emerson, Hawthorne, Melville, and others.

Tampa | College of Arts and Sciences | English

AML 6018 Studies in American Literature 1860 to 1920

Credit Hours: 3

Selected focused studies in American literature: Dickinson, Whitman, Twain, Howells, James, Jewett, Chopin, Crane, Dreiser, and others.

Tampa | College of Arts and Sciences | English

AML 6027 Studies in Modern American Literature

Credit Hours: 3

Modern American drama, poetry, fiction, and literary criticism; authors include Faulkner, Hemingway, Fitzgerald, O'Neill, Miller, Anderson, Wolfe, Cummings, Frost, Pound, and Eliot.

Tampa | College of Arts and Sciences | English

AML 6608 Studies in African American Literature

Credit Hours: 3

Focuses on varied topics in African American literature such as African American Fiction and the Harlem Renaissance. Topics will supply greatly needed coverage of increasingly important areas of American and African American literature, history, and culture.

Tampa | College of Arts and Sciences | English

AML 6637 Studies in US Latina/Latino Literatures

Credit Hours: 3

Students will explore the major strands of US Latina/o Literatures including immigration narratives, auto ethnography, and historical fiction from or about the perspective of US Latinas/os.

Tampa | College of Arts and Sciences | English

AMS 6002 American Lives

Credit Hours: 3

Open to non-majors. An interdisciplinary approach to the study of autobiography. Examines the relationship between identity and community in classic American autobiographies. Utilizes autobiography as a resource of social and cultural history which provides insights regarding the complex interaction between a life, a mind, and a text.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6156 Theories and Methods of Cultural Studies

Credit Hours: 3

This course examines the relationship between the arts and society by introducing various approaches to the study of literature, art, and culture that are of contemporary relevance to graduate students in the liberal arts and American Studies.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6254 Cultural Era

Credit Hours: 3

Open to non-majors. Interdisciplinary analysis of American life during a specific cultural era.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6805 Enduring Questions in American Culture

Credit Hours: 3

Open to non-majors. Explores the historical changes and continuities of an enduring theme, issue, pattern, or practice in American culture across multiple cultural eras. E.g., democracy, wilderness, jazz, domesticity, regionalism, ethnicity.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6901 Directed Readings in American Studies

Credit Hours: 1-3

Open to non-majors. A supervised program of intensive reading.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6915 Directed Research

Credit Hours: 1-12

Directed research course.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6934 Selected Topics

Credit Hours: 1-3

Open to non-majors. Variable topics such as American Autobiography, Film in American Culture, and Photography in American Culture.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6938 Research Seminar

Credit Hours: 3

A course emphasizing the practical aspects of research in American Studies including analyzing primary sources, assembling a bibliography, synthesizing secondary sources, and defining an argument. Topic varies.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6940 Internship in American Studies

Credit Hours: 1-3

A structured, out-of-class learning experience providing first hand, practical training in American Studies-related professional careers.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

AMS 6971 Thesis: Master's

Credit Hours: 2-19

A Master's thesis course.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

ANG 5395 Visual Anthropology

Credit Hours: 3

This class will examine the major dimensions of visual anthropology with an emphasis on the visual means of presenting anthropology to the discipline and general public. The course will focus on visual documentation and study of visual images.

Tampa | College of Arts and Sciences | Anthropology

ANG 5486 Quantitative Methods in Anthropology

Credit Hours: 3

This course is an introduction to quantitative methods for the anthropologist covering both classical statistical approaches and exploratory data analysis, using computers with statistical software.

Tampa | College of Arts and Sciences | Anthropology

ANG 5901 Directed Reading

Credit Hours: 1-4

Individual guidance in concentrated reading on a selected topic in Anthropology. Contract required prior to registration.

Tampa | College of Arts and Sciences | Anthropology

ANG 5910 Individual Research

Credit Hours: 2-4

Individual guidance in selected research project.

Tampa | College of Arts and Sciences | Anthropology

ANG 5937 Seminar in Anthropology

Credit Hours: 2-4

Topics to be chosen by students and instructor.

Tampa | College of Arts and Sciences | Anthropology

ANG 6081 Museum Methods

Credit Hours: 4

The class introduces students to contemporary issues in exhibit practice in anthropology museums, and offers practical, hands-on experience in the design and fabrication of a museum exhibit based on anthropological concepts.

Tampa | College of Arts and Sciences | Anthropology

ANG 6084 Anthropological Theory Today

Credit Hours: 3

This course provides an overview of contemporary theorizing in social and cultural anthropology for graduate students.

Tampa | College of Arts and Sciences | Anthropology

ANG 6100 Topics in Archaeological Science

Credit Hours: 3

This course focuses on the application of scientific methods of analysis to archaeological materials, including bone, stone, pottery, and metal. Repeatable for up to 6 hours.

Tampa | College of Arts and Sciences | Anthropology

ANG 6110 Archaeology Theory and Current Issues

Credit Hours: 3

Methodology and theory in archaeology, analysis, interpretation of data.

Tampa | College of Arts and Sciences | Anthropology

ANG 6115 Seminar in Archaeology

Credit Hours: 3

An advanced critical survey of archaeology emphasizing contributions to applied anthropology.

Tampa | College of Arts and Sciences | Anthropology

ANG 6153 Topics in North American Archaeology

Credit Hours: 3

Comprehensive understanding of the prehistoric development of American Indian cultures in the main geographical regions, with emphasis on current issues in cultural resource management. Repeatable for up to 6 hours.

Tampa | College of Arts and Sciences | Anthropology

ANG 6155 Southeastern U.S. Archaeology

Credit Hours: 3

The course examines the culture history and processes of change or continuity throughout the region of the Southeast, as well as the often differing record for various local areas, from prehistoric through historic times.

Prerequisite(s): ANT 3101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Anthropology

ANG 6163 Topics in Mesoamerican Archaeology

Credit Hours: 3

This course explores the distinctive features of the evolving cultural traditions of Mesoamerica. This course identifies the major issues and methodological approaches of Mesoamerican archaeology. Repeatable for up to 6 hours.

Tampa | College of Arts and Sciences | Anthropology

ANG 6165 Topics in South American Archaeology

Credit Hours: 3

This course introduces the prehistoric and early historic cultural chronology of the South American continent, with an emphasis on current research and controversies and perspectives from cultural ecology. Repeatable for up to 6 hours

Tampa | College of Arts and Sciences | Anthropology

ANG 6175 Topics in Mediterranean Archaeology

Credit Hours: 3

A graduate seminar in Mediterranean archaeology, spanning prehistory and the early historical period, and will examine subsistence adaptations, island settlement, trade, technology, religion, rise of complex societies and early states. Repeatable to 6 hr.

Tampa | College of Arts and Sciences | Anthropology

ANG 6189 Ancient Diets

Credit Hours: 3

This course focuses on archaeological remains and studies about ancient diet, a fundamental practice by all world cultures.

Tampa | College of Arts and Sciences | Anthropology

ANG 6195 Ancient Trade

Credit Hours: 3

This course focuses on long-distance trade and contact in ancient times, based on archaeological evidence and scientific studies, and how this informs us about sociopolitical systems and economic relations and how they vary over time and space.

Tampa | College of Arts and Sciences | Anthropology

ANG 6197 Public Archaeology

Credit Hours: 3

This graduate-level course surveys archaeological practice as part of applied anthropology, in the public and private sector, from local to international.

Tampa | College of Arts and Sciences | Anthropology

ANG 6198 Regional Problems in Methods of Public Archaeology

Credit Hours: 3

Contemporary problems in Public Archaeology in the context of a specific region. Open to non-majors.

Tampa | College of Arts and Sciences | Anthropology

ANG 6270 Chiefdoms

Credit Hours: 3

This course examines theory and data on the emergence of chiefly forms of social organization using case studies from both ethnography and prehistory, and focusing on classic works of cultural evolution and recent critiques of the chiefdom concept.

Tampa | College of Arts and Sciences | Anthropology

ANG 6302 Gender in Cross-Cultural Perspective

Credit Hours: 3

Examines roles of women, men, other genders and social, economic, and political aspects of sex and gender, from a biocultural, 4-field anthropological perspective, emphasizing non-Western societies and cross-cultural comparison in past and present.

Tampa | College of Arts and Sciences | Anthropology

ANG 6392 Engaging Ethnography

Credit Hours: 3

What does engaged research and writing look like, and to what effect? Explore ethnographic monographs to discover how various forms of engagement can transform research epistemologies, questions, methodologies, and products, and define own approach.

Tampa | College of Arts and Sciences | Anthropology

ANG 6393 Anthropology, Contemporary Culture and the Media

Credit Hours: 3

Course entails the anthropological study of the roll of media in contemporary culture. Selected issues include the cultural impact of images and gender/ethnic stereotypes. Special attention will be paid to ethnographic studies of media audiences, and a central theme will be the roll of media in a global, multi-cultural context.

Tampa | College of Arts and Sciences | Anthropology

ANG 6404 Health and Medical Systems

Credit Hours: 3

An explicitly medical anthropological approach to systems-level issues in

health and medicine.

Tampa | College of Arts and Sciences | Anthropology

ANG 6436 Issues in Heritage Tourism

Credit Hours: 3

The purpose of this course is to introduce students to the theoretical and practical issues in heritage tourism and the business of heritage resource management from an anthropological perspective.

Tampa | College of Arts and Sciences | Anthropology

ANG 6447 Selected Topics in Urban Anthropology

Credit Hours: 3

Current topical issues in Urban Anthropology. Open to non-majors.

Tampa | College of Arts and Sciences | Anthropology

ANG 6448 Regional Problems in Urban Anthropology

Credit Hours: 3

Contemporary problems in Urban Anthropology in the context of a specific region. Open to non-majors.

Tampa | College of Arts and Sciences | Anthropology

ANG 6463 Social Epidemiology Applied Anthropology

Credit Hours: 3

An advanced medical anthropology course on the application of methods and concepts from social epidemiology as relevant to cultural analysis.

Tampa | College of Arts and Sciences | Anthropology

ANG 6465 Regional Problems in Medical Anthropology

Credit Hours: 3

Contemporary problems in Medical Anthropology in the context of a specific region. Open to non-majors.

Tampa | College of Arts and Sciences | Anthropology

ANG 6469 Selected Topics in Medical Anthropology

Credit Hours: 3

Current topical issues in Medical Anthropology. Open to non-majors.

Tampa | College of Arts and Sciences | Anthropology

ANG 6490 Seminar in Cultural Anthropology

Credit Hours: 3

A critical advanced survey of Cultural Anthropology emphasizing contributions to Applied Anthropology, required of all MA students.

Tampa | College of Arts and Sciences | Anthropology

ANG 6495 Oral History and Life History: Approaches to Qualitative Research

Credit Hours: 3

A in-depth survey of the methods, concepts, and practical applications of narrative-based qualitative research, featuring critical readings in case studies, and individual and group projects.

Tampa | College of Arts and Sciences | Anthropology

ANG 6497 Qualitative Research Methods in Anthropology

Credit Hours: 3

This course is designed to acquaint students with the philosophical foundations of qualitative research, and to provide the opportunity for students to develop skills in the variety of data collection methods and analysis typical of qualitative research.

Tampa | College of Arts and Sciences | Anthropology

ANG 6511 Seminar in Physical Anthropology

Credit Hours: 3

A critical advanced survey of Physical Anthropology emphasizing contributions to Applied Anthropology.

Tampa | College of Arts and Sciences | Anthropology

ANG 6516 Human Variation

Credit Hours: 3

This course is designed to provide students with an overview of human genetic, phenotypic, and demographic variation from both evolutionary and bio-cultural perspectives, looking at both past and present approaches to understanding human diversity.

Tampa | College of Arts and Sciences | Anthropology

ANG 6525 Human Osteology

Credit Hours: 3

This course involves the detailed examination of the elements of the human skeleton with an emphasis on identifying individual bones and their structures.

Tampa | College of Arts and Sciences | Anthropology

ANG 6533 Anthropology of Human Growth and Development

Credit Hours: 3

Overview of human growth and development from a perspective that combines biological and cultural approaches in anthropology.

Tampa | College of Arts and Sciences | Anthropology

ANG 6536 Bioarchaeology

Credit Hours: 3

Overview of methods and theories used to study the relationship between behavioral, cultural, and environmental factors and human biology, as reflected in human skeletal remains.

Tampa | College of Arts and Sciences | Anthropology

ANG 6570 Nutritional Assessment

Credit Hours: 3

Overview of basic nutritional assessment methods used in anthropology, nutritional sciences, and public health.

Tampa | College of Arts and Sciences | Anthropology

ANG 6575 Neuroanthropology

Credit Hours: 3

This class will provide students with a comprehensive overview of the emerging field of Neuroanthropology.

Tampa | College of Arts and Sciences | Anthropology

ANG 6584 Evolution and Life History Theory

Credit Hours: 3

Life history theory is the study of how organisms evolved to optimize their resources to maximize reproductive success. This course will primarily focus on human life histories and provides the theoretical background of evolutionary life history theory.

Tampa | College of Arts and Sciences | Anthropology

ANG 6585 Theories in Applied Bioanthropology

Credit Hours: 3

A survey of the major theoretical frameworks and quantitative and qualitative methodologies commonly used in biological anthropology research.

Tampa | College of Arts and Sciences | Anthropology

ANG 6701 Contemporary Applied Anthropology

Credit Hours: 3

A critical survey of Applied Anthropology as practiced today in the major branches of Anthropology, focusing on Applied, Medical, and Urban Anthropology. Open to non-majors.

Tampa | College of Arts and Sciences | Anthropology

ANG 6705 Foundations of Applied Anthropology I

Credit Hours: 3

MA Foundations of Applied Anthropology I provides graduate students with an introduction to the philosophical basis of contemporary anthropology.

Tampa | College of Arts and Sciences | Anthropology

ANG 6706 Foundations of Applied Anthropology II

Credit Hours: 3

This course is the second part of a two-course sequence required of all MA students in the anthropology department. This course provides students with foundational understandings of the epistemologies underlying contemporary applied anthropology.

Prerequisite(s): ANG 6705
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Anthropology

ANG 6730 Socio Cultural Aspects of HIV/AIDS

Credit Hours: 3

This course is designed to provide an overview of the different social, economic, cultural, political, and ethical issues surrounding the spread of HIV/AIDS around the world.

Tampa | College of Arts and Sciences | Anthropology

ANG 6731 Health and Disasters

Credit Hours: 3

Disasters like Katrina and complex emergencies like Bosnia exacerbate social divisions and impact the health status of individuals, communities, and nations. This course considers mitigation policies and humanitarian responses.

Tampa | College of Arts and Sciences | Anthropology

ANG 6732 Global Health from an Anthropological Perspective

Credit Hours: 3

The aim of the course is to situate the debate about what is 'global health' clearly in an anthropological perspective.

Tampa | College of Arts and Sciences | Anthropology

ANG 6733 Issues in Migrant Health

Credit Hours: 3

This course provides an overview of health issues associated with transnational migration from an anthropological point of view.

Tampa | College of Arts and Sciences | Anthropology

ANG 6735 Reproductive Health

Credit Hours: 3

An in-depth examination of major issues related to sexual and reproductive health in both domestic and international settings, with emphasis on perspectives from medical anthropology, public health, and women studies.

Tampa | College of Arts and Sciences | Anthropology

ANG 6739 Applied Anthropology and International Health

Credit Hours: 3

An advanced international anthropology course on the health issues, organization, people, policies and limitations of the arena of international health.

Tampa | College of Arts and Sciences | Anthropology

ANG 6741 Introduction to Forensic Sciences

Credit Hours: 3

Provides a general introduction to the methods and techniques used in

the interdisciplinary field of forensic sciences.

Tampa | College of Arts and Sciences | Anthropology

ANG 6745 Forensic Anthropology

Credit Hours: 3

Provides a general introduction to the methods, theories, and techniques of Biological Anthropology as applied to medico-legal death investigations.

Tampa | College of Arts and Sciences | Anthropology

ANG 6746 Investigation of Violent Crimes Against Children

Credit Hours: 3

Advanced instruction for students to help them to understand the definitions of various forms and aspects of neglect, abuse, exploitation, abduction, and murder involving child victims.

Tampa | College of Arts and Sciences | Anthropology

ANG 6766 Research Methods in Applied Anthropology

Credit Hours: 3

Research design, data collection, and data analysis for Applied Anthropologists with urban and medical interests. Emphasis will be on non-quantitative research methods. Open to non-majors.

Tampa | College of Arts and Sciences | Anthropology

ANG 6770 Crime Scene Reconstruction

Credit Hours: 3

Surveys theories and methods of crime scene management and administration for violent crimes. Specifically it is designed to explore the ways in which evidence is recognized, preserved, documented, and collected in cases of violent crimes.

Tampa | College of Arts and Sciences | Anthropology

ANG 6771 The Science of Missing and Unidentified Persons

Credit Hours: 3

Surveys scientific methods for the investigation of missing, endangered, and unidentified persons. Topics include forensic anthropology, archaeology, odontology, forensic pathology, crime scene, victimology, homicide, and facial approximations.

Tampa | College of Arts and Sciences | Anthropology

ANG 6772 Homicide Investigations

Credit Hours: 3

Provide an introduction to the theoretical and practical issues in the field of criminal homicide investigations, and to teach the methods and tools necessary to collect, preserve, interpret and analyze evidence from violent crime scenes.

Tampa | College of Arts and Sciences | Anthropology

ANG 6905 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Arts and Sciences | Anthropology

ANG 6915 Directed Research Internship

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Anthropology

ANG 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Anthropology

ANG 7487 Advanced Quantitative Research Methods Applied Anthropology

Credit Hours: 3

Critical review of quantitative approaches to the development, management, and analysis of sociocultural data. Open to non-majors.

Tampa | College of Arts and Sciences | Anthropology

ANG 7703 History and Theory of Applied Anthropology

Credit Hours: 3

The history and theoretical development of Applied Anthropology, including cultural resources management are discussed in the context of the overall development of Anthropology as a discipline and profession.

Tampa | College of Arts and Sciences | Anthropology

ANG 7704 Legal and Ethical Aspects of Applied Anthropology

Credit Hours: 3

Development and nature of professional ethics in Applied Anthropology, including legal and quasi-legal regulations pertaining to human subjects research, cultural resources management, historic preservation, privacy, and freedom of information.

Tampa | College of Arts and Sciences | Anthropology

ANG 7708 Selected Topics in Applied Anthropology

Credit Hours: 3

An overview of Applied Anthropology in its relation to a major mode of public/private activity, e.g., planning, clinical practice, policy process, or advocacy.

Tampa | College of Arts and Sciences | Anthropology

ANG 7709 Applied Anthropology and Human Problems

Credit Hours: 3

Examination of specific problem areas of social significance and policy relevance. Typical offerings include: substance abuse, disease, mental health, international development, urban design, and education.

Tampa | College of Arts and Sciences | Anthropology

ANG 7905 Directed Individual Study

Credit Hours: 1-15

An advanced reading program of selected topics in Applied Anthropology under the supervision of an anthropology faculty member. A written contract describing requirements must be signed by the student and faculty member prior to registration.

Tampa | College of Arts and Sciences | Anthropology

ANG 7910 Directed Research

Credit Hours: 1-15

An advanced directed research program in a selected topic of Applied Anthropology under the supervision of an anthropology faculty member.

Tampa | College of Arts and Sciences | Anthropology

ANG 7938 Doctoral Proseminar in Applied Anthropology

Credit Hours: 3

Emphasizing the process of doing "four-field" anthropology (biological, archeological, linguistic, and cultural), conceptualizing research questions, identifying, gathering and analyzing data. How application and theory are integrated and how this integration is vital to the conduct of good anthropology with a variety of anthropological ideas.

Tampa | College of Arts and Sciences | Anthropology

ANG 7940 Doctoral Internship in Applied Anthropology

Credit Hours: 1-15

Supervised training in practicing Anthropology in a non-academic setting, focusing on the applications of Anthropology. A written contract describing requirements must be signed by the student, the faculty advisor, and the agency supervisor prior to registration.

Tampa | College of Arts and Sciences | Anthropology

ANG 7980 Dissertation: Doctoral

Credit Hours: 2-15

Tampa | College of Arts and Sciences | Anthropology

APK 6104 Developmental Exercise Physiology

Credit Hours: 3

The course covers normal growth and physiological development in children and adolescents with an emphasis on the changes in physiological adaptations with exercise as a result of maturation.

Prerequisite(s): APK 3120
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

APK 6109 Cardiorespiratory Aspects of Exercise Physiology

Credit Hours: 3

Covers selected topics regarding cardiorespiratory aspects of exercise physiology. Some of the topics to be covered include: gas exchange and transport during exercise; aerobic metabolism, and acute & chronic adaptations to exercise training.

Tampa | College of Education | Educational and Psychological Studies

APK 6111 Advanced Exercise Physiology

Credit Hours: 3

The course will address advanced principles of basic and applied exercise physiology. Cardiovascular and respiratory physiology and physiological responses of these systems to acute and chronic exercise will be discussed, as well as thermal stress.

Prerequisite(s): APK 3120
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

APK 6116 Neuromuscular Aspects of Exercise Physiology

Credit Hours: 3

Covers selected topics regarding neuromuscular aspects of exercise physiology. Some of the topics to be covered include: neuromuscular anatomy and physiology, theory of skeletal muscle contraction, protein synthesis and degradation.

Tampa | College of Education | Educational and Psychological Studies

APK 6406 Psychology of Exercise

Credit Hours: 3

Covers selected topics regarding the psychological aspects of exercise. Topics to be covered include: stress, anxiety, depression, mood, pain, exertion, and body image. Research methodology will be an important consideration throughout.

Tampa | College of Education | Educational and Psychological Studies

APK 6431 Stress Management and Mental Performance

Credit Hours: 3

This course will focus on the psychophysiological effects of stress and its impact on physical and mental performance.

Tampa | College of Education | Educational and Psychological Studies

APK 6511 Science of Physique Enhancement

Credit Hours: 3

This course investigates the science of improving one's physique/body composition. Topics covered include weight loss, weight management, and metabolism. Popular diets will also be discussed, including a discussion of their strengths and limitations.

Tampa | College of Education | Educational and Psychological Studies

APK 6902 Controversies in Exercise and Nutrition Science

Credit Hours: 3

Introduces current controversies in exercise & nutrition science. Students read and critically analyze scientific papers presenting opposing conclusions on specific topics and come to their own conclusion based on their interpretation of the literature.

Tampa | College of Education | Educational and Psychological Studies

ARC 5175 Computer Technology

Credit Hours: 3

Introduction to the application of computer technology in current architectural practice. The exploration of available software, programs, and computer services for word processing, information handling, specification writing, feasibility analysis, cost estimating, economic performance and life cycle cost analysis, project management (network programming and analysis), computer graphics, computer aided design and drafting.

Tampa | College of The Arts | Architecture and Community Design

ARC 5216 The Building Arts

Credit Hours: 3

Introduction to the man-made environment. The study and profession of architecture. The various facets of the process of shaping the built environment as it manifests itself in the different roles and specialization of the experts involved the process, and in the various academic courses that prepare the architect for practice.

Tampa | College of The Arts | Architecture and Community Design

ARC 5256 Design Theory

Credit Hours: 3

Survey of major schools of thought in design theory, methods of design and problem-solving, and design research. The nature of the design activity and its recurring difficulties. The nature and different types of problems. Traditional approaches to problem-solving and design in architecture; recent systematic as well as intuitive approaches to problem-solving based on developments in other fields. Scientific method; the systems approach and design.

Tampa | College of The Arts | Architecture and Community Design

ARC 5361 Core Design I

Credit Hours: 9

First of two semester Design Fundamentals/Design Graphics sequence focusing on design abstractions and analysis of the factors influencing conceptual design. Emphasis is placed on ordering principles, pattern recognition and utilization, and figure-ground relationships. Development of craftsmanship, drawing as a means to design, and perceptual acuity are stressed.

Tampa | College of The Arts | Architecture and Community Design

ARC 5362 Core Design II

Credit Hours: 9

Second of a two semester Design Fundamentals/Design Graphics sequence focusing on synthesis of design concepts and application of ordering principles in architectural design. Emphasis is placed on developing an understanding and awareness of architectural elements and compositions. Students examine the work of significant architects and use it as a basis for design exploration. Graphic documentation, diagramming, and model studies are stressed.

Prerequisite(s): ARC 5361
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 5363 Core Design III

Credit Hours: 6

Study of the various phases of the building delivery and design process, and of different approaches to ordering that process in a systematic fashion. The student will use one such systematic approach in the investigation and development of design solutions for a project of moderate scale and complexity. Studies of built form ordering principles, mass/void relationships, scale and proportion, color, texture, contextual relationships, meaning/imagery, and building technology (awareness of

structural organization, services networks, construction processes and materials). Aspects of human behavior as design determinants.

Prerequisite(s): ARC 5362, ARC 5467, ARC 5587, ARC 5731
Corequisite(s): ARC 5689
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 5364 Advanced Design A

Credit Hours: 6

Application of orderly design processes to building projects of moderate complexity and scale. Continued investigation of the relationship between human behavior and the environment. Analysis and integration of site relationships into the development of design solutions. Legal aspects of zoning, building codes, and regulations regarding access for accessibility, fire escape, etc.

Prerequisite(s): ARC 5363
Corequisite(s): None.
Co-Prerequisite(s): ARC 5588, ARC 5467

Tampa | College of The Arts | Architecture and Community Design

ARC 5365 Advanced Design B

Credit Hours: 6

Investigation of the interaction between user requirements, environmental determinants, site and urban context conditions, technological factors, and design intentions in the development of design solutions for projects of medium scale and complexity. The analysis, design, and coordination of the various resulting systems, including structural, circulation, service networks, space zoning and use, environmental control systems at the interface between interior and exterior of a building. Representation of these relationships and systems in diagrams and models, and their manifestation in design and construction details.

Prerequisite(s): ARC 5363
Corequisite(s): None.
Co-Prerequisite(s): ARC 5588, ARC 5467

Tampa | College of The Arts | Architecture and Community Design

ARC 5366 Advanced Design C

Credit Hours: 6

Design of multi-purpose buildings of medium to large scale and complexity. Issues of community and neighborhood design as they relate to the design of buildings. Restoration and adaptive re-use of existing historic buildings. Focus on thinking through as well as documenting the complete building system and process.

Prerequisite(s): ARC 5363
Corequisite(s): None.
Co-Prerequisite(s): ARC 5588, ARC 5467

Tampa | College of The Arts | Architecture and Community Design

ARC 5467 Materials and Methods of Construction

Credit Hours: 3

Overview of properties of primary construction materials and systems that make up building structures and enclosures. Emphasis on elements and assemblies relative to various climates, technologies, costs, building codes, and craftsmanship.

Prerequisite(s): ARC 5470
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 5470 Introduction to Technology

Credit Hours: 3

Introduction to architectural technology, including structures, materials and methods of construction, and environmental controls. Overview of building systems and components and their integration into architectural design projects.

Tampa | College of The Arts | Architecture and Community Design

ARC 5587 Structures I

Credit Hours: 3

Review of static and mechanical principles of materials. Analysis and evaluation for appropriate selection of structural systems and elements. Analysis and design of timber and steel structures, based on moment, shear, and deflection. Fundamentals of wind and seismic design as they apply to wood and steel construction. Truss analysis, beam and column

behavior.

Prerequisite(s): Calculus, Physics, and ARC 5470
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 5588 Structures II

Credit Hours: 3

Introduction to the concepts and theories of structural analysis and design of reinforced concrete systems and elements, including practical application in building construction. Prestressing, post-tensioning, hybrid assemblies. Fundamentals of wind and seismic design. Formwork, placement, and assembly techniques.

Prerequisite(s): ARC 5587
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 5689 Environmental Technology

Credit Hours: 3

Comprehensive overview of mechanical systems for buildings including: water and waste: fire protection and suppression; heating, cooling and controls; electric power distribution and illumination; communications; transportation systems, and acoustics.

Prerequisite(s): ARC 5467, ARC 5470
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 5731 Architectural History I

Credit Hours: 3

Overview of the built environment from prehistory through the Middle Ages. Buildings and cities in their geographical, topographical, political, aesthetic, social, technological and economic context. Varieties of methodological approaches to the analysis of historical architecture. The focus will be on the built environment of Europe and the Mediterranean basin.

Tampa | College of The Arts | Architecture and Community Design

ARC 5732 Architectural History II

Credit Hours: 3

Overview of the built environment from the Renaissance to the present. Buildings and cities in their geographical, topographical, political, aesthetic, social, technological, and economic context. Study of various methodological approaches to the analysis of historic architecture, and development of student's own approach. Emphasis will be on the built environment of Europe and America.

Tampa | College of The Arts | Architecture and Community Design

ARC 5789 Modern Architecture History

Credit Hours: 3

Exploration of the philosophic, economic, aesthetic, social, historical and moral imperatives used by modern architects and historians in their attempt to design the appropriate physical environment for a new social order. The course will investigate the writings and works of the proponents of the modern style of architecture and study the "New Architecture" as defined by those who broke tradition and expressed the new era using modern construction materials and techniques.

Tampa | College of The Arts | Architecture and Community Design

ARC 5793 History Abroad

Credit Hours: 3

Summer study abroad. Location and description varies from year to year.

Tampa | College of The Arts | Architecture and Community Design

ARC 5794 Florida Architectural History

Credit Hours: 3

An examination of the environmental, sociological, technological, political, economic, cultural, and other factors that influenced the discovery, growth, and urbanization of Florida as manifested by its architecture.

Tampa | College of The Arts | Architecture and Community Design

ARC 5920 Architectural Design Studio Abroad

Credit Hours: 5

Summer study abroad. Location and description varies from year to year.

Tampa | College of The Arts | Architecture and Community Design

ARC 5931 Special Studies in Architecture

Credit Hours: 1-5

Variable titles offered on topics of special interest.

Tampa | College of The Arts | Architecture and Community Design

ARC 6176 Advanced Computer Technology

Credit Hours: 3

Elective course dealing with further development of CAD skills, focusing on three-dimensional modeling. A wide range of software programs is included which explores painting and shading, surface textures, 3D detail studies, perspectives, and oblique representations.

Prerequisite(s): ARC 5175
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6287 Professional Practice I

Credit Hours: 3

Introduction and overview of professional practice, emphasizing business, organization, management, and marketing. Legal, economic, and ethical aspects of project procurement, design services, and delivery. Contracts, owner-contractor-architect roles and responsibilities.

Prerequisite(s): ARC 5216, ARC 5364
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6288 Professional Practice II

Credit Hours: 3

Continued overview of professional practice, emphasizing legal, economic, and ethical aspects of practice. Project planning, funding, administration, risk management, and performance. Topics include: estimating, financing, life-cycle cost analysis, information resources and management.

Prerequisite(s): ARC 6287
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6367 Advanced Design D

Credit Hours: 6

Comprehensive studio problems emphasizing the integration of disciplinary and professional skills through the formulation of architectural propositions grounded in critical, speculative, and creative research.

Prerequisite(s): ARC 5366, ARC 6481
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6372 The Neighborhood

Credit Hours: 3

Introduces students to the range of urban and suburban neighborhood typologies. We will discuss the purpose of the neighborhood as a physical and social construct, the history of neighborhoods, and the meaning of the neighborhood in present.

Tampa | College of The Arts | Architecture and Community Design

ARC 6373 Community Design Studio

Credit Hours: 6

(Varies depending on topic) The Community Design Studio is a six credit hour physical design lab course. Its focus is on design at the scale of urbanism – the metropolitan region, the city, the district, the block, the street, and the building complex.

Prerequisite(s): None.
Corequisite(s): ARC 6398
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6397 Introduction to Urban Design Theory, Methods & Processes

Credit Hours: 3

Introduction to the concepts, methods, and manifestations of urban design and city-building. Focus on both traditional city and modern city conditions. Student will gain a basic understanding of the design structure, order, function and character of cities and towns and assess various qualitative aspects of these conditions. Relationships between processes of architecture, landscape architecture, site planning, preservation and other relevant acts of city-building will be considered as referential points-of view in assessing certain complexities of urban morphology.

Tampa | College of The Arts | Architecture and Community Design

ARC 6398 Introduction to Community and Urban Design

Credit Hours: 3

Introduce community and urban design as an academic discipline and professional practice that incorporates architecture, planning, landscape architecture, real estate development, and engineering. Major topics include urban form, function, and perception.

Tampa | College of The Arts | Architecture and Community Design

ARC 6471 Advanced Topics in Materials and Methods

Credit Hours: 3

Analysis and design of advanced construction assemblies. Specific focus on application and integration of multiple systems and components. Research in new materials and methods. Documentation and model and analysis.

Prerequisite(s): ARC 5175, ARC 5587, ARC 5588
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6481 Design Development

Credit Hours: 3

The summary course of the building technology sequence in which construction, structural and environmental technologies are integrated within an architectural design project. Emphasis is placed on poetic and technical aspects of building systems.

Prerequisite(s): ARC 5689, ARC 5364
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6692 Advanced Topics in Environmental Technology

Credit Hours: 3

Analysis and preliminary design of advanced environmental control systems; specific focus on architectural applications; integration with structural and construction systems. Research of special aspects of ET systems, computer simulation and analysis techniques.

Prerequisite(s): ARC 5175, ARC 5689
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6930 Special Topics in Urban and Community Design

Credit Hours: 1-6

Special topics related to urban and community design and planning issues.

Tampa | College of The Arts | Architecture and Community Design

ARC 6936 Research Methods in Architecture

Credit Hours: 2

A seminar course with the primary purpose of providing tools to conduct the independent research necessary for the two-semester, independent Master's Thesis requirement.

Prerequisite(s): ARC 6398, ARC 5365, ARC 6481
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6971 Master's Thesis

Credit Hours: 5

This represents the most significant project and provides for a demonstration of the ability to synthesize learned skills into a convincing independent work of professional quality. 10 credit hours of ARC 6971 is required. See also the USF Graduate Catalog.

Prerequisite(s): ARC 5364, ARC 5365, ARC 5366, ARC 6481, ARC 6936
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6974 Master's Project Planning

Credit Hours: 2

The Master's Project (ARC 6971) will call for the student's independent selection, organization, programming and design of a complex project. This course aims at preparing students for these tasks by exploring potential topics for master's projects and theses, introducing the concepts of architectural facility programming, methods of gathering, organization, analysis and evaluation of information needed for the project, and by studying the process of writing proposals for the master's project that clearly communicate the problem or task, goals and objectives, the proposed approach and procedure, the expected outcome, as well as the work plan and schedule for such a project and the time and resources required. At the end of the course, students will have prepared an acceptable master's project proposal which will allow them to proceed with the master's project during the following term.

Prerequisite(s): Two of ARC 5364, ARC 5365, ARC 5366
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARC 6976 Terminal Master's Project

Credit Hours: 5

Students will independently investigate an architectural topic of personal interest. The requirements include the submission of a research and design document and the preparation of juried presentation of the work.

Prerequisite(s): ARC 6936
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Architecture and Community Design

ARH 5226 Art of the Medieval and Renaissance Book

Credit Hours: 4

Examines the book as a visual arts medium in Europe from the period of the emergence of manuscripts in modern book form (the codex, circa 4th century CE) to the invention of printing (circa 1454) and its aftermath in the late 15th and 16th centuries.

Tampa | College of The Arts | Art and Art History

ARH 5428 Cultural Encounters in Art

Credit Hours: 4

Focusing on the early modern period from roughly 1650 to 1850, this course considers how the mobility of art is intertwined with diplomatic and trade networks in the international arena.

Tampa | College of The Arts | Art and Art History

ARH 5813 Methods of Art History

Credit Hours: 4

This course introduces students to various methods which art historians have used to analyze the form and content of individual works of art, and to various modes of historical explanation.

Tampa | College of The Arts | Art and Art History

ARH 5816 Research in Art History

Credit Hours: 4

This course examines research methods and sources in art history.

Tampa | College of The Arts | Art and Art History

ARH 5836 Collection and Exhibition Management

Credit Hours: 3

This class will introduce students to the basic principles of collections care and management and to the intellectual and practical tasks of preparing an exhibition. Sessions will include art handling, registration and condition reporting, preparing works of art for transit, environmental standards for collections storage and exhibition, and the professional responsibilities of the curator.

Tampa | College of The Arts | Art and Art History

ARH 6055 Art History

Credit Hours: 1-4

A contract for research in any elective area of Art History.

Tampa | College of The Arts | Art and Art History

ARH 6798 Seminar in Art History

Credit Hours: 4

Var. Specialized topics in art history.

Tampa | College of The Arts | Art and Art History

ARH 6868 Current Historiography: 20th Century

Credit Hours: 4

A critical examination of current art historical scholarship on 20th century art.

Tampa | College of The Arts | Art and Art History

ARH 6891 Paris Art History

Credit Hours: 4

This course will explore issues central to the history and criticism of art through the rich and visual culture that Paris offers. The goal of this course is to provide students with an experience of the cultural life of the city through an exploration of its major art collections, monuments, art collections and historical sites. Thematically-organized topic will include: art and national identity, patronage, orientalism, the birth of the avant-garde and the role of the museum in the evolution of modernism and modern art.

Prerequisite(s): At least 8 hours art history at the undergraduate level
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Art and Art History

ART 5390C Drawing

Credit Hours: 4

Advanced problems in various drawing techniques. Emphasis on individual creative expression. Repeatable.

Prerequisite(s): ART 4320C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Art and Art History

ART 5448C Intaglio

Credit Hours: 4

Investigations into more complex intaglio processes including photoengraving and color printing procedures. Emphasis on personal conceptual development in graphic media.

Tampa | College of The Arts | Art and Art History

ART 5580C Painting

Credit Hours: 4

Research in painting

Tampa | College of The Arts | Art and Art History

ART 5740C Sculpture

Credit Hours: 4

Advanced problems in the various techniques of sculpture. Emphasis on individual creative expression. Repeatable.

Prerequisite(s): ART 2701C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Art and Art History

ART 5790C Ceramics

Credit Hours: 4

Advanced problems in the various ceramic techniques, including throwing and glaze calculation. Repeatable.

Prerequisite(s): ART 2750C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Art and Art History

ART 5910 Research

Credit Hours: 1-4

Tampa | College of The Arts | Art and Art History

ART 6391C Drawing

Credit Hours: 4

Advanced graduate research in drawing.

Tampa | College of The Arts | Art and Art History

ART 6449C Intaglio

Credit Hours: 4

Advanced graduate research in intaglio process.

Tampa | College of The Arts | Art and Art History

ART 6581C Painting

Credit Hours: 4

Advanced graduate research in painting.

Tampa | College of The Arts | Art and Art History

ART 6688 Electronic Media

Credit Hours: 4

Advanced projects in the exploration of the issues and practices involved in the creation of experimental computer art at the graduate level. Emphasis on individual creative expression. May be repeated.

Tampa | College of The Arts | Art and Art History

ART 6791C Ceramics

Credit Hours: 4

Advanced graduate research in ceramics.

Tampa | College of The Arts | Art and Art History

ART 6792C Sculpture

Credit Hours: 4

Advanced problems in the various techniques of sculpture. Emphasis on individual creative expression. Repeatable.

Tampa | College of The Arts | Art and Art History

ART 6811 Paris Art Studio

Credit Hours: 3

This course will explore the experience of modern life in the city as a source for art making. Projects will encourage students to encounter the

dense and varied space and time of Paris toward a better understanding of the part that this city has played in the shaping of modern and post modern sensibilities. We will draw upon a range of avant-garde strategies that have imagined and conceptualized Paris by movement through city spaces and close observation of the ordinary and extraordinary aspects of everyday life.

Tampa | College of The Arts | Art and Art History

ART 6816 MFA Professional Practices

Credit Hours: 3

MFA students will analyze their experiences and explore options available to visual artists after completion of their degree. Restricted to majors; not repeatable for credit.

Tampa | College of The Arts | Art and Art History

ART 6895 Graduate Seminar I

Credit Hours: 3

This seminar will expand students understanding of the complexities of contemporary art. Students will develop an awareness of current critical theories through readings, writings and discussions. Restricted to majors and is non-repeatable.

Tampa | College of The Arts | Art and Art History

ART 6896 Graduate Seminar II

Credit Hours: 3

This course facilitates a critical awareness of the self-reflexive nature of artistic vision within a larger cultural context including the relevance of one's work in relationship to contemporary art theory. Restricted to majors and is non-repeatable.

Prerequisite(s): Graduate Seminar I.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Art and Art History

ART 6897 Critical Writing Seminar

Credit Hours: 3

Significant texts of the 20th Century and contemporary criticism introduce multiple lenses through which art is encountered, inviting self identification within a broad range of engaged positions. This forms the core of the MFA Research Project Proposal.

Tampa | College of The Arts | Art and Art History

ART 6907 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of The Arts | Art and Art History

ART 6911 Directed Research

Credit Hours: 1-19

Directed Research in which student must have a contract with an instructor.

Tampa | College of The Arts | Art and Art History

ART 6937 Graduate Instruction Methods

Credit Hours: 1-4

Special course to be used primarily for the training of graduate teaching assistants.

Tampa | College of The Arts | Art and Art History

ART 6940 Selected Topics in Art

Credit Hours: 1-4

Variable credit depending upon the scope and magnitude of the work agreed to by the student and the responsible member of the faculty.

Tampa | College of The Arts | Art and Art History

ART 6956 MFA Research Project

Credit Hours: 2-19

Development/Finalization of MFA Research Project, including the planning and realization of an exhibition and a written document articulating ideas, processes, and sources related to the project. Usually taken during last year.

Tampa | College of The Arts | Art and Art History

ART 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of The Arts | Art and Art History

BCH 5045 Biochemistry Core Course

Credit Hours: 3

A one-semester survey course in biochemistry for graduate students in chemistry, biology, and other appropriate fields and for particularly well-qualified undergraduates.

Prerequisite(s): CHM 2211, CHM 2211L, and CHM 3400 or CHM 4410
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

BCH 5105 Biochemistry Laboratory Rotations

Credit Hours: 1-3

A course in which first year graduate students rotate through selected professor's laboratories to learn techniques, become familiar with ongoing research in the Department and facilitate the selection of a mentor.

Tampa | College of Arts and Sciences | Chemistry

BCH 6135C Methods in Molecular Biology

Credit Hours: 4

An introduction to modern molecular biological techniques and instrumentation. Lec. Lab.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6411 Biomedical Genomics and Genetics

Credit Hours: 4

An overview of Biomedical Genomics & Genetics and current and potential applications in biology & medicine, including identification of gene defects and the use of genetic tools for diagnosis and treatment of disease.

Prerequisite(s): GMS 6001 or GMS 6200C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6627 Molecular Basis of Disease

Credit Hours: 4

The course will deal with the genetic, molecular, and biochemical basis of human diseases.

Prerequisite(s): GMS 6200C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6746 Structural Biology

Credit Hours: 3

The theory and application of modern physical biochemical techniques.

Prerequisite(s): GMS 6001
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6886 Fundamentals of Structural Bioinformatics

Credit Hours: 4

This lecture-based, nonrestrictive course covers basics of molecular

bioscience data management/analysis. This course comprises a mixed delivery mode consisting of traditional didactic lectures coupled with student assignments and presentations.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6888 Bioinformatics

Credit Hours: 3

An introduction to computer software applications for research in Biochemistry and Molecular Biology. Emphasis on database searching and submission, data analysis and graphical presentation, DNA and protein sequence analysis and molecular modeling. Lec./Pro.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6889 Bioinformatics II

Credit Hours: 3

Bioinformatics II focuses on four aspects: genome analysis; software suites; homology modeling and DNA micro arrays; all of which have become essential tools in modern day analyses of both genome organization and protein structure-function relationships.

Prerequisite(s): BCH 6888
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6935 Grant Writing and Scientific Communication

Credit Hours: 2

Development of skills related to scientific communication, including the preparation of effective scientific manuscripts and related communications, and the preparation of fundable grant proposals.

Prerequisite(s): GMS 6001
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6942 Bioinformatics Internship I

Credit Hours: 4-6

This course focuses on applications of bioinformatics and computational biology principles in a practical environment necessary for an "in-depth" understanding of how the methodologies of bioinformatics can be applied to solve bioscience problems.

Prerequisite(s): BCH 6888
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

BCH 6943 Bioinformatics Internship II

Credit Hours: 2

This course focuses on applications of bioinformatics and computational biology principles in a practical environment necessary for an "in-depth" understanding of how the methodologies of bioinformatics can be applied to solve bioscience problems.

Prerequisite(s): BCH 6888
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 5005 Introduction to the Health Professions

Credit Hours: 1-19

This three-week course placed at the beginning of the medical school curriculum will introduce the students to principles that will be used through the entire medical school education and beyond. Basic scientists and clinicians present information in an integrated approach. Topical areas include: use of information resources (library/computer), the medical article, intro to evidence based medicine, effective study techniques, intro to the physical exam, cultural diversity, ethics and professionalism, and state of the art presentation. The course will use both large and small group learning techniques and students will demonstrate achievement of knowledge.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 5015 Clinical Diagnosis and Reasoning

Credit Hours: var.

This course aims to provide the student with the opportunity to "think like a physician." It will provide the venue to integrate clin diagnosis/reasoning strategies with complementary aspects of clin problem solving/phys diagnosis/evidence based medicine.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6100C Gross Anatomy

Credit Hours: 5-10

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6206 Medical Biochemistry

Credit Hours: var.

Emphasis of biochemistry, cell biology, and genetic that have immediate relevance for clinical medicine while also providing a fundamental foundation of understanding that will permit life-long learning. The pathogenesis of disease will be understood based on a practical understanding gained from the students address in this course.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6300 Principles of Immunology and Infectious Diseases

Credit Hours: var.

This course consists of lectures, laboratory, and small-group conferences. Principles of infectious disease are presented with emphasis on both the characteristics of the causative agent and the host response to colonization activities.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6633 Medical Science 3: Cardiovascular and Pulmonary Systems

Credit Hours: var.

A comprehensive description of the cardiovascular and pulmonary systems including anatomy, physiology and nervous control.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6639 Medical Science 4: Gastrointestinal, Renal, and Endocrine Systems

Credit Hours: var.

A comprehensive description of the Gastrointestinal, Reproductive and Renal Systems and some of the Disorders of Behavior that affect human homeostasis.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6640 Medical Science 1: Musculoskeletal System

Credit Hours: var.

A comprehensive/integrated discussion of the basic principles of Anatomy/Biochemistry/Cell Biology/Genetics/Molecular/Biology/Neuroscience/ Physiology & Human Behavior plus a discussion of the anatomy/biochemistry/physiology of the musculo-skeletal system.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6641 Medical Science 2: Neurological System

Credit Hours: var.

A comprehensive description of the major communication systems found in the human body.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6825 Doctoring I

Credit Hours: var.

This course will instruct students in clinical skills essential to medical practice: effective history taking, patient-centered communication, professionalism, ethics, cultural competence, basic physical diagnosis, humanities related to medical practice.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6836 Evidence Based Clinical Reasoning

Credit Hours: var.

This course will instruct students in infomatics, acquisition of data from the medical literature, and application of research by application to selected clinical cases using problem-based learning.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6991 Scholarly Concentration I

Credit Hours: var.

Provides opportunities for scholarly endeavors in areas of special interest. Year 1 students will take a core curriculum, participate in journal clubs, and start a scholarly legacy project.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6992 Scholarly Concentration II

Credit Hours: var.

Each topic includes elements of course work, practical application, and scholarly presentation. Year 2 students will take a leadership role in journal clubs, continue working on their scholarly legacy projects, make use of on-line portfolios.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6993 Scholarly Concentration III

Credit Hours: var.

Provides opportunities for scholarly endeavors in areas of interest. Year 3 students will participate in journal clubs, continue work on their scholarly legacy projects, and make use of on-line portfolios.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 6994 Scholarly Concentration IV

Credit Hours: var.

This Year 4 elective provides opportunities for scholarly endeavors in areas of special interest. Includes active participation in journal clubs, use of on-line portfolios including opportunities for reflection, & generation of a scholarly legacy project.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 7303 Clinical Microbiology and Immunology

Credit Hours: var.

This course will focus on an experiential approach to issues in clinical microbiology and immunology of relevance to the practicing physician.

Tampa | Morsani College of Medicine | Medical Sciences

BMS 7304 Review of Immune and Infectious Diseases

Credit Hours: var.

This course will focus on a review of the major immune and infectious diseases that may be encountered by the general physician.

Tampa | Morsani College of Medicine | Medical Sciences

BME 5040 Pharmaceutical Engineering

Credit Hours: 2

Introduction to pharmaceutical engineering, including dosage forms (tablets, capsules, powders, liquids, topical forms, and aerosols), excipients, regulatory issues, clinical studies, and good manufacturing practices.

Tampa | College of Engineering | Medical Engineering

BME 5105 Introduction to Biomedical Engineering

Credit Hours: 3

This course is designed to introduce students from engineering and other disciplines to a range of topics in biomedical engineering. The course will cover engineering tools and techniques applied to medicine and biology.

Prerequisite(s): CHM 2045 and MAC 2311 or MAC 2281 or MAC 2241
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Medical Engineering

BME 5320 Theory and Design of Bioprocesses

Credit Hours: 3

Introduction to biotechnology, including applied microbiology, enzyme technology, biomass production, bioreactor design, and transport processes in biosystems.

Tampa | College of Engineering | Medical Engineering

BME 5910 Directed Research in Bioengineering

Credit Hours: 1-3

Directed research in an area of biomedical engineering or engineering biotechnology.

Tampa | College of Engineering | Medical Engineering

BME 5937 Selected Topics in Biomedical Engineering

Credit Hours: 1-3

Selected topics in biomedical engineering, including biomedical engineering, biomedical materials, biodynamics of circulation, separation processes in biomedical systems, and artificial organ systems. May be taken by non-engineering students with CI. Repeatable as subjects vary.

Tampa | College of Engineering | Medical Engineering

BME 6000 Biomedical Engineering

Credit Hours: 3

Biomedical engineering analysis, including biomedical thermodynamics, biomechanics, biomaterials, medical imaging, biomedical instrumentation, tissue/cellular engineering, clinical engineering, prosthetic/medical devices, and regulatory issues.

Tampa | College of Engineering | Medical Engineering

BME 6001 Biomedical Engineering II

Credit Hours: 3

This course will address a wide range of fundamental topics in biomedical engineering, focusing on the application of engineering fundamentals to the analysis of the human biomedical system.

Tampa | College of Engineering | Medical Engineering

BME 6055 Modern Biomedical Technologies

Credit Hours: 3

In this class students will learn about new possibilities brought by development of interfaces between human body and computers, creation of artificial body parts, deciphering of brain signals and design of new generation biomedical instruments.

Tampa | College of Engineering | Medical Engineering

BME 6107 Biomaterials I: Material Properties

Credit Hours: 3

Properties and characterization of biomaterials, including ceramics, glasses, metals, natural materials, polymers, and composites. Applications include dental, orthopedic, soft tissue, and tissue scaffolds. Design and sterilization issues.

Tampa | College of Engineering | Medical Engineering

BME 6108 Biomaterials II Biocompatibility

Credit Hours: 3

Biocompatibility issues of biomaterials, including inflammation, wound healing, foreign body response, toxicity, blood coagulation, tumorigenesis, infection, and related issues including testing. Degradation of materials in the biological environment.

Tampa | College of Engineering | Medical Engineering

BME 6235 Tissue Biomechanics

Credit Hours: 3

Biomechanical properties of hard and soft tissues, including measurement procedures, influences on properties (gender, aging, physical conditioning, disease processes), tissue repair, and implant

devices. Open to non-majors with CI.

Tampa | College of Engineering | Medical Engineering

BME 6340 Biomedical Fluids and Cardiovascular Engineering

Credit Hours: 3

Roles of mechanics & transport phenomena in pathology, diagnosis & treatment of cardiovascular disease. Intro to methods for assessing hemodynamics & cardiovascular health -Doppler echocardiography & MRI. Cardiovascular devices. Open to non-majors.

Tampa | College of Engineering | Medical Engineering

BME 6410 Engineering Physiology

Credit Hours: 3

General physiology of nerve, muscle, heart, and lung tissue, along with quantitative models of physiological processes at cell, tissue, and/or system level.

Prerequisite(s): ECH 4846, EGN 3433, PHY 2048, PHY 2049
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Medical Engineering

BME 6420 Human Sensory Processes

Credit Hours: 3

Biological and engineering aspects of the human sensory system (vision, hearing, taste, smell, touch, pain, etc.), including normal and impaired performance, engineering models, and prosthetic device design considerations.

Tampa | College of Engineering | Medical Engineering

BME 6430 Cardiovascular Systems for Engineers

Credit Hours: 3

Cardiovascular basic and medical science from an engineering viewpoint. Topics explored: cardiovascular anatomy and physiology, physical and mathematical aspects of current therapies and diagnostics, imaging, hemodynamics, and cardiovascular disease.

Tampa | College of Engineering | Medical Engineering

BME 6573 Nano-medicine

Credit Hours: 3

This course will provide a basic knowledge of the principles, technology and applications of nanotechnology in medicine with special emphasis on recombinant DNA technology, protein engineering, drug delivery, biomaterials, MEMs & tissue engineering.

Tampa | College of Engineering | Medical Engineering

BME 6634 Biotransport Phenomena

Credit Hours: 3

Analysis and applications of biofluids, including non-Newtonian and particulate systems, bioheat transfer, including energy balances, and biomass transport, including mass balances and membrane processes.

Tampa | College of Engineering | Medical Engineering

BME 6905 Directed Independent Study

Credit Hours: 1-6

Directed independent study in biomedical engineering.

Tampa | College of Engineering | Medical Engineering

BME 6911 Research Methods in Biomechanics

Credit Hours: 1-3

Research methods in biomechanics, including materials testing, gait analysis, modeling techniques, and related issues. Open to majors and non-majors. May be repeated for credit as the subject varies up to six total credits.

Tampa | College of Engineering | Medical Engineering

BME 6920 Seminar in Biomedical Engineering

Credit Hours: 1

Seminar in biomedical engineering. Speakers will address current research topics in biomedical engineering, including biomechanics, cardiovascular engineering, sensors, tissue engineering, and drug delivery. Can be repeated up to 3 total credits.

Tampa | College of Engineering | Medical Engineering

BME 6931 Selected Topics in Biomedical Engineering

Credit Hours: 1-3

Selected topics in biomedical engineering, including focused topics in biomechanics, biomedical imaging, biomaterials, biomedical instrumentation and sensors, tissue and cellular engineering, and clinical engineering & health systems.

Tampa | College of Engineering | Medical Engineering

BME 6944 Biomedical Engineering Industrial Internship

Credit Hours: 1-6

Individual study as practical engineering work at an industrial facility or laboratory under the supervision of a faculty member interacting with the sponsoring industrial facility or laboratory.

Tampa | College of Engineering | Medical Engineering

BME 6971 Research for Master's Thesis

Credit Hours: 2-6

Research for the Master's Thesis in Biomedical Engineering. Students may count up to six hours total maximum towards the M.S. degree. Students must have an approved Master's committee for registration.

Tampa | College of Engineering | Medical Engineering

BME 7915 Directed Research in Biomedical Engineering

Credit Hours: 1-6

Directed research in an advanced topic in biomedical engineering.

Tampa | College of Engineering | Medical Engineering

BME 7980 Ph.D. Dissertation

Credit Hours: 2-19

Dissertation research for the Ph.D. in Biomedical Engineering.

Tampa | College of Engineering | Medical Engineering

BSC 5425 Genetic Engineering and Recombinant DNA Technology

Credit Hours: 3

This lecture-based course will use a problem solving approach, provide fundamental knowledge of scientific concepts and principles that form the basis of experimental methodologies in genetic engineering and recombinant DNA technology.

Prerequisite(s): PCB 3023, PCB 3063, and PCB 3023L or PCB 3063L
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 5931 Selected Topics in Biology

Credit Hours: 1-4

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 6428 Immunological Techniques for Cancer Research

Credit Hours: 2

This course will provide foundational knowledge of modern techniques utilized in cancer immunology research. In-class discussion will be supplemented with tours, interactive assignments, and papers from the recent literature.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 6436 Introduction to Biotechnology

Credit Hours: 3

The course focuses on biotechnology, the integration of biology and technology and its applications in genomics, forensics, agriculture, engineering and medicine that have resulted in new products and services and solved biological/biomedical problems.

Tampa | Morsani College of Medicine | Medical Sciences

BSC 6437 Biotechnology and Bioethics

Credit Hours: 3

Provides students a basic understanding of what biotechnology is and how it is employed throughout the world. Students are to learn the ethical and legal issues facing this technology, and how biotechnology is regulated. Course is not repeatable.

Tampa | Morsani College of Medicine | Medical Sciences

BSC 6457 Modern Basic Tools of Research

Credit Hours: 2

An introduction to modern core research facilities and methodologies used in cancer research. Lec., Lab., Dem. Department Approval Required.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 6865 Conservation Biology Theory

Credit Hours: 3

Surveying major concepts and current issues in the field of conservation biology. Value of biodiversity, conservation, and protection of species and ecosystems at risk, genetic diversity, systematics, endangered species, invasive species, extinction.

St. Petersburg | College of Arts and Sciences | Biology

BSC 6875 Cancer Drug Discovery

Credit Hours: 3

This core course will offer cutting-edge knowledge in cancer drug discovery and chemical biology and reveal the development and use of chemical probes to unravel the mechanisms underlying oncogenesis and innovative anticancer drug design.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 6882 Integrated Mathematical Oncology I

Credit Hours: 3

This course is a broad introduction to phenomenological mathematical modeling of cancer biology specifically focused on how tumors grow and respond to therapy, bridging multiple scales in space and time.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 6883 Integrated Mathematical Oncology II

Credit Hours: 4

This is a deep focus course on data-driven development of mathematical models of tissue homeostasis, cancer development, and treatment response to answer specific open questions in cancer biological and clinical oncology.

Prerequisite(s): BSC 6882 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 6905 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 6910 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 6930 Lectures in Contemporary Biology

Credit Hours: 1

This Biology lecture series includes a diversity of contemporary topics including: molecular regulatory mechanics, evolutionary genetics, organismal physiology and community ecology.

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 6932 Selected Topics in Biology

Credit Hours: 1-4

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 6933 Advances in Integrated Mathematical Oncology

Credit Hours: 2

Students review and orally present current breaking research in mathematical oncology and modeling approaches. Presentations require critical evaluation of the published data. Students also receive critique on presentation skills.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 6935 Graduate Seminar in Biology

Credit Hours: 1

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 6936 Scientific Grant Writing

Credit Hours: 3

Course provides instruction on becoming a successful grant writer as well as understanding the grant proposal writing and review process. Responsibilities of the principle investigator for compliance, fiscal matters, and scientific management of the funded grant will also be covered with guest lecturers from the Division of Sponsored Research.

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 6939 Selected Topics in Cancer Biology

Credit Hours: 1-4

Provides in-depth study of a single aspect of cancer biology. Topics offered vary by semester.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 6940 Internship in Conservation Biology

Credit Hours: 1-3

Internship at a local agency. Internship might involve data collection and analysis in conservation biology or address policy issues. Intended to provide work experience and professional development opportunities.

St. Petersburg | College of Arts and Sciences | Biology

BSC 6945 Graduate Instruction Methods

Credit Hours: 1-3

Special course to be used primarily for the training of teaching assistants.

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 6971 Thesis: Master's

Credit Hours: 2-19

Thesis: Master's

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 7910 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 7911 Directed Research in Cancer Biology

Credit Hours: 1-12

Student research will be performed under the guidance of Ph.D. prior to formation of dissertation committee.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

BSC 7936 Doctoral Seminar

Credit Hours: 1

Graduating Ph.D. students will present a formal seminar based upon their dissertation to the Department of Biology and the public. Restricted to majors.

Tampa | College of Arts and Sciences | Biology - Integrative

BSC 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Biology - Integrative

BUL 5332 Law and the Accountant

Credit Hours: 3

A comprehensive study of commercial law as it affects the practice of accounting.

Prerequisite(s): BUL 3320
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

BUL 5842 Risk Management and Legal Compliance

Credit Hours: 3

This course is designed for non-accounting students who need to understand, monitor and control risks. The content of this course spans corporate governance, risk strategy and legal/regulatory compliance including analysis of significant laws/regulations.

Tampa | Muma College of Business | Business Administration

CAP 5400 Digital Image Processing

Credit Hours: 3

Image formation, sources of image degradation, image enhancement techniques, edge detection operators and threshold selection, low-level processing algorithms for vision, image data compression.

Prerequisite(s): COP 4530
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 5625 Introduction to Artificial Intelligence

Credit Hours: 3

Basic concepts, tools, and techniques used to produce and study intelligent behavior. Organizing knowledge, exploiting constraints, searching spaces, understanding natural languages, and problem solving strategies.

Prerequisite(s): COP 4530
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 5627 Affective Computing

Credit Hours: 3

The study of systems that can express, recognize and respond to human affects by analyzing faces, gestures, body pose, and biological data that includes brain, heart, and respiration signals.

Tampa | College of Engineering | Computer Science and Engineering

CAP 5771 Data Mining

Credit Hours: 3

An introductory course to mining information from data. Scalable supervised and unsupervised machine learning methods are discussed. Methods to visualize and extract heuristic rules from large databases with minimal supervision is discussed.

Prerequisite(s): Undergraduate Statistics.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6011 Multimedia and E-Commerce for IT

Credit Hours: 3

Introduces the design principles of multimedia authoring and communication systems. It covers the interface and characteristics and video processing, multimedia, media encoding/compressions, multimedia editors, current communication standards.

Prerequisite(s): CGS 3823
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6100 Human Computer Interface

Credit Hours: 3

Introduction to the design and evaluation of the interface between a computer based application and a human user.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6415 Computer Vision

Credit Hours: 3

Techniques for description and recognition of objects, use of stereo, texture, and motion information for scene segmentation and description, consistent labeling and matching, use of knowledge and planning in computer vision.

Prerequisite(s): CAP 5400
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6455 Advanced Robotic Systems

Credit Hours: 3

Unmanned ground, aerial and underwater robots. Modeling, kinematics dynamics and control; navigation and collision avoidance; sensor fusion; vision-based navigation; sensor fault detection and isolation; system architectures and robot swarms.

Prerequisite(s): Control Systems, Intro to Robotics, MatLab
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6615 Neural Networks

Credit Hours: 3

Defines models of artificial neural networks, compares these models, and investigates the relationship of neural network learning to other symbolic learning methods.

Prerequisite(s): CAP 5625
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6638 Geometric/Statistical Pattern Recognition Techniques

Credit Hours: 3

Principles and applications of statistical pattern recognition methods, Bayes decision theory, parametric and nonparametric techniques, discriminant function ns, unsupervised classification and clustering.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6663 IT Robotics Application

Credit Hours: 3

Introduction to Robotics and its different applications. Robotics technology is being used in a wide variety of applications that involve ground, aerial and marine systems. Robotics technology and applications will be explored and discussed.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6671 IT Intelligent Agents

Credit Hours: 3

Introduction to Intelligent Agents and its different applications. Intelligent agent technology relates to important areas that include artificial intelligence, neural networks, and expert systems. These areas will be discussed during the class.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6672 Robot Intelligence and Computer Vision

Credit Hours: 3

An introduction to robotic systems with emphasis on the computational aspects of robot control. Topics for discussion: overview of the robotics field, analysis of robot arm kinematics and coordinate transformation, real-time computer control of robot arms, and computer vision. Practical experience in programming robotic systems will be included.

Prerequisite(s): COP 2400
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6736 Geometric Modeling

Credit Hours: 3

The course deals with the representation, design, analysis, processing and visualization of shape information used in a variety of fields of science and engineering.

Prerequisite(s): Data Structures, Programming in a higher level language.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CAP 6940 IT Graduate Practicum

Credit Hours: 3-6

An information technology project-based course that requires the student to investigate, design and implement a real-world application over two semesters or, with approval, one semester.

Tampa | College of Engineering | Computer Science and Engineering

CCE 5035 Construction Management & Planning

Credit Hours: 3

Fundamentals of construction management. Topics include: general definitions, organizational roles, types of contracts, analysis of labor and equipment, cost estimating, contractor cash flow analysis, planning and scheduling, project control, construction administration, quality and safety management, and use of computer software in construction management.

Prerequisite(s): EGN 3613C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CCJ 6057 Cybercrime Capstone

Credit Hours: 1

This is a concluding capstone course in which students create an electronic portfolio documenting how they have met the program's core learning objectives. Overall, the course is a reflective learning exercise documenting both competencies and potential.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6118 Introduction to Criminology Theory

Credit Hours: 4

An introduction to, and comparison of, major historical and contemporary theories that seek to explain criminal behavior or the existence of crime in society.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6406 Theory, Practice, and Research in Law Enforcement

Credit Hours: 3

This issue-oriented course explores the relationships among theory, practice, and research as these are reflected in the problems and challenges that confront law enforcement.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6485 Criminal Justice and Public Policy

Credit Hours: 3

In this course, students will learn about the structure, function, theory and key issues of the criminal justice system. Students will also acquire the skills necessary to analyze public policy in criminal justice.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6624 Seminar in Violence

Credit Hours: 3

This course utilizes psychological, sociological, and biological perspectives to help students to understand different types of violent offenders and various intervention strategies.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6637 Technology Adoption and Crime

Credit Hours: 3

An overview of theories of technology adoption and use, concentrating primarily on information technologies (IT) and those technologies associated with the Internet (e.g., social media).

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6638 Seminar in Nature and Causes of Crime

Credit Hours: 3

Examination of some of the issues green criminologists study and investigate why it is important to study these issues from a criminological perspective. Topics include crime against animals, forests, and water.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6654 Seminar in Drugs and Crime

Credit Hours: 3

The objective of this course is to provide the student a comprehensive understanding of the dynamics of drug use in American society.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6669 Seminar in Social Inequality and Crime

Credit Hours: 3

In this course, students will examine one of the most persistent and divisive issues in criminal justice—racial, and to a lesser extent ethnic, disproportionality in the U.S. criminal justice system (CJS).

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6705 Research Methods in Criminology

Credit Hours: 3-4

Introduction to the basic methods of criminological research; overviews philosophy of science, research ethics, research design issues such as sampling and measurement, and methods of data collection, including survey, experimental, and evaluation research.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6706 Quantitative Analysis in Criminology I

Credit Hours: 4

Introduction to data management utilizing computer statistical packages and elementary statistical techniques used in criminological research: descriptive and inferential statistics, group comparisons, measures of association, linear regression.

Prerequisite(s): CCJ 6705
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6707 Quantitative Analysis in Criminology II

Credit Hours: 3

Intermediate-level data analysis and statistical techniques applied to problems in criminology. Emphasis on multivariate techniques, including multiple regression, path analysis, and nonlinear models.

Prerequisite(s): CCJ 6706
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6708 Quantitative Analysis in Criminology III

Credit Hours: 3

This course familiarizes students with advanced multivariate linear and nonlinear statistical procedures appropriate for analyzing criminological data.

Prerequisite(s): CCJ 6707
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6905 Directed Independent Study

Credit Hours: 1-12

Independent study in which student must have contract with instructor.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6910 Directed Research

Credit Hours: 1-19

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6930 Current Issues in Corrections

Credit Hours: 3

This course is designed to review and analyze the major issues and dilemmas that confront corrections today, including overcrowding, inmate rights, privatization, control of gangs, control of inmates, and the availability or programs and services. Attention will also focus on the strategies and/or controversies associated with these issues.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6931 Seminar in Criminological Theory

Credit Hours: 3

This course is designed to provide an in-depth analysis of specific theoretical issues in criminology.

Prerequisite(s): CCJ 6118
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6935 Topics in Criminology and Criminal Justice

Credit Hours: 3

Analysis and discussion of topics of major concern in criminology and criminal justice that are not covered in regular courses.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6936 Current Issues in Law Enforcement

Credit Hours: 3

This course will focus on some of the most significant issues facing law enforcement agencies today. Some topics included will be: police use of deadly force; review of police conduct; police unionization; police corruption; media relations; civil liability; and community/problem-oriented policing.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6937 Pro Seminar in Criminology

Credit Hours: 1

Provides a forum for presentation and discussion of research ideas by faculty, students, and guests, with a view toward the development of thesis topics.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 7065 Professional Development in Criminology

Credit Hours: 2

Engage in a range of professional activities that form the core of a successful career in the field of criminology. Topics will include: writing a dissertation, teaching, presenting at professional conferences.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 7605 Theories of Criminal Behavior I

Credit Hours: 3

The course is part 1 of a two semesters designed to expose students to the foundations of social scientific theory and the major paradigms within sociology, social psychology, and criminology on which most criminological theories are based.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 7606 Theories of Criminal Behavior II

Credit Hours: 3

An advanced course that builds upon the knowledge base of criminological theory attained in prior coursework.

Prerequisite(s): CCJ 7605
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 7726 Research Methods in Criminology II

Credit Hours: 3

Students will have the opportunity for the practical application of key research processes including classical test theory, item response theory, reliability and validity, item analysis, construct validity, sampling methods, causal inference.

Prerequisite(s): CCJ 6705, CCJ 6706, CCJ 6707
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 7910 Advanced Research

Credit Hours: 1-12

Course is designed to give students an opportunity to conduct independent research under the supervision of a faculty member. May be repeated.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 7940 Teaching Practicum in Criminology

Credit Hours: 1

In this course, a student will receive supervision and mentoring from an experienced teacher in the context of a single undergraduate "live" (not on-line) course, the primary instructor of which is the experienced faculty member.

Tampa | College of Behavioral and Community Sciences | Criminology

CCJ 7980 Doctoral Dissertation

Credit Hours: 2-12

Tampa | College of Behavioral and Community Sciences | Criminology

CDA 5416 Computer System Verification

Credit Hours: 3

This course introduces basic concepts of formal verification. Topics include formal specification, algorithms, and methodologies for scalable verification. It is only for CSE majors or non-majors with permission from the instructor, not repeatable.

Prerequisite(s): CDA 3201, COT 3100, COT 4400, COP 4530
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CDA 6328 Cryptographic Hardware and Embedded Systems

Credit Hours: 3

Efficient hardware implementation of cryptographic algorithms is presented to meet the performance and cost requirements of computing platforms from handheld to server-level computers. Cryptographic implementation attacks and countermeasures are covered.

Tampa | College of Engineering | Computer Science and Engineering

CEG 5115 Foundation Engineering

Credit Hours: 3

Design of shallow foundations, cantilevered and anchored retaining walls, piling, drilled piers and special foundations. Computer applications to geotechnical engineering are covered.

Prerequisite(s): CEG 4011
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CEG 5205 Laboratory Testing for Geotechnical Engineers

Credit Hours: 3

Both routine and advanced forms of soil testing are covered. Emphasis is placed on procedures and application of results to design.

Prerequisite(s): CEG 4011
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CEG 6015 Advanced Geotechnical Topics

Credit Hours: 3

Advanced concepts of shear strength and consolidation of soils; slope stability, nonlinear and secondary consolidation, numerical methods.

Prerequisite(s): CEG 4011, CEG 4011L, CEG 5205
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CEG 6065 Soil Dynamics

Credit Hours: 3

Fundamentals of vibrations, wave propagation, design of foundations, retaining walls and slopes to resist vibrations, liquefaction of soils.

Prerequisite(s): CEG 4011, CEG 4011L, CEG 4012
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CEG 6415 Seepage and Subsurface Drainage

Credit Hours: 3

Design of underdrains, wells, soil filters, fabric filters, and dewatering systems with special emphasis on case studies.

Prerequisite(s): None.
Corequisite(s): CEG 4011
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CEN 6084 Advances in Object Oriented Programming for IT

Credit Hours: 3

This course will explore advanced object oriented principles. Topics will include meta-object protocols, reflexive languages, meta classes and class/object hierarchies' structures and bootstrapping.

Tampa | College of Engineering | Computer Science and Engineering

CES 5105C Advanced Mechanics of Materials I

Credit Hours: 3

Analytical study of the mechanical behavior of deformable solids. Basic concepts, stress and strain transformations, special topics in beams, theory of elasticity, criteria of failure, beams on elastic foundation.

Prerequisite(s): EGN 3331, MAP 2302
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 5209 Structural Dynamics

Credit Hours: 3

Behavior of structural components and systems when subjected to periodic dynamic loads.

Prerequisite(s): CES 3102, EGN 3321
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 5715C Prestressed Concrete

Credit Hours: 3

Fundamental principles of prestressing; calculation of losses; stress analysis and design of simple beams for flexure and shear. Examples of pressures applications.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6010 Structural Life Prediction

Credit Hours: 3

Prediction of durability of structures, detection and evaluation of structural corrosion damage in steel/cementitious system, structure corrosion damage prevention, control and rehabilitation techniques.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6103 Experimental Stress Analysis

Credit Hours: 3

This course will provide the tools of research necessary to design experiments and/or instrumentation schemes for directed studies. It is intended for structural and geotechnical engineering graduates conducting master's or doctoral research.

Prerequisite(s): EGN 3331, EGN 3373
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6107C Advanced Mechanics of Materials II

Credit Hours: 3

Continuation of CES 5105C. Structural stability of beam-columns and frames, calculus of variations and energy methods, introduction to viscoelasticity and plasticity.

Prerequisite(s): CES 5105C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6118 Applied Finite Elements

Credit Hours: 3

The course focuses on applying the finite element method to types of problems encountered in various fields of engineering. In the course, underlying theories are presented, enough hand calculations are done to ensure an understanding of the methods, and then students solve problems using the ANSYS finite element program. The course is ideally suited for engineers wanting an understanding of the finite element method as applied to their jobs, graduate students wishing to apply the finite element method to their research problems, and students wanting a preparation for the Department's computational mechanics course sequence.

Prerequisite(s): CES 3102
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6144 Advanced Structural Analysis

Credit Hours: 3

This course provides a firm foundation in matrix structural analysis with emphasis on the direct stiffness method. The theory and development of the matrix equations for truss and frame structures in two- and three-dimensions will be covered.

Prerequisite(s): EGN 3331, EGN 4453, CES 3102
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6230 Advanced Structural Mechanics

Credit Hours: 3

This course develops linear elasticity from kinematics, equilibrium through linear constitutive theory.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6326 Design of Concrete Bridges

Credit Hours: 3

Bridge Classification, AASHTO loads and load combinations, load distribution, design of typical superstructures and substructures for concrete and prestressed bridges.

Prerequisite(s): CES 4702, CES 5715C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6586 Design of Structures to Resist Natural Hazards

Credit Hours: 3

Study of natural hazards (wind, earthquakes & ocean waves) and their interaction with structures. Use of exact and approximate methods of analysis, computer modeling, and design provisions for structures to resist the aforementioned loads.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6609 Advanced Steel Design

Credit Hours: 3

Advanced topics in steel design. Topics covered include connection design, torsion of wide range sections, and optimum structural design.

Prerequisite(s): CES 4605
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6706 Advanced Concrete Design

Credit Hours: 3

Advanced topics in concrete designs. Topics include torsion two way floor systems, composite construction, slabs on grade, and deep beams.

Prerequisite(s): CES 4702
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6716 Design of Continuous Post-Tensioned Structures

Credit Hours: 3

Methods of analysis and design of post-tensioned statically indeterminate structures. Emphasis will be on the design of two-way slabs for floor systems using the equivalent frame method and load balancing.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6835 Design of Masonry Structures

Credit Hours: 3

This course provides an overview of the design of masonry structures using concrete masonry units. It covers both working stress and strength design of typical elements such as walls and lintels and simple structures.

Prerequisite(s): CES 4702
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6841 Infrastructure I: Repair/Rehab of Structures

Credit Hours: 3

This course focuses on the repair of structures using fiber reinforced polymers.

Prerequisite(s): CES 4702
Corequisite(s): CES 5715C
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CES 6935 Graduate Structures/Materials Seminar

Credit Hours: 1

This course consists of oral presentations made by graduate structures/materials seminar students, faculty members, and outside speakers including practitioners on their current topics of structures and materials engineering.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 5933 Special Topics in Civil Engineering and Mechanics

Credit Hours: 1-5

New technical topics of interest to civil engineering students.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6311C Introduction to Data Science for Civil Engineers

Credit Hours: 2

This course offers students the opportunity to apply data science skills to civil engineering projects. The course gives students opportunities to improve their data analysis, teamwork, and communication skills.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6720 Electrochemical Diagnostic Techniques

Credit Hours: 3

Fundamentals and applications of electrochemical diagnostic techniques. Focus on electrochemical impedance spectroscopy to evaluate reaction rates in corrosion and interfacial phenomena of materials. Includes research project.

Prerequisite(s): EGN 3365 or equivalent basic Materials Science course.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6906 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6915 Directed Research

Credit Hours: 1-19

Course consists of directed research on topics selected by student and professor. The topics vary. The course allows students to develop research skills and independent work disciplines.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6933 Special Topics in Civil and Environmental Engineering

Credit Hours: 1-4

Topics to be chosen by students and instructor permitting newly developing subdisciplinary special interests to be explored.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6941 Graduate Instruction Methods

Credit Hours: 1

This course provides the opportunity for students to learn the principles and effective teaching methods used by engineering educators. This course follows the ASCE Excellence in Civil Engineering Education model of engineering education.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6945 Graduate Research Methods in Civil & Environmental Engineering

Credit Hours: 2

Course covers proposal writing including review of successful proposals and scientific literature, developing research hypotheses and objectives, presenting preliminary results and developing a research program. Required core course for doctoral students.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6950 Mentoring Novice Researchers

Credit Hours: 1

This course is designed for graduate students who are mentoring undergraduate researchers through the NSF Research Experience for Undergraduates (REU), Research Experience for Teachers (RET) and similar programs.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 6971 Thesis: Master's

Credit Hours: 2-19

Thesis/Specialist project hours.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 7915 Directed Research

Credit Hours: 1-19

Course consists of directed research on topics selected by student and professor. The topics vary. The course allows students to develop research skills and independent work disciplines.

Tampa | College of Engineering | Civil and Environmental Engineering

CGN 7980 Dissertation Doctoral

Credit Hours: 2-19

Research and writing of a dissertation.

Tampa | College of Engineering | Civil and Environmental Engineering

CGS 6210 Computer Hardware Systems for Education

Credit Hours: 3

This course focuses on the development of an understanding of microcomputer hardware that allows individuals to teach as well as make decisions concerning purchase, repair, and appropriate use. Topics include: basic concepts of digital electronics, the operation of a digital computer system, major categories of computer peripherals, historical development of electronic computers, and selection and maintenance of computers in an educational setting.

Tampa | College of Education | Educational and Psychological Studies

CGS 6842 IT and Systems for E-Business

Credit Hours: 3

This course provides a managerial perspective on how Web Design and Computing are evolving and how they will impact future enterprise e-solution. It will cover both the foundations of Web design/Computing and the important technological advancements.

Tampa | College of Engineering | Computer Science and Engineering

CHM 5225 Intermediate Organic Chemistry I

Credit Hours: 3

This course will extend organic chemistry beyond the undergraduate level and will emphasize concepts of stereochemistry and reaction mechanisms.

Prerequisite(s): CHM 2211, CHM 2211L
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 5226 Intermediate Organic Chemistry II

Credit Hours: 3

An introduction to synthetic organic chemistry for graduate students and advanced undergraduates. Semester II.

Prerequisite(s): CHM 5225
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 5452 Polymer Chemistry

Credit Hours: 3

Fundamentals of polymer synthesis, structure, properties, and characterization.

Prerequisite(s): CHM 2211, CHM 2211L, and CHM 3400 or CHM 4410
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 5621 Principles of Inorganic Chemistry

Credit Hours: 3

Chemical forces, reactivity, periodicity, and literature in organic chemistry; basic core course.

Prerequisite(s): CHM 4411, CHM 4610
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 5931 Selected Topics in Chemistry

Credit Hours: 1-3

The following courses are representative of those that are taught under this title: Natural Products, Stereochemistry, Reactive Intermediates, Photochemistry, Instrumental Electronics, Advanced Lab Techniques, Heterocyclic Chemistry, etc.

Tampa | College of Arts and Sciences | Chemistry

CHM 6036 Chemical Biology

Credit Hours: 3

Current research directions in chemical biology. Topics include chemical and biosynthesis of peptides, proteins and nucleic acids, genetic and protein engineering, combinatorial chemistry, targeted probes and imaging, bioorthogonal reactions, etc.

Prerequisite(s): BCH 3053 or BCH 4033
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 6138 Mass Spectrometry

Credit Hours: 3

This course covers the topic of mass spectrometry from physical principles and theory to implementation and method development.

Tampa | College of Arts and Sciences | Chemistry

CHM 6150 Advanced Analytical Chemistry

Credit Hours: 3

A study of complete analytical process, including sample handling, separations, the analysis step, and statistical interpretation of data. Emphasis placed on separations and statistics. Lec.

Tampa | College of Arts and Sciences | Chemistry

CHM 6235 Spectroscopic Analysis of Organic Compounds

Credit Hours: 3

This course provides the student with a thorough understanding of the theory and use of spectroscopic techniques (MS, IR, UV-vis, and NMR,) and their use in identification of organic compounds from the spectroscopic data from techniques discussed.

Prerequisite(s): CHM 2211
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 6250 Advanced Organic Chemistry I: Synthesis

Credit Hours: 3

Detailed consideration of modern synthetic methods. Lec.

Prerequisite(s): CHM 5225
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 6263 Advanced Organic Chemistry II: Physical-Organic

Credit Hours: 3

Organic reaction mechanisms emphasizing the interpretation of experimental data. Lec.

Prerequisite(s): CHM 5225
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 6279 Introduction to Drug Discovery

Credit Hours: 3

Explores the entire drug discovery process, from initial target identification and hit generation through lead optimization and clinical trials to FDA approval. Case studies will be used to illustrate the process.

Prerequisite(s): BSC 2011, CHM 2211
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Chemistry

CHM 6440 Reaction Kinetics

Credit Hours: 3

The course covers macro- and microscopic reaction kinetics; rate laws of model reactions; enzyme catalysis; reactions in solutions, gases or on solid surfaces; collision and transition state theories; potential energy surfaces; and unimolecular reactions.

Tampa | College of Arts and Sciences | Chemistry

CHM 6480 Advanced Quantum Mechanics I

Credit Hours: 3

Basic theoretical concepts and mathematical framework; applications to simple systems.

Tampa | College of Arts and Sciences | Chemistry

CHM 6804 Advanced Safety in the Chemistry Laboratory

Credit Hours: 1

This is a course designed to develop a solid foundation in the fundamentals of safety in the chemistry laboratory and a strong safety ethic that can support good lab practices in academia, industry, or any other lab setting.

Tampa | College of Arts and Sciences | Chemistry

CHM 6810 Methods of Instruction in Higher Ed Chemistry

Credit Hours: 3

This course presents pedagogical approaches associated with evidence-based effective instruction for postsecondary chemistry education.

Tampa | College of Arts and Sciences | Chemistry

CHM 6811 Classroom Assessment Practices in Chemistry

Credit Hours: 3

This course addresses the theory and practice of assessments in chemistry. The course will focus on the design, implementation, and evaluation of classroom assessments and the rationale for considering alternative assessments.

Tampa | College of Arts and Sciences | Chemistry

CHM 6907 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Arts and Sciences | Chemistry

CHM 6935 Graduate Seminars in Chemistry

Credit Hours: 1

Required every semester (when offered) for all students enrolled in Chemistry graduate program. Requires participation in and attendance at the weekly departmental seminar.

Tampa | College of Arts and Sciences | Chemistry

CHM 6936 Chemistry Colloquium

Credit Hours: 1

Frequent (usually weekly) small-group analysis of current developments.

Tampa | College of Arts and Sciences | Chemistry

CHM 6937 Discipline-Based Education Research Colloquium

Credit Hours: 3

The course involves two types of presentations that are typically expected of graduate students: a research talk and a literature review.

Tampa | College of Arts and Sciences | Chemistry

CHM 6938 Selected Topics in Chemistry

Credit Hours: 1-3

Representative titles taught include: Symmetry and Group Theory, Photochemical Kinetics, Quantum Mechanical Calculations, Advanced Chemical Thermodynamics, Reaction Mechanisms, Advanced Instrumentation, Separations and Characterizations, Spectroscopy, etc.

Tampa | College of Arts and Sciences | Chemistry

CHM 6945 Investigating Chemical Education Research in the United States

Credit Hours: 3

Introduction to the field of Chemical Education Research including the types and kinds of research conducted, primary publication venues, seminal and recent research contributions.

Tampa | College of Arts and Sciences | Chemistry

CHM 6946 Graduate Instruction Methods

Credit Hours: 1-4

Special course for the training of teaching assistants.

Tampa | College of Arts and Sciences | Chemistry

CHM 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Chemistry

CHM 6973 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Chemistry

CHM 6978 Advanced Research in Chemistry

Credit Hours: 3

This is a required core course for all of our graduate students as a means for them to gain familiarity in the Chemistry department's graduate program and to develop competency in presentations, writing, and instructional methods.

Tampa | College of Arts and Sciences | Chemistry

CHM 7820 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Chemistry

CHM 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Chemistry

CIS 6220 Penetration Testing for IT

Credit Hours: 3

Penetration testing and related software tools are presented. Legalities and various cyber-attacks such as distributed denial of service, man-in-the-middle, and password attacks are covered. Methods to correct security flaws are given.

Tampa | College of Engineering | Computer Science and Engineering

CIS 6373 Foundations of Software Security

Credit Hours: 3

Introduction to research in foundations of software security. Basic static and dynamic enforcement of security policies. Roles and meanings of policies, properties, mechanisms, and enforcement. Language-based security and tools for specifying security.

Tampa | College of Engineering | Computer Science and Engineering

CIS 6377 Information Security Architecture for IT

Credit Hours: 3

The course outlines a complete road map to a successful adaptation and implementation of a security program based on a code of practice for information security management.

Tampa | College of Engineering | Computer Science and Engineering

CIS 6511 IT Risk Management

Credit Hours: 3

Various aspects of Risk Managements throughout the life of a project. The course will also present various quantitative/qualitative risk assessment models.

Tampa | College of Engineering | Computer Science and Engineering

CIS 6900 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor. Requires completed contract prior to enrollment.

Tampa | College of Engineering | Computer Science and Engineering

CIS 6930 Special Topics

Credit Hours: 1-5

Tampa | College of Engineering | Computer Science and Engineering

CIS 6940 Graduate Instruction Methods

Credit Hours: 1-4

Special course to train graduate teaching assistants.

Tampa | College of Engineering | Computer Science and Engineering

CIS 6946 Internships/Practicums/Clinical Practice

Credit Hours: 0-3

Practical computer science and/or computer engineering work under industrial supervision with a faculty approved outline and end-of-semester report. One semester for variable credit and S-U only.

Tampa | College of Engineering | Computer Science and Engineering

CIS 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Engineering | Computer Science and Engineering

CIS 7910 Directed Research

Credit Hours: 1-19

Requires completed contract prior to enrollment.

Tampa | College of Engineering | Computer Science and Engineering

CIS 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Engineering | Computer Science and Engineering

CJC 6020 Theory, Practice, and Research in Corrections

Credit Hours: 3

Examination of the interrelationships between theory and practice in corrections, as these are affected by empirical research and systematic program evaluation.

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6025 Policy Organization, Behavior, and Administration

Credit Hours: 3

Graduate seminar focusing on the topics of police behavior, organization, and administration.

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6029 Advanced Seminar in Law Enforcement

Credit Hours: 3

Students integrate theory and empirical data to critically analyze issues in law enforcement practice and policy.

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6624 Introduction to Digital Evidence

Credit Hours: 3

This course is designed to facilitate development of the basic knowledge and skills necessary to recognize, identify, collect, and preserve digital evidence in any kind of criminal investigation. Focus is upon a wide array of digital technologies.

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6625 Network Forensic Criminal Investigations

Credit Hours: 3

As applied to criminal investigations, this course focuses on forensic security issues involving access to data stored on networked computer systems and the transmission of data between systems.

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6627 Digital Evidence Recognition and Collection

Credit Hours: 3

Instructs participants in the basics of recognizing potential sources of electronic evidence, preparing them to respond to an electronic crime scene, and to collect items of evidentiary value to be used in court proceedings.

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6688 Cybercrime and Criminal Justice

Credit Hours: 3

Introduction to the topic of criminality in online environments. Topics include hacking, online identity theft, fraud, trade in illicit substances/items, sexual crimes online, and responses to cybercriminality.

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6690 Cybercrime Law and Social Policy

Credit Hours: 3

This course will introduce the student to the basic legal foundations related to the enforcement of criminal statutes and investigations of violations of law in the realm of illicit activities generally known as cybercrime.

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6716 Criminal Justice Graduate Capstone Seminar

Credit Hours: 3

In this capstone seminar students will be required to demonstrate an in-depth knowledge of a specific problem within their agency as well as a proposed solution(s).

Tampa | College of Behavioral and Community Sciences | Criminology

CJE 6945 Practicum for Digital Forensics

Credit Hours: 3

This "experiential learning" or practicum course allows students to apply knowledge from their program and to critically consider and address issues relevant to the cybersecurity field.

Tampa | College of Behavioral and Community Sciences | Criminology

CJL 6421 Law, Crime and Justice

Credit Hours: 4

An exposition of historical and contemporary legal principles, procedures, and issues as reflected in Constitutional provision, statutes, and case law.

Tampa | College of Behavioral and Community Sciences | Criminology

CLP 6166 Psychopathology

Credit Hours: 3

Exploration of current approaches to the understanding of pathological behavior and implications for theories of personality. A survey of treatment methods is included.

Tampa | College of Arts and Sciences | Psychology

CLP 6438 Psychological Assessment: Theory and Research

Credit Hours: 1-4

Courses cover theory, research, and applications of psychological assessment in areas, such as interviewing, intellectual and cognitive functioning, neuropsycho-diagnostics, and personality testing.

Tampa | College of Arts and Sciences | Psychology

CLP 6937 Topics in Clinical Psychology

Credit Hours: 1-3

Courses on topics, such as humanistic psychology, community psychology, and clinical neuropsychology.

Tampa | College of Arts and Sciences | Psychology

CLP 7188 Clinical Psychology Interventions

Credit Hours: 1-4

Study of the theoretical, empirical, and applied foundations of the major systems of therapeutic intervention.

Tampa | College of Arts and Sciences | Psychology

CLP 7379 Graduate Seminar in Clinical-Community Psychology

Credit Hours: 1-3

Seminars on topics, such as psychopathology, community psychology, clinical issues, personality, and developmental psychology.

Tampa | College of Arts and Sciences | Psychology

CNT 6215 Computer Networks

Credit Hours: 3

Design and analysis of data communication networks with an emphasis on the Internet and its protocols. Key topics include protocol models, HTTP, TCP, IP, local area networks, routing, flow control, multimedia networking, and performance evaluation.

Tampa | College of Engineering | Computer Science and Engineering

CNT 6410 Emerging Topics in Network Security

Credit Hours: 3

Covers basic concepts of network security, network security primitives, authentication techniques, security and privacy issues in modern wireless systems, and vulnerability analysis of electric power grids.

Tampa | College of Engineering | Computer Science and Engineering

COM 5930 Topics in Communication Studies

Credit Hours: 3

Topical issues in communication.

Tampa | College of Arts and Sciences | Communication

COM 6001 Theories and Histories of Communication

Credit Hours: 3

An introduction to the history and theory of communication as a discipline: its relationship to the arts and sciences, and a survey of the historical development of the field, emphasizing current issues in theory, research, and practice.

Tampa | College of Arts and Sciences | Communication

COM 6017 Gender in the Workplace

Credit Hours: 3

This course focuses on the workplace as a site of gendered communication practices. A variety of work settings will be analyzed in terms of how they construct gender identities, reinforce public-private

distinctions and maintain traditional career models.

Tampa | College of Arts and Sciences | Communication

COM 6025 Health Communication

Credit Hours: 3

Application of communication theory and research to the health context including provider-patient communication, health information campaigns, and health beliefs and behavior. Special attention to the value issues in health communication.

Tampa | College of Arts and Sciences | Communication

COM 6045 Communicating Leadership

Credit Hours: 3

Effective leadership today focuses less on control and more on the strategic use of communication to build relationships and guide behavior. This course examines the various ways leaders can communicate more effectively in contemporary organizations.

Tampa | College of Arts and Sciences | Communication

COM 6121 Organizational Communication

Credit Hours: 3

A study of communication theory and behavior within organizational settings: role of communication, communication climates, communication networks, leadership.

Tampa | College of Arts and Sciences | Communication

COM 6248 Historical Perspectives on Communication

Credit Hours: 3

Explores prominent figures and theoretical movements in area of Communication (Interpersonal or Organizational Communication, Cultural Studies, Rhetorical Studies, or Performance Studies). [Repeatable for credit as topics vary.]

Tampa | College of Arts and Sciences | Communication

COM 6306 Action Research

Credit Hours: 3

Action research is rooted in engagement, involving collaboration with community or organizational partners who will be affected by the research. Through hands-on projects we learn principles of action research and explore communication and ethical issues.

Tampa | College of Arts and Sciences | Communication

COM 6313 Interpreting Communication Research

Credit Hours: 3

This course is designed to give students tools to help them interpret the mainstream research literature in communication and to judge research on a quality continuum. No assumptions are made about student understanding of quantitative research methods.

Tampa | College of Arts and Sciences | Communication

COM 6345 Contemporary Cultural Studies

Credit Hours: 3

Examines theoretical issues and interpretive approaches for exploring questions of knowledge, identity, experience, meaning and value in modern culture through the study of communication.

Tampa | College of Arts and Sciences | Communication

COM 6400 Communication Theory

Credit Hours: 3

An examination of communication theory through selected reading in the works of major theorists past and present.

Prerequisite(s): COM 6001
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Communication

COM 6418 Communication and Systems Practice

Credit Hours: 3

Systems theories offer possibilities for understanding interconnections and emergence, identities and environments, and stability and change, with communication processes being central. We explore social systems principles by linking theory and praxis.

Tampa | College of Arts and Sciences | Communication

COM 6605 Media Studies

Credit Hours: 3

Study of the impact of mass and mediated forms of communication on individuals, groups, societies, and cultures. Several theoretical and critical perspectives are considered.

Tampa | College of Arts and Sciences | Communication

COM 6724 Communication Training in Organizations

Credit Hours: 3

Provides holistic understanding of how communication training is developed and conducted in organizations. Students learn to assess communication training needs, design/deliver effective communication training programs, and evaluate their effectiveness.

Tampa | College of Arts and Sciences | Communication

COM 7325 Seminar in Communication Research Methods

Credit Hours: 3

Examines the research practices and methodologies of communication as a discipline, including bibliographical resources, research designs, research techniques, and forms of scholarly presentation.

Tampa | College of Arts and Sciences | Communication

COM 7933 Seminar in Communication Studies

Credit Hours: 3

Variable topics course.

Tampa | College of Arts and Sciences | Communication

COP 5016 Introduction to Unix and C

Credit Hours: 3

Unix operating system. Internet resources. Netscape, WWW and HTML. ANSI C language, syntax. Arrays and pointers. Iterations and recursions. Header files and macros. C libraries. Structuring data. File I/O.

Tampa | College of Engineering | Computer Science and Engineering

COP 6021 Programming Languages: Design and Analysis

Credit Hours: 3

In-depth, graduate-level study of the design and analysis of programming languages. Functional programming, deductive systems, operational semantics, type systems, and proofs of type safety.

Tampa | College of Engineering | Computer Science and Engineering

COP 6611 Operating Systems

Credit Hours: 3

Operating systems functions and design, resource management, protection systems, process communication, and deadlocks.

Tampa | College of Engineering | Computer Science and Engineering

COP 6621 Programming Languages and Translation

Credit Hours: 3

Grammars and languages, symbols, strings, syntax, parsing, the design of a compiler, storage organization and symbol tables, translator writing systems.

Tampa | College of Engineering | Computer Science and Engineering

COP 6625 Compilers

Credit Hours: 3

In-depth, graduate-level study of compiler design and implementation. Lexical, syntactic, and semantic analysis. Type safety. Code generation. Run-time support. Garbage collection. Code optimizations.

Tampa | College of Engineering | Computer Science and Engineering

COT 6405 Introduction to the Theory of Algorithms

Credit Hours: 3

Analysis techniques for algorithms. Characterizing algorithms in terms of recurrence relations, solutions of recurrence relations, upper and lower bounds. Graph problems, parallel, algorithms, NP completeness and approximation algorithms, with relationship to practical problems.

Prerequisite(s): COT 3100, COT 4400
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

CPO 5934 Selected Topics in Comparative Politics

Credit Hours: 3

Studies specific substantive areas in Comparative Politics, such as political economy or the politics of specific countries or regions.

Tampa | College of Arts and Sciences | Government and International Affairs

CPO 6077 Social Movements

Credit Hours: 3

Introduces students to the main theoretical perspectives of social movement scholarship and investigates core social movements in the US and beyond.

Tampa | College of Arts and Sciences | Government and International Affairs

CPO 6091 Seminar in Comparative Politics

Credit Hours: 3

Extensive examination of the major theories and approaches used in the study of Comparative Politics. Seminar format.

Tampa | College of Arts and Sciences | Government and International Affairs

CRW 6025 Special Topics in Creative Writing

Credit Hours: 3

This course will offer coverage of current topics in creative writing based on student demand and instructor interest. Topics offered may include memoir, novel writing, screenwriting, and editing and publishing.

Tampa | College of Arts and Sciences | English

CRW 6130 Fiction Writing

Credit Hours: 3

A study of the process of fiction writing and the artistic demands associated with its forms, from microfiction to the novel.

Tampa | College of Arts and Sciences | English

CRW 6164 The Craft of Fiction

Credit Hours: 3

A study in the forms and technique of fiction writing. Students will examine how novels and stories are constructed, analyze craft (plotting, characterization, point of view) and the relationship of form and craft, and study the variety of approaches to storytelling (realism, magic realism, minimalism, and metafiction).

Tampa | College of Arts and Sciences | English

CRW 6236 Nonfiction Writing

Credit Hours: 3

An exploration of the different types of nonfiction writing, such as memoir, travel, nature, commentary, book review, essay, and biography.

Tampa | College of Arts and Sciences | English

CRW 6331 Poetry Writing

Credit Hours: 3

A study of the process of poetry writing and the demands associated with its form, both free verse and metrical.

Tampa | College of Arts and Sciences | English

CRW 6352 The Craft of Poetry

Credit Hours: 3

An intensive examination of established schools of poetic writing: their themes, imagery, and approach to subject matter. Students also will write and submit original poetry for private and group constructive evaluation.

Tampa | College of Arts and Sciences | English

CRW 6726 Practicum in Literary Editing and Publishing

Credit Hours: 3

Introduction to the publishing industry, including book publishing, literary magazines, editing, agents, book design and packaging, book marketing and publicity, interviewing, and book reviewing. Students assist in publication of a literary magazine.

Tampa | College of Arts and Sciences | English

CST 6920 Non-Credit Graduate Study

Credit Hours: 0

This course is used for students on educational experiences to maintain continuous enrollment/good standing (i.e., Peace Corps).

Tampa | College of Arts and Sciences | Interdisciplinary Studies

CST 6934 Special Topics in Graduate School: Research Practicum

Credit Hours: 3

Variable titles offered on topics of special interest pertaining to research practices.

Tampa | College of Arts and Sciences | Interdisciplinary Studies

CST 6935 Special Topics in Graduate School: Professional Development

Credit Hours: 1-3

Variable titles offered on topics of special interest pertaining to professional development.

Tampa | College of Arts and Sciences | Interdisciplinary Studies

CTS 6716 Network Programming for IT

Credit Hours: 3

Network programming using high level languages. Topics covered will include distributed computing using remote method invocation technologies, peer-to-peer protocols, w-level socket-based programming and mobile code.

Tampa | College of Engineering | Computer Science and Engineering

CWR 6105 Vadose Zone Hydrology

Credit Hours: 3

Analysis of flow and transport in porous media with emphasis on processes in the unsaturated vadose zone and applications in soil hydrology.

Tampa | College of Engineering | Civil and Environmental Engineering

CWR 6235 Free Surface Flow

Credit Hours: 3

Fundamental and applied aspects of free surface flow, including river hydraulics, canal flow, and open channel design.

Prerequisite(s): CWR 4202
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CWR 6239 Waves and Beach Protection

Credit Hours: 3

A study of the fundamentals of shoreline dynamics including distribution of wave energy, motion of beach sand, stable configurations and protective measures.

Prerequisite(s): CWR 6820
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CWR 6305 Urban Hydrology

Credit Hours: 3

A study of the quantity and quality problems and solution techniques associated with urban runoff.

Tampa | College of Engineering | Civil and Environmental Engineering

CWR 6533 Water Quality Modeling

Credit Hours: 3

This course will develop the fundamental principals and concepts of water quality modeling and apply water quality models in a variety of contexts. The mathematical representations of environmental transport and transformation processes will be elucidated. Models of different complexity will be applied to a variety of environmental contexts.

Tampa | College of Engineering | Civil and Environmental Engineering

CWR 6534 Coastal and Estuary Modeling

Credit Hours: 3

Digital modeling of coastal and estuary systems, currents tide heights, sediment transport, erosion, data collection, temperature distribution, source and sinks. Special emphasis on Florida regions.

Tampa | College of Engineering | Civil and Environmental Engineering

CWR 6535 Hydrologic Models

Credit Hours: 3

A study of the theoretical principles of hydrologic modeling and an examination of various numerical hydrologic models available. Students will be required to develop and apply computer models.

Tampa | College of Engineering | Civil and Environmental Engineering

CWR 6538 Advanced Hydrologic Models

Credit Hours: 3

To present the theoretical and applied concepts of advanced hydrologic modeling and especially integrated surface water/ground water modeling and to examine various numerical hydrologic models used in engineering practice.

Prerequisite(s): CWR 6535, GLY 6739
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

CWR 6820 Coastal Waves and Structures

Credit Hours: 3

Fundamentals of wave motion and the mutual interaction of waves and structures. A design project is included.

Tampa | College of Engineering | Civil and Environmental Engineering

DEP 6058 Developmental Psychology

Credit Hours: 3

Basic survey of research and theory in human developmental processes.

Tampa | College of Arts and Sciences | Psychology

DIE 6127 Principles of Leadership and Management of Food and Nutrition

Credit Hours: 2

Course equips students with leadership and management skills needed to establish and maintain effective food and nutrition programs. Food service and clinical nutrition management is addressed so students can adapt to a changing healthcare environment.

Tampa | College of Public Health | Community and Family Health

DIE 6248 Advanced Clinical Nutrition

Credit Hours: 3

An integration of pathophysiology, biochemistry, and nutrition concepts that form the basis for medical nutrition therapy in health care.

Tampa | College of Public Health | Community and Family Health

DIG 6007 Trends in Digital Humanities

Credit Hours: 3

Intensive study of one or more current issues in digital humanities. Involves readings in theory, discussion leading, reverse engineering, and participation in current Digital Humanities project.

Tampa | College of Arts and Sciences | Interdisciplinary Arts and Sciences

DIG 6178 Introduction to Digital Humanities

Credit Hours: 3

Introduction to the interdisciplinary field of Digital Humanities. Examines contemporary theories and debates at the intersection of technology and humanities research and learning, provides practical experience with specific DH tools and methods.

Tampa | College of Arts and Sciences | Interdisciplinary Arts and Sciences

DIG 6585 Digital Humanities Capstone Project

Credit Hours: 3

Student designs and implements a significant demonstration segment of a practical Digital Humanities project (or serves in an internship and documents it with a portfolio). A written proposal for the project is also required.

Prerequisite(s): DIG 6178 with a minimum grade of C-
Tampa | College of Arts and Sciences | Interdisciplinary Arts and Sciences

DIG 6774C Virtual Museums

Credit Hours: 3

This course explores a wide range of digital applications on public history focusing on the impact 3D visualization has got on public historians, curators, museum educators, docents and local and global public.

Prerequisite(s): None.
Tampa | College of Arts and Sciences | History

DIG 6818 Feminist Digital Humanities

Credit Hours: 3

This course offers an introduction to foundational concepts and analytical tools in the study of feminist digital humanities and conducts key feminist digital humanities projects using feminist literature.

Tampa | College of Arts and Sciences | English

DIG 6834C Digital Antiquity

Credit Hours: 3

This course provides a hands-on, project based introduction to digital technologies as they are used in the study of the ancient world.

Tampa | College of Arts and Sciences | History

DIG 6886 Digital Pedagogy

Credit Hours: 3

Introduction to wide range of foundational concepts & digital tools in digital pedagogy. Designed for English majors & English students, focus is on what the digital can offer to theorizing & teaching of reading, writing, & research in humanities studies.

Tampa | College of Arts and Sciences | English

EBD 6215 Advanced Theories and Practices in Emotional Handicaps

Credit Hours: 3

In-depth study of specific behavioral disorders of children and youth, with an emphasis on educational implications and interventions.

Prerequisite(s): Introductory course in special education.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EBD 6216 Educational Strategies for Students with Behavior Disorders

Credit Hours: 3

Advanced methods and materials for planning, implementing, and evaluating educational interventions with students with behavior disorders. For certification.

Tampa | College of Education | Teaching and Learning

EBD 6246 Educating Students with Autism

Credit Hours: 3

This course provides an overview of the characteristics, etiology, and prevalence of autism spectrum disorders, along with the knowledge and skills necessary to support the learning of children with autism spectrum disorders.

Tampa | College of Education | Teaching and Learning

EBD 6943 Supervised Practicum in Behavior Disorders

Credit Hours: 1-12

Supervised graduate practicum experiences with children who have behavior disorders. For students seeking certification only.

Tampa | College of Education | Teaching and Learning

ECH 5320 Chemical Process Engineering I

Credit Hours: 4

The course presents the principles of mass balances, classical thermodynamics, phase equilibria, energy balances, and psychrometrics. The student will learn by doing many case studies. Computer software will be used to obtain solutions to many problems.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5321 Chemical Process Engineering II

Credit Hours: 4

Basic concepts of fluid mechanics, including viscous fluids, pipe flow with minor losses, simple fluid machinery, momentum and external flow. Steady state conductive and convective heat transfer. Not available for chemical engineering students.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5322 Chemical Process Engineering III

Credit Hours: 4

Basic concepts of fluid phase equilibrium, chemical equilibrium, separation processes, and chemical reactors. Not available for chemical engineering students.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5324 Automatic Process Control II

Credit Hours: 3

The course covers the root locus and frequency response methods to study stability of control loops. The techniques of ratio, cascade, feed forward, selective, override, and multi-variable control techniques are discussed in detail and shown how to utilize to design control systems, z-transforms and discrete controllers including PID, Dahlin and deadline compensation.

Prerequisite(s): ECH 4323C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5327 Chemical Process Control

Credit Hours: 4

Basic concepts of feedback control, process dynamics, process controllers (PID)including tuning, control loop stability, cascade, ratio, selective, override, feedforward, and multivariable control. Not available for chemical engineering students.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5740 Theory and Design of Bioprocesses

Credit Hours: 3

Introduction to biotechnology, including applied microbiology, enzyme technology, biomass production, bioreactor design, and transport processes in biosystems.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5747C Selected Topics in Chemical Engineering Biotechnology

Credit Hours: 1-3

Selected topics in engineering in biotechnology, including cell separation technology, immobilized enzymes and cells, food engineering, biohazardous waste, and bioseparations.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5748 Selected Topics in Biomedical Engineering

Credit Hours: 1-3

Selected topics in biomedical engineering, including biomedical engineering, biomedical materials, biodynamics of circulation, separation processes in biomedical systems, and artificial organ systems.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5785 Sustaining the Earth: An Engineering Approach

Credit Hours: 3

An approach of global perspective on ecological principles revealing how all the world's life is connected and sustained within the biosphere and how engineering provides the tools to design solutions engaging materials science & environmental ethics.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5786 Green Engineering

Credit Hours: 3

Synthesis and design of green chemical, biological and energy conversion processes and products. Environmental impact analysis; green chemistry and materials; life cycle analysis; industrial ecology; systematic methods and real-life examples.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5930 Special Topics III

Credit Hours: 1-4

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5931 Special Topics IV

Credit Hours: 1-4

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 5945 Chemical Engineering Industrial Internship

Credit Hours: 1-6

Individual study as practical engineering work at an industrial facility or laboratory under the supervision of a faculty member interacting with the sponsoring industrial facility or laboratory.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6105 Advanced Thermodynamics I

Credit Hours: 3

Selected topics in classical and irreversible thermodynamics.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6107 Molecular Thermodynamics

Credit Hours: 3

Introduction of thermodynamics from a molecular perspective. The focus will be on applications to chemical engineering systems and processes.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6285 Advanced Transport Phenomena

Credit Hours: 3

Formulation of flux equations for fluid, heat & mass transport. Development & resolution of unsteady state and multidimensional models in various co-ordinate systems. Analytical & numerical techniques to solve the resulting equations will be presented.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6412 Processes Analysis and Modeling

Credit Hours: 3

Computer-controlled data acquisition and analysis aimed at development and evaluation of empirical and physical models of chemical and mechanical engineering processes.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6417 Bioseparations

Credit Hours: 3

Design and analysis of bioseparation processes, including crystallization, membrane separations, chromatography, liquid-liquid extraction, electrophoresis, and emerging technologies. Open to non-majors with CI.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6506 Chemical Engineering Kinetics

Credit Hours: 3

Fundamental aspects of chemical reactions, including collision theory, transition rate theory, unimolecular rate theory, homogeneous gas and liquid phase kinetics, heterogeneous kinetics, and mass-transfer limited kinetics.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6515 Reacting Systems

Credit Hours: 3

Economic factors in the design of chemical reactors. Simulation of complex reacting systems.

Prerequisite(s): ECH 4415C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6536 Catalysis: Concepts and Applications

Credit Hours: 3

Descriptions of thermodynamic, dynamic, and structural features of surfaces, analysis of the chemical bonds at surfaces, and assessment of

unique properties of surfaces and exploitation in applications including heterogeneous catalysis.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6805 Synthetic Fuel Production

Credit Hours: 3

Descriptions of historic developments in transportation fuel production, current oil and gas industry methods for fuel production analyses of futuristic synthetic fuel production, and assessment of proposed future fuel economies.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6840 Mathematical Methods for Chemical Engineering

Credit Hours: 3

Mathematical modeling of chemical engineering systems. Numerical and analytical solution methods for algebraic equations, ordinary differential equations, coupled differential and algebraic equations and partial differential equations.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6906 Directed Research

Credit Hours: 1-19

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6907 Independent Study - Variable Title

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6930 Special Problems I

Credit Hours: 1-3

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6931 Special Problems II

Credit Hours: 1-3

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 7915 Directed Research

Credit Hours: 1-19

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECH 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Engineering | Chemical and Biomedical Engineering

ECO 6005 Introduction to Economic Concepts for Managers

Credit Hours: 3

A graduate level introduction to the economic foundations of decision making, this course addresses the fundamental tools of micro and macroeconomic analysis and how they can be applied to firms operating in both domestic and global markets.

Tampa | College of Arts and Sciences | Economics

ECO 6115 Microeconomics I

Credit Hours: 3

Microeconomic behavior of consumers, producers, and resource suppliers, price determination in output and factor markets, general market equilibrium.

Prerequisite(s): ECO 3101, ECO 4401
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6120 Economic Policy Analysis

Credit Hours: 3

Conditions for efficient resource allocation in a market economy; how inefficiency arises in markets and government; ways to reestablish efficiency; social welfare and equity. Introduction to benefit-cost analysis.

Prerequisite(s): ECO 3101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6205 Macroeconomic Theory and Policy

Credit Hours: 3

Determination of income, employment, wages, prices, and interest rates, contemporary policy issues, long-run economic growth.

Tampa | College of Arts and Sciences | Economics

ECO 6206 Macroeconomics I

Credit Hours: 3

Advanced macroeconomic analysis of income, employment, prices, interest rates and economic growth rates.

Prerequisite(s): ECO 6405
Corequisite(s): ECO 6115
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6305 History of Economic Thought

Credit Hours: 3

Currents of modern economic thought in the last hundred years.

Prerequisite(s): ECO 3101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6405 Mathematical Economics I

Credit Hours: 3

This course provides the basic mathematical background necessary to undertake graduate-level work in economics. Several topics from calculus and linear algebra are covered.

Prerequisite(s): ECO 3101, ECO 3203, ECP 6702, ECO 6708
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6424 Econometrics I

Credit Hours: 3

Theory and use of multiple regression to estimate relations in causal models, use of standard software packages.

Prerequisite(s): ECO 3203 with a minimum grade of C or ECO 6708 with a minimum grade of C, QMB 3200 with a minimum grade of C, QMB 6305 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6425 Econometrics II

Credit Hours: 3

Advanced econometric techniques; model building, estimation and forecasting; design and execution of research projects.

Prerequisite(s): ECO 6424
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6505 Public Finance

Credit Hours: 3

Effects of tax and expenditure policies on resource allocation and income distribution.

Prerequisite(s): ECO 3101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6525 Public Sector Economics

Credit Hours: 3

The economic role of government in the allocation of resources in the presence of market failure.

Prerequisite(s): ECO 3101 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6705 International Economic Issues

Credit Hours: 3

Analysis of international economic relations and institutions. Analysis of the effects of changing economic conditions and policy on the climate for international business and investment.

Prerequisite(s): ECO 6708 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6706 International Trade: Theory and Policy

Credit Hours: 3

Causes of international trade, international trade policy, economic integration, trade problems of developing countries, role of multinational corporations in world trade.

Prerequisite(s): ECO 3101 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6708 Global Economic Environment of Business

Credit Hours: 2

Determination of prices, employment, and output in domestic and international settings.

Tampa | College of Arts and Sciences | Economics

ECO 6716 International Monetary Economics

Credit Hours: 3

International macroeconomic relationships, foreign exchange market, the international monetary system, balance of payments adjustments, macroeconomic policy in the open economy.

Prerequisite(s): ECO 3203 or ECO 6708
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 6906 Independent Study

Credit Hours: 1-19

Independent study. Student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Economics

ECO 6917 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Economics

ECO 6936 Selected Topics in Economics

Credit Hours: 1-4

The course content will depend on student demand and instructor's interest.

Tampa | College of Arts and Sciences | Economics

ECO 7116 Microeconomics II

Credit Hours: 3

Topics in advanced microeconomic theory, including general equilibrium, welfare economics, intertemporal choice, uncertainty, information, and game theory.

Prerequisite(s): ECO 6115
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 7207 Macroeconomics II

Credit Hours: 3

Empirical study of economic growth, business cycles, and the other macroeconomic phenomena.

Prerequisite(s): ECO 6206 with a minimum grade of C, ECO 6425 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 7406 Mathematical Economics II

Credit Hours: 3

This course provides a continuation of ECO 6405, Mathematical Economics I. Students will become familiar with certain additional mathematical tools needed to pursue a graduate degree in economics.

Prerequisite(s): ECO 6115, ECO 6405
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 7426 Econometrics III

Credit Hours: 3

The aim of this course is to provide students several important advanced econometrics techniques and how they can be used in empirical research and practical applications. Emphasis will be on cross-sectional and panel data models.

Prerequisite(s): ECO 6425, ECO 6405
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 7427 Econometrics IV

Credit Hours: 3

Advanced econometric techniques with emphasis on applying the proper method to actual data and to situations where various techniques are appropriate.

Prerequisite(s): ECO 7426
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECO 7980 Dissertation

Credit Hours: 2-19

Dissertation Research

Tampa | College of Arts and Sciences | Economics

ECP 6205 Labor Economics I

Credit Hours: 3

Labor demand and supply, unemployment, discrimination in labor

markets, labor force statistics.

Prerequisite(s): ECO 3101, ECO 6114, or ECO 6115
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 6305 Environmental Economics and Policy

Credit Hours: 3

An economic analysis of business's and the government's approach to managing environmental issues. The focus of the course is on the analysis of case studies of specific environmental issues using fundamental efficiency analysis.

Prerequisite(s): ECO 2023
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 6405 Industrial Organization I

Credit Hours: 3

Structure of industry and its effect on economic efficiency.

Prerequisite(s): ECO 6115
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 6408 Economics of Organization

Credit Hours: 3

Theory of the evolution of firms and other hierarchies as alternatives to markets. Topics include the market mechanism as a coordinating system, agency theory, risk-sharing and incentive mechanisms, ownership versus control of organizations, and organizational forms. Intended for PhD and MA in Economics students.

Tampa | College of Arts and Sciences | Economics

ECP 6415 Issues in Regulation and Antitrust

Credit Hours: 3

Issues concerning rationale, structure and performance of government regulation and antitrust policy.

Prerequisite(s): ECO 3101 with a minimum grade of C or ECP 3703 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 6456 Law and Economics

Credit Hours: 3

Impact of Tort, Criminal, Property, and Contract Law on the allocation of resources.

Prerequisite(s): ECO 3101 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 6535 Analysis of Health Care Issues

Credit Hours: 3

Evolution of medical care industries and government healthcare policies. International comparisons. Measures of cost benefit and of cost-effectiveness.

Tampa | College of Arts and Sciences | Economics

ECP 6536 Economics of Health Care I

Credit Hours: 3

Analysis of the supply and demand for health care, health insurance and the pharmaceutical industry.

Prerequisite(s): ECO 3101 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 6614 Urban Economics

Credit Hours: 3

Economics of growth and development of urban areas, interurban location patterns.

Prerequisite(s): ECO 3101 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 6624 Regional Economics

Credit Hours: 3

Geographical allocation of resources within and among regions, location of households and firms, inter-regional migration of labor and capital, regional growth and development, regional policy.

Prerequisite(s): ECO 3101 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 6702 Managerial Economics

Credit Hours: 2

This course presents the microeconomic theory of price determination in an exchange economy with special emphasis on the behavior of firms in various market structures.

Tampa | College of Arts and Sciences | Economics

ECP 7207 Labor Economics II

Credit Hours: 3

Advanced study of labor economics including analysis of the wage structure, labor unions, labor mobility, and unemployment.

Prerequisite(s): ECP 6205
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 7406 Industrial Organization II

Credit Hours: 3

This course will introduce students to advanced topics in empirical industrial organization. Particular emphasis will be placed on techniques to estimate the behavior of firms, market equilibrium, and the impact of economic policy on markets.

Prerequisite(s): ECO 6115, ECO 6424, ECO 6405
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECP 7537 Economics of Health Care II

Credit Hours: 3

Advanced analysis of health economics with emphasis on recent empirical studies of health care.

Prerequisite(s): ECP 6536 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECS 6015 Economic Development

Credit Hours: 3

The course studies human economic development focusing on explaining cross-country and intertemporal differences in living standards in the world. The course focuses on the microeconomic aspect of economic development.

Prerequisite(s): ECO 3101, ECP 6702
Corequisite(s): ECO 6115
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Economics

ECT 5386 Preparation and Development for Teaching

Credit Hours: 4

The development of selected instructional materials, use of new educational media, performance evaluation instruments, and counseling techniques.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 6197 Enhancing Career and Technical Education Curriculum

Credit Hours: 3

Enhancing career & technical education curriculum including broadening mission, goals & outcomes, integration with academics, work-based learning, contextual learning, appropriate technology & certifying student mastery. Open to majors & non-majors.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 6661 Trends and Issues in Career and Technical Education

Credit Hours: 3

Historical influences and current trends and issues in career and technical education. Emphasis on forces significantly shaping the course of CTE and its relationship with workforce development and academic education. Open to majors and non-majors.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 6766 Emerging Workplace Competencies

Credit Hours: 3

An interactive exploration of emerging workplace competencies through research, analysis, and work-based experiences for the purpose of professional development and program improvement.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 6767 Improving Career and Technical Education Programs

Credit Hours: 3

The purpose of the course is to facilitate the development of essential understandings on the nature and use of action research strategies as a means to support improvement strategies involving data collection and analysis, and reporting skills.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 6926 Staff Development

Credit Hours: 1-5

Implementation of new procedures addressed to discrete developmental needs of the staff as identified by an educational agency.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 6930 Seminar

Credit Hours: 3

Focuses on special topics, interaction with visiting scholars, recent research and major initiatives within the profession.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 6948 Practicum: Industrial-Technical Education

Credit Hours: 3-6

A problem-centered field study in the local community, school, government, office, social agency, business, or industry.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 7768 Information Research Strategies

Credit Hours: 1

This course provides an introduction to information research strategies involving planning, locating, accessing, evaluating, organizing, and managing information as a means to support and document a research proposal or dissertation chapters.

Prerequisite(s): ECT 7791
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 7791 Research Seminar in Vocational, Technical, and Adult Education

Credit Hours: 3

Examination and critical evaluation of research in a particular specialization area of Vocational, Technical, or Adult Education. Preparation of an individual research prospectus.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 7910 Directed Research in Vocational Education

Credit Hours: 1-19

This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECT 7981 Scholarly Writing for Doctoral Students

Credit Hours: 1

The purpose of this course is to facilitate the development of scholarly writing skills required for the synthesis and reporting of research literature resulting in research proposals or manuscripts in career in workforce education.

Prerequisite(s): ECT 7791
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 5315 Program Management: Diversified Cooperative Training

Credit Hours: 3

Organization, coordination, and budgeting of adult, cooperative, and special programs.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 6205 Administration of Local Programs: Vocational

Credit Hours: 3

Organization, personnel selection and assignment, and establishment of policies and procedures for local vocational programs within federal, state and local requirements.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 6206 Supervision of Local Programs: Vocational Education

Credit Hours: 3

A study of the factors involved in the supervision of instruction including plans for teacher education, improvement of instruction, coordination of activities, and personnel relations.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 6695 School Community Relations

Credit Hours: 3

Maintaining positive relations between career and technical education programs and stakeholders, enhancing CTE image, interacting positively with customers, positive relations with businesses and marketing the program. Open to majors and non-majors.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 6696 Equity and Access in the New Economy

Credit Hours: 3

Examine workplace/workforce education regarding equity and access issues of gender, race, class and age through reflective practice, research, dialogue, field experience, product development with implications for education, training, personal and systems change.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 7066 Foundations and Philosophy of Vocational, Technical and Adult Education

Credit Hours: 3

Historical development and contemporary philosophies, cultural bases and practices of Vocational, Technical, and Adult Education.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 7105 Vocational and Adult Education Program Planning and Implementation

Credit Hours: 3

Knowledge and skills necessary to participate in the initial determination, planning, organization, and implementation of new or expanded adult, vocational and technical education institutions or programs.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 7167 Career Development in Career and Workforce Education Change

Credit Hours: 3

This course provides an overview of major theories of career development, examines related research in career and workforce education context, and addresses the implications for integration in the curriculum and service supports in different settings.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 7168 Instructional Development for Vocational, Technical, and Adult Education

Credit Hours: 3

The systematic approach to vocational, technical, and adult education curriculum improvement and instructional development. Students will apply an instructional systems approach to the development of practical solutions to critical teaching and learning problems.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

ECW 7195 Comparative Study of Career Workforce Education Systems

Credit Hours: 3

This online course provides an overview of global perspectives and models for career and workforce education with an emphasis on comparative analyses of national, state, and international systems.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6061 Principles of Educational Administration

Credit Hours: 3

Educational administration as a profession. Consideration of organization, control, and support of the educational system.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6106 Administrative Analysis and Change

Credit Hours: 3

Change and change strategies in formal and informal organizations are foci. Students will develop change strategies and will apply them to selected situations.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6192 Educational Leadership

Credit Hours: 3

Administration course that addresses change, influences, and planning systems. Also examines personnel functions for administrators.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6194 Educational Leadership II: Building Capacity

Credit Hours: 3

Three major themes to improve schools within a clear/compelling moral purpose: 1) communities of differences; 2) teacher development through professional community building; and 3) learners and learning through capacity building at the school level.

Prerequisite(s): EDA 6192
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6195 Policy Development

Credit Hours: 3

Contemporary research on diffusion of innovations, political power in policy decision making. Role of establishing educational policies.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6213 Culturally Relevant Leadership

Credit Hours: 3

This course prepares culturally responsive leaders to attend to diverse needs of all students. It is organized with the understanding that school leaders are moral stewards and public intellectuals who reflect notions of instructional accountability.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6232 School Law

Credit Hours: 3

Basic essentials of School Law. A review of court decisions affecting American education with emphasis on Florida State statutes.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6242 School Finance

Credit Hours: 3

Financial support of education by local, state, federal sources, with emphasis on Florida; introduction to educational budgeting.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6262 Planning Educational Facilities

Credit Hours: 3

Problems in the planning, construction, and use of educational facilities. Visitation and/or evaluation of selected schools.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6271 Data-based Decision Making Strategies for Educational Leaders

Credit Hours: 3

Beginning with a truncated review of purposes and applications of statistical methods utilized in academic, legislative, and district-level research, this course acquaints students with various ways of framing data-based questions and interpreting data.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6503 The Principalship

Credit Hours: 3

Organization and administration of the school. Emphasis on the competencies necessary for leadership and management by the principal as the administrator and instructional leader.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6910 Directed Research

Credit Hours: 1-9

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6931 Case Studies in School Administration

Credit Hours: 3

Helps prospective administrators understand administrative problems, propose feasible solutions, and evaluate courses of action. Develops skill in decision making.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6945 Administration Practicum

Credit Hours: 3-8

Field experiences in school systems for identifying and analyzing educational problems and their solutions. Application of concepts developed in the student's program.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7069 Ethics and Educational Leadership

Credit Hours: 3

The purpose of this course is to read about, examine, discuss, and critique competing theories of ethics and educational leadership. Students will construct critical cases & statements of responsibility in terms of ethics applied to leadership.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7192 Leadership in Education: Theory and Inquiry

Credit Hours: 3

The course provides students with exposure to major leadership theories and contemporary inquiry in Leadership as applicable to various educational contexts.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7193 Organizational Leadership and Systems Theory

Credit Hours: 3

The course examines K 12 educational systems through the theoretical frameworks of organizational learning and change applying problem-based approaches that emphasize socio-political and local , state, and federal influences.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7197 Current Readings and Discourse in Educational Leadership

Credit Hours: 3

The purpose of this course is to identify the discourses that have shaped and are shaping the dialogue, scholarship, and practice of public education and to contextualize leadership as a social practice that holds unique values and ideologies.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7206 Appreciative Inquiry and Organizing in Public Education

Credit Hours: 3

This course introduces Appreciative Inquiry and Appreciative Organizing in Public Education as a strength-based, problem solving and continuous improvement approach to inform and build school and district leadership capacity.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7215 Educational Politics and the Engagement of Communities

Credit Hours: 3

Students explore political frameworks and communication strategies in order to effectively engage multiple communities within and outside schools.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7222 Administration of School Personnel Policies and Practices

Credit Hours: 3

Administration of school personnel policies and practices relating to professional staff, supporting staff, and students.

Prerequisite(s): EDA 6061
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7233 Legal Dimensions of School Administration

Credit Hours: 3

Historical perspective in law and education with in-depth reviews of case law showing the evolution of courts as educational policy makers.

Prerequisite(s): EDA 6232
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7238 Special Education Law and Policy Issues

Credit Hours: 3

This course is focused on the framework of special education law and its application in school systems.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7247 Advanced School Finance

Credit Hours: 3

Advanced treatment of school finance. Development, implementation, and evaluation of financial resource and allocation systems. Emphasis is on intradistrict allocation.

Prerequisite(s): EDA 6242
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7280 Curriculum Theory

Credit Hours: 3

The purpose of this course is to prepare critical and culturally responsive curriculum leaders to engage curriculum theory in the work of curriculum policy, development, and inquiry.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7281 Policy Analysis and Implementation Strategies for Educational

Credit Hours: 3

This course has students apply systematic frameworks for policy analysis and implementation - utilizing multiple analytical and implementation concepts - to improve educational system, district, school, and student performance.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7287 Educational Politics and Policy: Theory and Issues

Credit Hours: 3

This course seeks to habituate students' conceptualization of schooling as political and to develop students' understanding of how educational politics and policies permeate educational systems.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7410 Qualitative Case Methods in Educational Leadership

Credit Hours: 3

Introduces qualitative Case methods, design, data collection, analysis and interpretation of data. Includes theories and sample software tools used in analysis.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDA 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDE 6076 Teacher Leadership for Student Learning

Credit Hours: 3

Prepares teachers as facilitators as they explore leadership roles in the K-12 contexts, including exemplary practitioner, curriculum decision-maker, researcher, advocate, and facilitator or job-embedded professional development.

Tampa | College of Education | Teaching and Learning

EDE 6225 Problems in Curriculum and Instruction: Elementary

Credit Hours: 1-3

For teachers, supervisors, and administrators. Curricular and instructional problems of the elementary school. Common problems or problems of special interest to the participants. Normally, for certification requirements only.

Prerequisite(s): EDG 4620, EDG 6627
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDE 6303 Instructional Planning for Maximizing Elementary Student Learning

Credit Hours: 3

The purpose of this course is to explore approaches to instructional planning that maximize student learning by using student data to meet the diverse needs of elementary learners.

Tampa | College of Education | Teaching and Learning

EDE 6326 Instructional Planning for Diverse Learners

Credit Hours: 3

Introduction to the theories and practices that support children's learning. Includes accessing resources that support teaching, developing lessons, designing appropriate assessments, and the elements that influence instructional decision-making.

Tampa | College of Education | Teaching and Learning

EDE 6346 Teaching and Learning with Technology in Elementary Classrooms

Credit Hours: 3

The purpose of this course is to support teachers in developing their own knowledge, comfort, and practice with technology as learners and support them in designing meaningful instructional experiences for K-12 students.

Tampa | College of Education | Teaching and Learning

EDE 6365 Culturally Responsive Pedagogy for Elementary Student Learning

Credit Hours: 3

This course provides the opportunity for the learner to develop the knowledge, skills, process, and understanding of the techniques and methods needed to develop as a culturally responsive teacher.

Tampa | College of Education | Teaching and Learning

EDE 6366 Professional Development for Student Learning

Credit Hours: 3

This course prepares effective teacher leaders for facilitating job-embedded educator learning with a specific focus on P-6 student learning.

Prerequisite(s): EDE 6076, EDE 6486, EDE 6556
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDE 6458 Reflecting on Instructional Decision Making

Credit Hours: 1-3

Develops the students' abilities to reflect upon teaching practice and evaluate instructional decisions on K-6 student learning. The first hour is taken with the practicum. The second hour is to be taken in conjunction with final internship.

Prerequisite(s): None.
Corequisite(s): For first hour: EDE 6946. For second hour: EDG 6947.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDE 6486 Teacher Research for Student Learning

Credit Hours: 3

Familiarizes practicing teachers with the application of research methodologies to strengthen teaching & learning in elementary schools. This course cultivates the literacy skills the educators need for professional accountability for student learning.

Prerequisite(s): EDE 6076
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDE 6506 Managing and Differentiating the Instructional Environment in Elementary Schools

Credit Hours: 3

Examines the legal issues affecting classroom/school management, school safety and professional ethics. Explores research and knowledge of best practices and a variety of teaching and management strategies for a diverse elementary classroom setting.

Tampa | College of Education | Teaching and Learning

EDE 6556 Coaching for Student Learning

Credit Hours: 3

Prepares coaches for facilitating preservice and in-service educator learning with specific focus on P-6 student learning.

Prerequisite(s): EDE 6076, EDE 6486
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDE 6906 Independent Study: Elementary/Early Childhood Education

Credit Hours: 1-6

Independent study in which students must have a contract.

Tampa | College of Education | Teaching and Learning

EDE 6946 Practicum Field Experience

Credit Hours: 3

This intensive practicum experience is designed to complement foundational MAT course work and is completed during the second block of the MAT program. This course is restricted to majors and is not repeatable. S/U only..

Prerequisite(s): RED 6514, FLE 5345, and 9 additional credits in program courses
Corequisite(s): EDE 6458
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDE 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of Education | Teaching and Learning

EDE 7206 Critical Analysis of Curriculum in Elementary Schools

Credit Hours: 3

The purpose of this course is to critically analyze curriculum in the elementary schools from its historical foundations through the current educational climate. This will enable educators to make informed decisions on curriculum issues.

Tampa | College of Education | Teaching and Learning

EDE 7327 Differentiated Supervision & Teacher Professional Development

Credit Hours: 3

This course cultivates the knowledge of job-embedded professional development tools that facilitates teacher effectiveness through collaborative instructional and school improvement efforts.

Tampa | College of Education | Teaching and Learning

EDE 7481 Teacher Education Seminar

Credit Hours: 3

This course prepares doctoral students to integrate, assimilate, and evaluate major research and research issues confronting the field of teacher education.

Tampa | College of Education | Teaching and Learning

EDE 7910 Directed Research in Elementary Education

Credit Hours: 1-19

Independent student-faculty research course.

Tampa | College of Education | Teaching and Learning

EDE 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Teaching and Learning

EDF 5607 Trends in Education Politics

Credit Hours: 3

Contemporary education politics in the U.S. with interdisciplinary social-science perspectives.

Tampa | College of Education | Educational and Psychological Studies

EDF 6165 Group Processes for Educational Personnel

Credit Hours: 1-3

Application of group process research to the needs of professional educators and training officers.

Tampa | College of Education | Educational and Psychological Studies

EDF 6166 Consulting Skills for Staff Development

Credit Hours: 1-3

Knowledge and skill training for consulting with organizational clients to solve educational problems and design learning environments or programs.

Tampa | College of Education | Educational and Psychological Studies

EDF 6211 Psychological Foundations of Education

Credit Hours: 3

Selected topics in psychology of human development and learning, related to schools and educational settings.

Tampa | College of Education | Educational and Psychological Studies

EDF 6213 Biological Bases for Learning Behavior

Credit Hours: 3

Human biological development and its influence upon learning and behavior.

Prerequisite(s): One course in Educational Psychology.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 6215 Learning Principles Applied to Instruction

Credit Hours: 4

Learning principles and their application to classroom instruction.

Tampa | College of Education | Educational and Psychological Studies

EDF 6217 Behavior Theory and Classroom Learning

Credit Hours: 4

Theory and practical applications of behavior modification; introduction to experimental methods for behavior modification; operant methods in behavior and development; analysis and field work.

Prerequisite(s): EDF 6215
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 6281 Workshop and Conference Design

Credit Hours: 3

Knowledge and skills to design, conduct and/or administer, and evaluate both workshops and conferences.

Tampa | College of Education | Educational and Psychological Studies

EDF 6284 Problems in Instructional Design for Computers

Credit Hours: 3

This course focuses on the systematic design of instructional courseware, including analysis, media selection, and evaluation. Topics include instructional strategies, screen design, response analysis, feedback and interactivity.

Tampa | College of Education | Educational and Psychological Studies

EDF 6288 Instructional Design I

Credit Hours: 3

Instructional design models/theories and their systematic application to instructional goals.

Prerequisite(s): EDF 6215
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 6354 Human Development and Personality Theories

Credit Hours: 4

A study of psycho-social and cognitive development throughout a person's life span with an analysis of the major personality theories.

Tampa | College of Education | Educational and Psychological Studies

EDF 6407 Statistical Analysis for Educational Research I

Credit Hours: 4

Theory and application of statistical procedures to problems in education: (1) descriptive statistics, (2) Probability-sampling distributions, (3) Inferential statistics-interval estimation, tests of significance (z, t, F-one way ANOVA). Coordinated use of computer included.

Tampa | College of Education | Educational and Psychological Studies

EDF 6432 Foundations of Measurement

Credit Hours: 3

Basic measurement concepts, role of measurement in education, construction of teacher-made tests and other classroom assessments, interpretation of standardized tests, and fundamental descriptive statistics for use in test interpretation.

Tampa | College of Education | Educational and Psychological Studies

EDF 6446 Development and Validation of Tests in Education

Credit Hours: 3

Design, construction, and validation of state-wide tests. Special emphasis on domain sampling, item response theory, item scaling, item

fit, and constructing, maintaining, and updating item banks.

Prerequisite(s): EDF 6432, EDF 6407
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 6461 Foundations of Applied Evaluation

Credit Hours: 3

Fundamentals of evaluation approaches and practices; tools & techniques used in evaluation; standards of quality for professional practice; evaluation ethics; appropriate evaluation uses; and impact of evaluation on decision making.

Prerequisite(s): EDF 6481
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 6481 Foundations of Educational Research

Credit Hours: 3

Analysis of major types of educational research designs, including experimental, correlational, ex post facto and case studies.

Prerequisite(s): EDF 6432
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 6492 Applied Educational Program Evaluation

Credit Hours: 3

Design, development, implementation, interpretation, and communication of both formative and summative educational program evaluation studies.

Prerequisite(s): EDF 6432, EDF 6446
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 6517 Historical Foundations of American Education

Credit Hours: 3

History of the origins and development of American education, events, and movements that have shaped school policies and practices, and their relationship to contemporary developments.

Tampa | College of Education | Educational and Psychological Studies

EDF 6531 History of Childhood

Credit Hours: 3

History of modern childhood, including diversity of childhood experiences and social construction of age categories.

Tampa | College of Education | Educational and Psychological Studies

EDF 6606 Socio-Economic Foundations of American Education

Credit Hours: 4

Socio-economic factors as they relate to the work of professional educators and the role of public education in American society.

Tampa | College of Education | Educational and Psychological Studies

EDF 6697 Learning and Linguistic Diversity in a Transnational Context

Credit Hours: 3

This course will explore the relationships between immigration, identity, and language. The course will take a transnational approach, which presumes that people, language, and culture are subject to dynamic change within the globalized world.

Tampa | College of Education | Educational and Psychological Studies

EDF 6705 Gender and the Educational Process

Credit Hours: 3

Course is designed to enable public school personnel, teachers, counselors, administrators, and other professionals to identify those aspects of public education that perpetuate sex role stereotyping. Emphasis will be placed on how the law and formal and informal affirmative action activities can be employed to correct sexism in schools.

Tampa | College of Education | Educational and Psychological Studies

EDF 6736 Education, Communication, and Change

Credit Hours: 3

Developments in communication as a process of social change as it affects students, teachers, and traditional school arrangements.

Tampa | College of Education | Educational and Psychological Studies

EDF 6765 Schools and the Future

Credit Hours: 4

Estimates of future demands upon schools; critique of current paradigms, techniques, and literature.

Tampa | College of Education | Educational and Psychological Studies

EDF 6863 Contemporary Issues and Trends in International Education

Credit Hours: 3

This course focuses on current IB research, trends, issues, as well as international, national, and state/provincial legislation concerning schools and the potential impact on IB schools.

Tampa | College of Education | Educational and Psychological Studies

EDF 6864 International Perspectives and Practices in Gifted and Talented Education

Credit Hours: 3

This course focuses on historical and current conceptions of giftedness and talent development. Historical and current practices in the education of gifted and talented learners will also be examined.

Tampa | College of Education | Educational and Psychological Studies

EDF 6883 Issues in Multicultural Education

Credit Hours: 4

Lecture/discussion course, open to both majors and non-majors; address both fundamental concepts and timely issues in multicultural education and working with culturally diverse students.

Tampa | College of Education | Educational and Psychological Studies

EDF 6906 Independent Study: Educational Foundations

Credit Hours: 1-6

Independent study in which students must have a contract with an instructor.

Tampa | College of Education | Educational and Psychological Studies

EDF 6935 Wellness Programming Seminar

Credit Hours: 2

This course familiarizes students with the array of extant programs to facilitate wellness and prevent problems that often affect college students. Through review and critique of such programs, participants will be able to design and administer wellness programs in their professional roles.

Tampa | College of Education | Educational and Psychological Studies

EDF 6938 Selected Topics

Credit Hours: 1-4

Exploration and demonstration of knowledge in an area of special interest to the student and/or in an area for which the student needs to demonstrate a higher level of competence. Designed to fit the needs of each student.

Tampa | College of Education | Educational and Psychological Studies

EDF 6941 Practicum in Measurement, Evaluation, and Research

Credit Hours: 1-4

Practicum provides individuals in the M.Ed.in Measurement and Evaluation opportunities to apply research and evaluation skills in applied settings (e.g., local school districts, Centers within the University). May be repeated up to 8 hours.

Tampa | College of Education | Educational and Psychological Studies

EDF 6944 Field Experience

Credit Hours: 1-4

Demonstrate skills in the practice of the student's specialty. Objectives will be defined by the needs of the individual student.

Tampa | College of Education | Educational and Psychological Studies

EDF 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of Education | Educational and Psychological Studies

EDF 7118 Lifespan Development

Credit Hours: 3

Multidisciplinary overview of contemporary lifespan development theory and research, focusing on physical, cognitive, social, emotional, and psychological factors influencing the developing individual, and issues facing educational research and practice.

Tampa | College of Education | Educational and Psychological Studies

EDF 7138 Adolescent Development

Credit Hours: 4

This course examines adolescent development in the physical, cognitive, social, and motivational domains. Academic achievement, social and cultural contexts, developmental theory, methodology, and educational practices and policies are discussed.

Tampa | College of Education | Educational and Psychological Studies

EDF 7145 Cognitive Issues in Instruction

Credit Hours: 4

Selected cognitive models of intelligence, memory, problem solving, thinking, and motivation applied to instructional strategies.

Prerequisite(s): EDF 6215
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7167 Experiential Learning: Theory and Methods

Credit Hours: 3

Theory and methods of experiential learning in both formal and organizational contexts.

Tampa | College of Education | Educational and Psychological Studies

EDF 7227 Topics in Behavior Analysis and Automated Instruction

Credit Hours: 1-12

Seminar in experimental analysis of functional relationships between behavior and relevant environmental variables. Interpretation of complex human behavior and formulation of procedures which expedite instruction in educational procedures for computer delivery.

Prerequisite(s): EDF 6215 or EDF 6217
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7265 Psychology of Oral and Written Language Development

Credit Hours: 4

The course focuses on theoretical and empirical perspectives of monolingual and bilingual language and literacy development. A foundational understanding of language and literacy allows a student the ability to critically analyze practical implications.

Tampa | College of Education | Educational and Psychological Studies

EDF 7357 Applications of Developmental Theories

Credit Hours: 4

Doctoral course fulfilling the psych. Foundation requirement in the college of education. It reviews theories of development having implications for curriculum,learning, and other educ./mental health practices. Offered via distance learning periodically

Tampa | College of Education | Educational and Psychological Studies

EDF 7359 Resilience in Human Development

Credit Hours: 4

This course explores developmental, neuro-psychological, socio-emotional, and cultural perspectives on resiliency in various areas of development (e. g., academic achievement, mental and physical health) from infancy to late adulthood.

Tampa | College of Education | Educational and Psychological Studies

EDF 7408 Statistical Analysis for Educational Research II

Credit Hours: 4

Theory and application of statistical procedures to problems in education: (1) ANOVA-factorial; ANCOVA; (2) multiple correlation and regression -- a specific technique and a general approach to data analysis. Coordinated use of computer included.

Prerequisite(s): EDF 6407
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7410 Design of Systematic Studies in Education

Credit Hours: 3

Theory and application of major design models to systematic inquiry, from experimental to naturalistic models. Nature and role of sampling in systematic studies.

Prerequisite(s): EDF 6407, EDF 7408
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7412 Application of Structural Equation Modeling in Education

Credit Hours: 3

Application of structural equation modeling in educational research, including path models, confirmatory factor analysis, structural modeling with latent variables, and latent growth curve models.

Prerequisite(s): EDF 7408
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7426 Action Research in Schools

Credit Hours: 3

Introduction to action research, a form of self-reflective systematic inquiry by practitioners on their own practice. The major assignment for the course will be the completion of an action research project.

Tampa | College of Education | Teaching and Learning

EDF 7436 Rasch Measurement Models

Credit Hours: 3

Introduction to a family of Rasch models. Estimation procedures of item and ability parameters. Applications of Rasch models for dichotomous and polytomous data, such as item construction/selection and differential item functioning (DIF).

Prerequisite(s): EDF 6432
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7437 Advanced Educational Measurement I

Credit Hours: 3

Logical, empirical, and statistical models of measurement processes. Examination of issues relative to scaling with a focus on reliability of measurement. Critique of available instruments for measurement in psychology and education. Examination of issues relative to scaling with a focus on reliability of measurement. Critique of available instruments for measurement in psychology and education.

Prerequisite(s): EDF 6432, EDF 6407
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7438 Advanced Educational Measurement II

Credit Hours: 4

Scaling techniques in educational and psychological measurement. Item analytic theories and practices. Validation theory, and construction and validation of instruments for measurements in education.

Prerequisite(s): EDF 7437
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7439 Foundations of Item Response Theory

Credit Hours: 3

Basic foundation underlying Item Response Theory (IRT) as well as most common applications in educational and psychological measurement, in terms of the theoretical basis, practical aspects, and specific applications.

Prerequisite(s): EDF 6432
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7462 Metaevaluation

Credit Hours: 4

In-depth study of the theory and practice of metaevaluation; planned field applications of principles of metaevaluation; and use of metaevaluation checklists and standards of quality for professional practice to conduct metaevaluations.

Prerequisite(s): EDF 7940
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7469 Introduction to Computer-Based Testing

Credit Hours: 3

This course should serve as an introduction to the field of computer-based testing. The material covered will be applicable to most operational educational, psychological, credentialing and licensure assessments, for research and measurement.

Prerequisite(s): EDF 6432
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7474 Applied Multilevel Modeling in Education

Credit Hours: 3

Helps students develop skills in defining, estimating, testing, and reporting the results of multilevel models. Design issues, model specification, estimation, statistical software, and model evaluation will be discussed.

Prerequisite(s): Multiple Regression.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7477 Qualitative Research in Education Part I

Credit Hours: 4

First of two sequenced seminars examining the theoretical and pragmatic aspects of conducting qualitative research in educational settings.

Tampa | College of Education | Educational and Psychological Studies

EDF 7478 Qualitative Research in Education Part II

Credit Hours: 4

Second of two sequenced seminars examining the theoretical and pragmatic aspects of conducting qualitative research.

Prerequisite(s): EDF 7477
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7484 Statistical Analysis for Educational Research III

Credit Hours: 4

Theory and application of selected multivariate statistical procedures, including multivariate analysis of variance, structural equation modeling, and multilevel modeling.

Prerequisite(s): EDF 7408
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7485 Theory and Practice of Program Evaluation

Credit Hours: 3

Comparative analysis of contemporary evaluation approaches; theory and scientific basis of evaluation; social and political impact of evaluation on educational decision making; and the design, implementation and reporting of evaluation studies.

Prerequisite(s): EDF 6481
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7488 Problems in Educational Data Analysis

Credit Hours: 2

Strategies and techniques for data processing and quantitative analysis using statistical software, including data screening, transformation, diagnostic indices, and interpretation.

Prerequisite(s): EDF 7408
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7491 Consulting and Project Management Skills for Evaluators

Credit Hours: 3

In-depth study of consulting and management skills applied to highly complex evaluations; techniques to use and control resources such as scope, time, risk, communications, and human resource management in a broad range of evaluation activities.

Prerequisite(s): EDF 7485
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7493 Systems Approaches for Program Planning, Evaluation and Development

Credit Hours: 4

Systems theory applied to problems in program planning, evaluation, and development. Analysis of evaluation models and policy analysis. Application of Networking, PERT, and Modeling procedures to selected problems in education. Emphasis on decision oriented research.

Tampa | College of Education | Educational and Psychological Studies

EDF 7497 Theory and Practice of Personnel Evaluation

Credit Hours: 3

In-depth theoretical and practical knowledge of evaluation systems and standards for personnel evaluations, and interpersonal dynamics as related to the major personnel evaluation functions.

Prerequisite(s): EDF 7485

Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7498 Analysis for Single-Case Experiments

Credit Hours: 3

Methods for analyzing data from single-case experiments (e.g., multiple baseline, reversal, and alternating treatment studies) including applications of visual analysis, effect size estimation, randomization tests, and multilevel modeling.

Prerequisite(s): EDF 7408
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7530 History of Higher Education in the United States

Credit Hours: 3

Historical overview of American higher education from Colonial period to present. History of undergraduate curriculum, changing purpose of higher ed, and growth in hierarchical categorization of higher ed as college became more accessible to students.

Prerequisite(s): EDF 6517
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7555 Moral Development and Education

Credit Hours: 3-4

This course will examine the dynamics of moral development. We will study the psychological foundations of moral education through examining the empirical research and philosophical work underlying social scientists' conceptions of morality.

Tampa | College of Education | Educational and Psychological Studies

EDF 7579 Theory and Practice of Collaborative Evaluation

Credit Hours: 3

This course is designed to help students gain an in-depth understanding of collaborative evaluation theory and its application to real-life situations. Students will learn how to use the model for collaborative evaluations in diverse contexts.

Prerequisite(s): None.
Corequisite(s): None.
Co-Prerequisite(s): EDF 7485 with a minimum grade of B

Tampa | College of Education | Educational and Psychological Studies

EDF 7586 Classics in Educational Research

Credit Hours: 4

Examination of the context, methods, and significance of selected research studies in education.

Prerequisite(s): EDF 6517, EDF 6606
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7682 Education in Metropolitan Areas

Credit Hours: 3

Modern public education and its relationship to national development.

Prerequisite(s): EDF 6517, EDF 6606
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7910 Directed Research in Measurement and Evaluation

Credit Hours: 1-19

Independent student-faculty research course.

Tampa | College of Education | Educational and Psychological Studies

EDF 7930 Professional Seminar

Credit Hours: 1

Ph.D. course fulfilling Educational Psych.concentration requirement under the Curr. & Instruc. doctoral program. It covers professional issues of working as an academic in research intensive or teaching college as well as working in non-academic settings.

Tampa | College of Education | Educational and Psychological Studies

EDF 7934 Seminar in Social Foundations of Education

Credit Hours: 4

Significant research on socio-cultural issues in Education.

Prerequisite(s): EDF 6517, EDF 6544, or EDF 6606
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7940 Practicum in Educational Planning, Evaluation, and Development

Credit Hours: 1-8

Supervised practicum in which the student assumes major responsibility for significant planning, evaluation, research, or development activity.

Prerequisite(s): EDF 7408, EDF 7493
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDF 7946 Supervised Experience in College Teaching

Credit Hours: 1

A seminar to increase knowledge and competencies in college instruction. Students must have advanced graduate standing, be currently teaching a college level course, willing to be observed, and able to discuss ongoing classroom practices and problems. Open to all doctoral level Education majors, other doctoral students if space available. S/U optional.

Tampa | College of Education | Educational and Psychological Studies

EDF 7947 Research Practicum

Credit Hours: 1

Provides research experience for students who plan to pursue teaching and research. Registration is restricted to doctoral students in College of Education or by permission. This doctoral course fulfils Educational Psychology concentration requirement.

Tampa | College of Education | Educational and Psychological Studies

EDF 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Educational and Psychological Studies

EDG 6285 School Curriculum Improvement

Credit Hours: 3

Open only to teachers in service. Complete faculty participation required.

Tampa | College of Education | Educational and Psychological Studies

EDG 6344 Project T.E.A.C.H. (Teacher Effectiveness and Classroom Handling)

Credit Hours: 3

Topics and techniques in verbal communication skills, questioning, paraphrasing, positive support skills, problem solving, counseling techniques, non-confrontation strategies, group dynamics, and discipline decision making.

Tampa | College of Education | Teaching and Learning

EDG 6436 Cybersecurity in the Schools

Credit Hours: 3

Knowledge in developing and implementing cybersecurity policies that govern schools and districts.

Tampa | College of Education | Teaching and Learning

EDG 6627 Foundations of Curriculum and Instruction

Credit Hours: 3

Open to all graduate students. Introductory course in curriculum and instruction at the graduate level, basic to all specialized courses in the field. Emphasis on foundations, design, basic concepts, theory, and trends of curriculum from early childhood through secondary levels.

Prerequisite(s): EDG 4620
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDG 6906 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDG 6931 Selected Topics in Education

Credit Hours: 1-4

Each topic is a course under the supervision of a faculty member. The title and content will vary according to the topic.

Tampa | College of Education | Educational and Psychological Studies

EDG 6935 Seminar in Curriculum Research

Credit Hours: 1-3

Critical evaluation of current research and curriculum literature, design and analysis of individual research topics leading to satisfaction of research requirements.

Tampa | College of Education | Teaching and Learning

EDG 6947 MAT Final Internship

Credit Hours: 1-9

Open to graduate degree candidates only. Supervised teaching at the secondary or junior college level as appropriate.

Tampa | College of Education | Educational and Psychological Studies

EDG 6971 Thesis: Masters/Education Specialist

Credit Hours: 2-19

Tampa | College of Education | Educational and Psychological Studies

EDG 6975 Project: Master's/Specialist

Credit Hours: 1-9

Individual scholarly project planned and completed with the approval of the advisor and program committee.

Tampa | College of Education | Educational and Psychological Studies

EDG 7035 Design and Evaluation of Teacher Education Programs

Credit Hours: 3

Students in this course will examine theories for design and evaluation of teacher ed programs. The course uses a problem-based approach in which instruction is structured around the design and evaluation of model teacher education programs.

Tampa | College of Education | Teaching and Learning

EDG 7046 Trends and Issues in Educational Policy: Literacy and Teacher

Credit Hours: 3

Offers the opportunity for wide reading and vigorous discussion of a variety of texts focused on the historical and current educational policies

impacting literacy, elementary, and teacher education.

Tampa | College of Education | Teaching and Learning

EDG 7066 Critical Pedagogy in Teacher Education

Credit Hours: 3

Introductions to key concepts and frameworks related to critical pedagogy. Graduate students will develop connections between theoretical exploration to teaching and scholarship in teacher education.

Tampa | College of Education | Teaching and Learning

EDG 7067 Philosophies of Inquiry

Credit Hours: 3

The purpose of this course is to introduce doctoral students to different approaches to educational research and to alternative frames for criticism, including postpositivism, constructivism, poststructuralism, pragmatism, critical theory, narrative, race and gender, ethics, and aesthetics.

Tampa | College of Education | Teaching and Learning

EDG 7069 Sustainable Innovation in Education

Credit Hours: 3

Research and theory on sustainable innovation, including life-cycles and evolution. Includes development of case study of existing or defunct innovation's origins, development, effectiveness and current status. Open to doctoral students in COEDU.

Tampa | College of Education | Teaching and Learning

EDG 7207 Transforming the Curriculum

Credit Hours: 3

Theory and research in curriculum development, including historical perspectives on curriculum movements, comparative global curriculum issues, and curriculum theories and models in use. Special attention given to innovations that succeed or fail.

Tampa | College of Education | Teaching and Learning

EDG 7357 Mentoring Theory and Leadership Practice

Credit Hours: 3

This cross-disciplinary doctoral course is for students interested in the topic and process of mentoring in education. Students from inside and outside the College of Education are eligible.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDG 7368 Visual Research Methods in Education

Credit Hours: 3

Introduces students to analytical and interpretative methods for understanding visual and media culture within an education context.

Tampa | College of Education | Teaching and Learning

EDG 7667 Analysis of Curriculum and Instruction

Credit Hours: 3

Various theoretical frameworks for analyzing curriculum and instruction. Emphasis on rational models of curriculum inquiry.

Prerequisite(s): EDG 6627
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDG 7692 Issues in Curriculum and Instruction

Credit Hours: 3

Identification and analysis of major problems and issues in curriculum and instruction. Critical examination of efforts to deal with these issues.

Prerequisite(s): EDG 6627
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDG 7695 Problems of Practice in Education

Credit Hours: 3

Theory and research in curriculum development, including historical perspectives on curriculum movements, comparative global curriculum issues, and curriculum theories and models in use. Special attention given to innovations that succeed or fail.

Tampa | College of Education | Teaching and Learning

EDG 7910 Directed Research

Credit Hours: 1-19

Tampa | College of Education | Educational and Psychological Studies

EDG 7931 Selected Topics

Credit Hours: 1-4

Selected topics in advanced Education.

Tampa | College of Education | Educational and Psychological Studies

EDG 7936 Graduate Seminar: Leader-Scholar Community

Credit Hours: 3

Participation in leader-scholar learning community to develop dissertation/capstone project concept, review literature, plan intervention, and design research. Registration begins in second year of program and continues until candidacy.

Prerequisite(s): EDG 7046
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDG 7937 Graduate Seminar

Credit Hours: 1-4

Seminar in advanced Education.

Tampa | College of Education | Educational and Psychological Studies

EDG 7938 Advanced Graduate Seminar: Introduction to Research

Credit Hours: 3

Students will survey educational theories that contribute to the scholarly literature in Childhood Education & Literacy Studies and acquire academic literacies that are used to share information within the doctoral program and across academic texts.

Tampa | College of Education | Teaching and Learning

EDG 7939 Advanced Graduate Seminar: Research in Progress

Credit Hours: 3

Interdisciplinary work and collaborative research will be fostered through an inquiry group. The group will work as a community of discursive social practice with the goal of more fully engaging doctoral students in the intellectual life of the discipline.

Prerequisite(s): EDG 7938
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDG 7941 Practicum in Educational Innovation

Credit Hours: 1-4

Requires doctoral students to actively engage in the development and operation of an innovative educational practice or program in the student's workplace or other institution.

Prerequisite(s): EDG 7046
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDG 7980 Dissertation

Credit Hours: 2-19

Tampa | College of Education | Educational and Psychological Studies

EDH 6051 Higher Education in America

Credit Hours: 3

For current and prospective faculty, administrators, policy analysts, and staff seeking to learn about American higher education. The topics addressed include the history, recent developments, and projections for the future of various aspects of higher education, including its missions, purposes, students, faculty and staff, administration, finance, organization, governance, and role in American society.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 6081 Junior College in American Higher Education

Credit Hours: 3

Philosophical and cultural bases for definition of its role and contemporary issues, such as control, financing, and curricular patterns. Emphasis on the place and problems of the community junior college.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 6406 Ethics and Higher Education

Credit Hours: 3

The purpose of this course is to assist students in developing a detailed ethical framework that will guide their actions and decision-making as they serve in leadership and teaching positions in higher education. Areas of emphasis include (a) learning selected philosophies of ethics; (b) exploring student, faculty, and classroom ethical issues; (c) discussing administrator/board ethical issues; (d) examining the college or university as an ethical organization.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 6906 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor. Rpt. S/U.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 6938 Seminar in College Teaching

Credit Hours: 3

Implications of learning theory and student characteristics for teaching at the college level. Types of teaching procedures, innovation, evaluation, student freedom, and responsibility for learning.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 6947 Internship in Higher Education

Credit Hours: 1-6

This course provides higher education program graduate students with an extensive, semester-long, field experience in a two- or four-year college, under the dual guidance of a campus-based supervisor and a USF higher education program faculty member. The internship experience must relate to the student's goals in the doctoral program. Students should be at or near the end of their graduate program.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7057 Introduction to Research Studies in Higher Education

Credit Hours: 3

This course introduces key studies in higher education selected from across areas of focus and a brief overview of research methodologies. Must be completed early after admittance to the doctoral program.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7225 Curriculum Development in Higher Education

Credit Hours: 3

Emphasis on curriculum perspectives, procedures, and practices in higher education; principles of curriculum and instruction in higher education; theory and practices in goal setting, curriculum planning, instructional improvement, and curriculum design.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7325 Supervised Teaching in Childhood Ed & Literacy Studies I

Credit Hours: 3

The purpose of this course is for graduate assistants to consider challenges and issues involved in preservice education. Students will reflect on their instruction, survey preservice teacher literature and develop an inquiry plan to study their teaching.

Tampa | College of Education | Teaching and Learning

EDH 7326 Supervised Teaching in Childhood Ed & Literacy Studies II

Credit Hours: 3

The purpose of this course is to provide new graduate assistants a foundation for studying their teaching at the collegiate level.

Tampa | College of Education | Teaching and Learning

EDH 7405 Policy and Legal Dimensions in Higher Education

Credit Hours: 3

This course is a doctoral level course with primary focus on the interface of policy and law as they address the nature, process and product of community college and higher education in the United States and Florida. Constitutional, statutory and contract law is also discussed, as are critical legal and policy issues in higher education, including governance, academic freedom, student rights, discrimination, tort liability, contracts and collective bargaining.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7505 Higher Education Finance

Credit Hours: 3

Emphasis on financial policies, planning, and budgeting; allocation; financial analysis and management, patterns of expenditure, sources of income. Relationships between educational objectives and resource allocations.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7632 Leadership in Higher Education

Credit Hours: 3

This cross-disciplinary doctoral course is for students interested in the topic and process of mentoring in education. Students from inside and outside the College of Education are eligible.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7633 Governing Colleges and Universities

Credit Hours: 3

Students in this course will examine and compare existing models of state and local college and university governance structures Demographic, social, legal, financial, and planning issues and forces that effect how colleges and universities are governed will also be explored. Policy analysis and research will be explored as it relates to governance in higher education.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7635 Organization and Administration of Higher Education

Credit Hours: 3

Examines the concepts about higher education organizations and administration, the behaviors of those organizations and administrators, and the relationships between concept and practice.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7636 Organizational Theory and Practices in Higher Education

Credit Hours: 3

Explores theories and models of organizations and their applicability to colleges and universities and the work done in the influence of internal and external actors. Also examines many of the administrative practices and processes common in colleges and universities today.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7910 Directed Research

Credit Hours: 1-19

This course provides higher education program graduate students with an opportunity for directed research, under the supervision of a higher education program faculty member.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7935 Higher Education Capstone Seminar

Credit Hours: 3

The course is designed to encourage students' integration and synthesis of theories, concepts and themes in previous coursework; to critique research in the field; and to provide some in-depth study of selected areas in higher education. Advanced Graduate Standing. Instructor approval required – majors only.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDH 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDM 6256 Problems in Curriculum and Instruction: Middle School

Credit Hours: 1-3

For teachers, supervisors, and administrators. Curricular and instructional problems of the middle school. Common problems or problems of special interest to the participants. Normally, for certification requirements only.

Prerequisite(s): EDG 4620, EDG 6627.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EDM 6622 Client Centered Middle Schools

Credit Hours: 3

Combination lecture/discussion/independent study course that examines in depth the current research on needs/characteristics of the early adolescent and its implications for both organization of the middle grade school and its delivery of curriculum and instruction.

Tampa | College of Education | Teaching and Learning

EDM 6624 Effective Instruction for Middle Schools

Credit Hours: 3

Combination lecture/discussion/individual study course that examines in depth the current research on both alternative instructional strategies and assessment practices that are successful with middle level students.

Prerequisite(s): EDM 6622
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EDM 6935 Middle School Issues Seminar

Credit Hours: 1-3

Combines discussion/individual study seminar modeling the advisory concept in a university setting and examining the current research on a

variety of important trends/issues affecting middle level education.

Tampa | College of Education | Teaching and Learning

EDS 6050 Principles and Practices of Educational Supervision

Credit Hours: 3

Three major themes to improve schools within a clear/compelling moral purpose: (1) communities of differences; (2) teacher development through professional community building; and (3) learners and learning through capacity building at the school level.

Prerequisite(s): EDA 6192
Corequisite(s): None.
Co-Prerequisite(s): None.

St. Petersburg | College of Education | Educational Leadership

EDS 6131 Clinical Supervision

Credit Hours: 3

Trains administrators, supervisors, and peer teachers in observing and diagnosing teacher classroom performance, writing remedial plans, conducting post observation conferences, and evaluating performance.

Prerequisite(s): EDS 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDS 6239 Problems in Supervision

Credit Hours: 3

Analysis of instructional problems in schools. Emphasis on supervisory tasks, case studies, and the application of problem solving techniques and strategies.

Prerequisite(s): EDS 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EDS 7130 Teacher Evaluation: Process and Instruments

Credit Hours: 3

Examines procedures for establishing content validity, reliability, norms, and predictive validity of teacher evaluation systems. Examines the psychometric qualities of selected instruments.

Prerequisite(s): EDA 6061, EDF 6432
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EEC 6055 Advocacy and Leadership in Early Childhood Education

Credit Hours: 3

This course focuses on developing leadership skills and knowledge necessary to help individuals build coalitions and design effective public policy/advocacy initiatives. This course is open to graduate non-majors and is repeatable for 3 hours credit.

Tampa | College of Education | Teaching and Learning

EEC 6205 EC: Curriculum and Authentic Assessment

Credit Hours: 3

This course focuses issues, strategies and research associated with curriculum and authentic assessment. This course is open to graduate non-majors and is repeatable for three hours credit.

Tampa | College of Education | Teaching and Learning

EEC 6265 Early Childhood Programs and Advanced Curriculum

Credit Hours: 3

Historical traditions and contemporary programs and curriculum models analyzed with an emphasis on dominant practices, methodologies, and current research that influences curriculum development in programs serving young children. Open non-majors/RTHC.

Tampa | College of Education | Teaching and Learning

EEC 6415 EC: Diversity in Home and School

Credit Hours: 3

Focuses on issues of diversity that affect classroom practices with emphasis on analyzing and synthesizing pertinent literature and research. This course is open to graduate non-majors and is repeatable for three credit hours.

Tampa | College of Education | Teaching and Learning

EEC 6517 Social Justice in Early Childhood Education

Credit Hours: 3

This course uses a social justice lens to examine the impact of diversities on social functioning and development of young children. Research skill development includes analysis of social policies. Course is open to non-maj and is rpt for 3 credit hours.

Tampa | College of Education | Teaching and Learning

EEC 6525 Early Childhood Program Development and Administration

Credit Hours: 3

An analysis of current educational programs for young children with emphasis on designing, developing, and administering a program commensurate with the needs of young children. This course is open for non-majors and is repeatable for 3 credit hours.

Tampa | College of Education | Teaching and Learning

EEC 6626 EC: Play and Learning

Credit Hours: 3

This course includes an analysis of play theories, the role of play in the total development of young children, and the role of play as a curricular tool and implications for program planning and evaluation. Open non-majors/RTHC.

Tampa | College of Education | Teaching and Learning

EEC 6678 Research Seminar: Issues and Trends in Early Childhood Education

Credit Hours: 3

This course is designed to create an awareness of developing trends and issues facing the field of early childhood education. Relevant research is reviewed and possible avenues for advocacy are explored. Course open to non-majors, repeatable for 3 credit hours.

Tampa | College of Education | Teaching and Learning

EEC 6926 Workshop in Early Childhood Education

Credit Hours: 3

Individual problems and innovations related to methods and materials of instruction in early childhood.

Tampa | College of Education | Teaching and Learning

EEC 7056 Leadership and Advocacy: Issues Affecting Young Children

Credit Hours: 3

This course focuses on developing leadership and advocacy knowledge and skills necessary for designing public policy/advocacy initiatives directly affecting children and families. Open to all adv. grad stud & may not be repeated for credit.

Tampa | College of Education | Teaching and Learning

EEC 7057 Critical Perspectives in Early Childhood Education

Credit Hours: 3

An exploration of how philosophical ideas of education impact today's practice in early childhood education. Open to all adv. grad stud & may not be repeated for credit.

Tampa | College of Education | Teaching and Learning

EEC 7306 Teaching and Learning in Early Childhood

Credit Hours: 3

Policies and research focusing on teaching and learning in Early Childhood Education with an naturalistic inquiry / action research component. Course is open to all adv. grad students and may not be repeated for credit.

Tampa | College of Education | Teaching and Learning

EEC 7317 ICT in the Early Years

Credit Hours: 3

Explores the interface between young children and information and communication technology (ICT) from a developmental perspective.

Tampa | College of Education | Teaching and Learning

EEC 7416 Sociocultural Approaches to Working with Children and Families

Credit Hours: 3

Focuses on issues relevant to young children within the context of their families and communities. Foundational and current research is examined in light of social policies. Open to all adv. grad stud & may not be repeated for credit.

Tampa | College of Education | Teaching and Learning

EEC 7417 Family Literacy

Credit Hours: 3

Students will examine how literacy is acquired, how culture, language, and family life relate to literacy development, and how home, school, and community contexts influence literacy acquisition.

Tampa | College of Education | Teaching and Learning

EEC 7615 Trends and Issues in Early Childhood Education

Credit Hours: 3

This course will focus on current issues and trends in the field of Early Childhood Education, which serves young children from birth to age 8. Open to all adv. grad stud & may not be repeated for credit.

Tampa | College of Education | Teaching and Learning

EEC 7617 Assessment in Early Childhood Education

Credit Hours: 3

Focuses on the goals, benefits & uses of assessment for young children & their teachers. It explores evaluation and accreditation of programs serving young children & ec teacher educators. Open to all adv. Grad stud & may not be repeated for credit.

Tampa | College of Education | Teaching and Learning

EEC 7627 Arts & Aesthetics in Early Childhood Education

Credit Hours: 3

Provides a synthesis of theoretical perspectives on aesthetic issues and the ramifications for the development, teaching, and the critique of arts in early childhood curriculum.

Tampa | College of Education | Teaching and Learning

EEC 7910 Directed Research in Early Childhood Education

Credit Hours: 1-19

Independent student-faculty research course.

Tampa | College of Education | Teaching and Learning

EEC 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Teaching and Learning

EEE 5344C Digital CMOS/VLSI Design

Credit Hours: 3

Design, layout, simulation, and test of custom digital CMOS/VLSI chips, using a CMOS cell library and state-of-the-art CAD tools. Digital CMOS static and dynamic gates, flip flops, CMOS array structures commonly used in digital systems. Top down design example of a bit slice processor.

Prerequisite(s): EEL 4705
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 5356 Integrated Circuit Technology

Credit Hours: 3

Physics and Chemistry of integrated circuit and discrete device fabrication, materials limitations, processing schemes, failure and yield analysis. A laboratory is integral to the course.

Prerequisite(s): EEL 4351
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 5382 Physical Basis of Microelectronics

Credit Hours: 3

Quantum mechanics with emphasis on electronic properties in atoms, molecules, and crystals; quantum statistics; energy band theory; crystal structures; defect chemistry; semiconductor properties.

Prerequisite(s): EEL 4471
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 6205 Personal Health Systems

Credit Hours: 3

The theory and design of personal health systems. Students design, build and evaluate personal health systems that are patient-facing; enable ubiquitous interaction with health; and employ persuasive techniques for behavior change.

Tampa | College of Engineering | Electrical Engineering

EEE 6217 Biomedical Optical Spectroscopy and Imaging

Credit Hours: 3

This course is an introduction to biomedical optical spectroscopy and imaging, with topics that include light-tissue interaction, theoretical & computational modeling of photon diffusion, optical medical device instrumentation, and clinical applications.

Tampa | College of Engineering | Electrical Engineering

EEE 6273 Chemical/Biological Sensors and Microfabrication

Credit Hours: 3

This course discusses general concepts of MEMS, microfabrication and chem/bio sensors. The course concentrates on basics of MEMS, different processes involved and principles of sensing and understanding systems approaches to problems that require Sensors/MEMS.

Tampa | College of Engineering | Electrical Engineering

EEE 6276 MEMS I/Chem Bio Sensors

Credit Hours: 3

Introduction to MEMS, microfabrication techniques and processes as well as basic design principles of biological and chemical Sensors. The course concentrates on basics of MEMS, different processes involved and principles of sensing.

Tampa | College of Engineering | Electrical Engineering

EEE 6277 Bioelectronics

Credit Hours: 3

Second course in the series covering bioelectrical phenomena and systems. The focus is electronics for biomedical applications.

Tampa | College of Engineering | Electrical Engineering

EEE 6278 MEMS II

Credit Hours: 3

Hands-on training related to design, simulation and fabrication of MEMS transducers and microsystems. The course concentrates on basics of micromachined sensors and actuators, different processes involved and principles of operation.

Prerequisite(s): EEE 6276
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 6282 Biomedical Systems and Pattern Recognition

Credit Hours: 3

Covers 'models for analysis of biomedical systems, both theoretical and computer-based' and 'biomedical pattern spaces, feature extraction and statistical pattern recognition' for insight into bio-systems and efficient integration with medical systems.

Tampa | College of Engineering | Electrical Engineering

EEE 6318 Characterization of Semiconductors

Credit Hours: 3

Electrical, optical, chemical, and physical methods used to characterize semiconductor materials and devices; includes surface and near surface spectroscopes. Available to non-majors.

Tampa | College of Engineering | Electrical Engineering

EEE 6345 VLSI for Signal Processing

Credit Hours: 3

VLSI applications in signal processing and telecommunications. General purpose DSP architectures. ASIS architectures: systolic arrays, data-flow multiprocessing, wavefront arrays. Case histories: modems, echo cancelers, digital PLL, etc. High-speed arithmetic and algorithms.

Tampa | College of Engineering | Electrical Engineering

EEE 6353 Semiconductor Device Theory I

Credit Hours: 3

Theory of operation and application of circuits and devices.

Tampa | College of Engineering | Electrical Engineering

EEE 6355 Compound Semiconductor Technology

Credit Hours: 3

Bulk crystal and epitaxial growth technologies of III-V and II-VI compound semiconductors. The properties, characterization, and device applications of these compounds will be emphasized.

Tampa | College of Engineering | Electrical Engineering

EEE 6357 Integrated System Technologies

Credit Hours: 3

Advanced fabrication concepts of integrated systems. Students will learn state of the art process techniques, apply simulation tools, and perform and interpret electrical measurements on devices fabricated as part of a laboratory experience.

Prerequisite(s): EEE 5356
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 6358 Semiconductor Device Theory II

Credit Hours: 3

Theory of operation and application of circuits and devices.

Prerequisite(s): EEE 6353
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 6368 RF/MW Power Amp Design

Credit Hours: 3

The emphasis of this course is on microwave power amplifier design for hybrid and monolithic microwave integrated circuit implementations.

Prerequisite(s): EEL 6427
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 6369 MMIC Design

Credit Hours: 3

Presents the design theory, technology, and applications of monolithic microwave integrated circuits (MMICs) and briefly introduces design theory and concept for radio frequency integrated circuits (RFICs).

Prerequisite(s): EEL 6427
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 6407 Semiconductor Materials and Devices

Credit Hours: 3

This is a course in semiconductor materials basics leading to a detailed discussion of semiconductor device structures and operation, with a review of current topics. Topics will include a review on semiconductor theory, industry drivers from a systems perspective.

Tampa | College of Engineering | Electrical Engineering

EEE 6412 System on a Chip

Credit Hours: 3

Fundamental concepts: 2D and 3D SoCs. Digital, analog, MEMS, sensors, optoelectronics, and communication/networking blocks for SoC. DNA chips. Fabrication techniques including photolithography, TFD, and etching. Platform based design. Applications.

Tampa | College of Engineering | Electrical Engineering

EEE 6425 Introduction to Nanotechnology

Credit Hours: 3

Basic nanotechnology fabrication and characterization techniques. Nanomaterials, Top-down and bottom-up assembly processes. Applications of nanotechnology.

Prerequisite(s): Physics I, Chemistry I and Calculus I and II
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 6432 Nanostructures and Nanomaterials for Sustainable Systems

Credit Hours: 3

Introduction to nanostructures (tubes, wires, fibers, laminates, spheres, etc.) and materials used to create these structures for sustainable systems to solve global issues for the environment, alternative energy, medicine, pharmacy, sports, space, etc.

Tampa | College of Engineering | Electrical Engineering

EEE 6502 Digital Signal Processing I

Credit Hours: 3

Digital signals and fourier transforms. Z-transforms, digital filter networks; dft, dct, and fast transforms. Design of iir and fir filters; quantization effects. Multirate processing; interpolation and decimation.

Tampa | College of Engineering | Electrical Engineering

EEE 6514 Biomedical Image Processing

Credit Hours: 3

2D signal processing: image enhancement; edge detection and image segmentation. Medical imaging: 3D computerized tomography, magnetic resonance imaging; single photon emission computed tomography; positron emission tomography; radiographs.

Tampa | College of Engineering | Electrical Engineering

EEE 6542 Random Processes in Electrical Engineering

Credit Hours: 3

Review of probability theory, functions of random variables; examples in electrical engineering. Sequences of random variables. Concepts in random processes, correlation functions, power spectrum, random inputs to linear systems. Spectral analysis. Applications to engineering systems.

Tampa | College of Engineering | Electrical Engineering

EEE 6586 Speech Signal Processing

Credit Hours: 3

Speech models: acoustic tube, source-filter. Time and frequency domain properties. Linear prediction analysis of speech. Speech coding: apcm, dpcm, adpcm, sub-band, vq, etc. Speech synthesis and recognition. Speech processing hardware.

Prerequisite(s): EEE 6502
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEE 6777 Data Analytics

Credit Hours: 3

This course aims to teach the fundamentals of Machine Learning and Statistical Data Analysis. It will cover the related theory in statistical inference and learning, as well as several applications in various fields.

Prerequisite(s): EEE 6542 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 5250 Power System Analysis

Credit Hours: 3

Analysis and design technique for AC power systems.

Prerequisite(s): EGN 3375
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 5462 Antenna Theory

Credit Hours: 3

Antenna theory beginning with fundamental parameter definitions and continuing with mathematical concepts, elemental antennas and arrays.

Prerequisite(s): EEL 4471
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 5594L Wireless Circuits and Systems Laboratory

Credit Hours: 3

An extensive hands-on introduction to wireless radio frequency and microwave circuits and systems, involving modern measurements, fabrication and computer-aided design experiences at both component and sub -system levels.

Tampa | College of Engineering | Electrical Engineering

EEL 5771 Introduction to Computer Graphics I

Credit Hours: 3

An introduction to the evolution of computer graphics including point-plotting, line drawing, two-dimensional transformations and graphics software packages.

Prerequisite(s): COP 4530

Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

EEL 5935 Special Electrical Engineering Topics I

Credit Hours: 1-3

Tampa | College of Engineering | Electrical Engineering

EEL 5936 Special Electrical Engineering Topics II

Credit Hours: 1-3

Tampa | College of Engineering | Electrical Engineering

EEL 5937 Special Electrical Engineering Topics III

Credit Hours: 1-3

Tampa | College of Engineering | Electrical Engineering

EEL 6018 System of Systems Eng & Model

Credit Hours: 3

A methodical, disciplined approach for the design, realization, technical management, operations, and implementation of a system. Methodologies based on System of Systems Engineering approach to solve complex engineering problems will be presented.

Tampa | College of Engineering | Electrical Engineering

EEL 6022 Engineering Applications of Complex Analysis

Credit Hours: 3

Analytic functions, conformal mapping, residue theory, Laurent series, transforms. Applications to various problems in engineering and physics.

Tampa | College of Engineering | Electrical Engineering

EEL 6023 Engineering Applications of Partial Differential Equations

Credit Hours: 3

Power series solutions for ordinary differential equations, Sturm-Liouville theory, special functions. Vector methods with generalized coordinates. Separation of variables for partial differential equations. Green's functions.

Tampa | College of Engineering | Electrical Engineering

EEL 6024 Matrix Theory and Optimization for Electrical Systems

Credit Hours: 3

Advanced matrix algorithms: LU and QR factorizations, least-squares, pseudoinverses. Eigen decomposition, Singular value decomposition. Optimization techniques: unconstrained and constrained optimization.

Tampa | College of Engineering | Electrical Engineering

EEL 6025 Math I for Professionals

Credit Hours: 1

Complex analysis: complex algebra, phasors description of circuits. Optimization theory: linear and nonlinear programming, Kuhn-Tucker conditions.

Prerequisite(s): MAP 2302
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6026 Math II for Professionals

Credit Hours: 1

Fourier analysis: frequency domain nomenclature, transfer function formulations, mathematical issues. Matrix analysis: linear system quantification, algorithms, equivalent formulations.

Prerequisite(s): EEL 6025
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6027 Engineering Applications for Vector Analysis

Credit Hours: 3

Vector methods of electromagnetism and fluid mechanics. Vector operators, line and flux integrals, potential and transport theorems, applications.

Tampa | College of Engineering | Electrical Engineering

EEL 6028 Math III for Professionals

Credit Hours: 1

Vector analysis: vector algebra, characterization of physical aspects of electric and magnetic fields. Partial differential equations, reading solution characteristics from separation-of-variables formulas.

Prerequisite(s): EEL 6025, EEL 6026
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6226 Microsystems and MEMS Technology

Credit Hours: 3

This course provides an overview of the MEMS Technology, focusing on devices and systems that can be developed using standard processing approaches.

Tampa | College of Engineering | Electrical Engineering

EEL 6227 Electrical Machines and Drives

Credit Hours: 3

A graduate course intended to familiarize students with the electrical to mechanical energy converters known as machines and the power electronic circuits used to control the machines and produce integrated drives.

Tampa | College of Engineering | Electrical Engineering

EEL 6245 Power Electronics

Credit Hours: 3

Covers topology, circuit analysis, and applications of various converters. Converters include switch-mode dc/dc converters, dc/ac converters and line frequency rectifiers and inverters. Applications of converters in dc motor control and ac motor control.

Prerequisite(s): None.
Corequisite(s): EEL 3302
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6256 Power Systems II

Credit Hours: 3

A graduate course intended to familiarize students with the dynamics, control and protection of electrical power systems.

Prerequisite(s): EEL 5250, EGN 3375
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6262 Industrial Power Distribution

Credit Hours: 3

Prepares student to design electrical power systems for industrial applications. Focuses on power system configurations, transformer connections, fault calculations, protective device sizing, arc flash calculations, and cable raceway system design.

Tampa | College of Engineering | Electrical Engineering

EEL 6263 Industrial Power Distribution II

Credit Hours: 3

Prepares student to design electrical power systems for industrial applications. Focuses on switchgear and motor control centers, ladder

logic, motor application, lighting systems, power factor correction, and power quality.

Prerequisite(s): EEL 6262
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6285 Energy Delivery Systems

Credit Hours: 3

The course provides the students the fundamentals and analysis of the electric power delivery system to facilitate the integration of renewal energy resources – wind energy and solar energy.

Prerequisite(s): EGN 3373, EGN 3375
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6289 Sustainable Energy

Credit Hours: 3

Introduction to concepts of sustainable energy conversion. Solar, wind, hydroelectricity, hydrogen, biomass and geothermal energy conversion methods as well as main storage technologies will be discussed.

Tampa | College of Engineering | Electrical Engineering

EEL 6292 Power Systems and Market: Operation and Analysis

Credit Hours: 3

This course aims to present the backgrounds, state-of-the-art and challenges in current power systems, the operational models and computational methods, the basic economics on electricity market as well as system expansion and investment.

Tampa | College of Engineering | Electrical Engineering

EEL 6293 Power Quality

Credit Hours: 3

Course in basic power quality concepts including interruptions, voltage sags and swells, transient overvoltages, and harmonics. Emphasis is placed on identifying and designing means of mitigation for commonly-encountered power quality problems.

Prerequisite(s): EEL 6263, EEL 6256
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6357 Analog CMOS/VLSI Design

Credit Hours: 3

Design of analog circuits for CMOS/VLSI design, Op amps, comparators, D to A and A to D converters, switched capacitor filters and analog simulation.

Prerequisite(s): EEE 4301
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6425 RF and Microwave Measurements

Credit Hours: 2

Concentrates on the theory and applications of modern radio frequency and microwave measurements. Topics include network analyzer, spectrum analyzer, noise, power and non-linear distortion measurements.

Prerequisite(s): Wireless Circuits Systems Lab.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6426 RF and Microwave Circuits I

Credit Hours: 3

Provides an introduction to passive RF/microwave/wireless circuit design. Topics to be covered include distributed transmission line theory, lumped circuit and network analysis, impedance matching, and the design of various microwave components.

Prerequisite(s): EEL 4471, ELR 4316L
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6427 RF and Microwave Circuits II

Credit Hours: 3

This course presents the design theory and analysis of microwave transistor amplifiers and oscillators. Lectures, homework, and CAD projects develop an understanding of the design and performance issues for this class of circuits.

Prerequisite(s): EEL 6426
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6463 Advanced Antenna Theory

Credit Hours: 3

Electromagnetic radiating systems studied by analytical and numerical methods.

Prerequisite(s): EEL 5462
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6481C Numerical Techniques in Electromagnetism

Credit Hours: 3

Review of Maxwell's equations. Finite differences, finite elements, boundary elements method of moments. Introduction to geometric theory of optics and diffraction.

Prerequisite(s): EEL 5462, EEL 6486
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6486 Electromagnetic Field Theory and Applications

Credit Hours: 3

Graduate-level course in time varying electromagnetic fields. This course is the basis for further study in wireless systems, antenna theory, power systems, high speed networks or electronics. Low frequency as well as high frequency concepts.

Tampa | College of Engineering | Electrical Engineering

EEL 6487C Advanced Electromagnetic Field Theory

Credit Hours: 3

Time harmonic fields emphasizing problems with exact solutions in the rectangular, cylindrical and spherical coordinate systems. Solutions by methods, Green's functions and vector methods.

Prerequisite(s): EEL 6486
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6506C Broadband Communications Networks

Credit Hours: 3

Objectives of networking, circuit and packet switching, queuing theory. Topologies, layered architectures, protocols and network performance. Local and wide area networks. Broadband networks: sonnet, SHD, ATM and BISDN. ATM: cell concept, visual paths and channels, layer functions, interfaces and protocols; switch fabrics; CBR, VBR, ABR traffic, QOS. Current trends and internet. Applications to ATA/voice/video/multimedia traffic.

Prerequisite(s): EEL 6534
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6534 Digital Communication Systems

Credit Hours: 3

Digital communication & info. theory. Random processes. Digital modulation and demodulation. Source & channel coding. Detection theory: matched filter and sequence detection. Multiple access techniques. Spread spectrum & multi-user radio communications.

Tampa | College of Engineering | Electrical Engineering

EEL 6584 RFID and NFC Technologies for IT

Credit Hours: 3

This course will cover an overview of the state-of-the-art radio frequency identification (RFID) and near field communication (NFC) technologies, basic science behind RF wireless communications, and tools and methods for application deployment.

Prerequisite(s): COP 2270
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6592 Wireless Communication Systems Lab

Credit Hours: 3

An extensive introduction to digital communications and wireless communication systems; involving testing, modeling, simulating, and evaluating the performance of digital communication systems at both sub-system and complete system levels.

Tampa | College of Engineering | Electrical Engineering

EEL 6593 Mobile and Personal Communication

Credit Hours: 3

Characteristics of wireless mobile channels indoor and outdoor ; multipath and shadow fading, frequency reuse; micro and pico cells; base-station and portable units. Cell coverage, blocking, and co-channel interference. TDMA, FDMA, CDMA and hybrid approaches to multiple access. Protocols, hand-over. Voice, data, and multi-media over wireless indoor channels.

Prerequisite(s): EEL 6534
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6597 Wireless Network Architecture and Protocols

Credit Hours: 3

Wireless systems and standards. Network fundamentals. Channel characteristics, models. Modulation/coding, spread spectrum. Multiple access control: TDMA/FDMA/CDMA. Mobility/resource management. Wireless network architecture-cellular, satellite, broadband.

Prerequisite(s): EEL 6593
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6614 Systems and Control Theory I

Credit Hours: 3

Analysis of multi-variable linear systems continuous and discrete time, state-space methodology and transfer functions description . Analysis and design of feedback control systems. Effects of plant and measurement noise. Optimal control.

Tampa | College of Engineering | Electrical Engineering

EEL 6615 Systems and Control Theory II

Credit Hours: 3

Continuation of EEL 6614.

Prerequisite(s): EEL 6614
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6630 Digital Control Systems

Credit Hours: 3

Review of linear control systems, discrete time linear systems analysis, Z-

transforms, modeling and design of digital control systems, digital implementation of analog controller, discrete state space representation, concepts of observability and control.

Prerequisite(s): EEL 4657
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6654 Control Systems Engineering

Credit Hours: 3

A course with emphasis on dynamic system modeling, design, analysis, and system verification following systems engineering approaches. The course introduces techniques, applications and trends from a trans/multi/inter/disciplinary perspectives.

Tampa | College of Engineering | Electrical Engineering

EEL 6706 Testing and Fault Tolerance in Digital Systems

Credit Hours: 3

Test generation for combinational and sequential digital circuits, fault analysis and diagnosis. Methods for reliability improvement through fault tolerant and testable circuit design. Introduction to software reliability.

Prerequisite(s): COP 2400, CDA 4201
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

EEL 6722C DSP/FPGA Laboratory

Credit Hours: 3

Development of real-time digital signal processing (DSP) systems from algorithm to hardware using DSP, FPGA and hybrid DSP/FPGA rapid prototyping platforms. The course has both lecture and laboratory components.

Prerequisite(s): None.
Corequisite(s): EEE 6502
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6728 Introduction to VHDL

Credit Hours: 3

An in-depth study of the VHDL hardware description language with emphasis on digital circuit simulation and digital design for synthesis.

Tampa | College of Engineering | Electrical Engineering

EEL 6729 Rapid System Prototyping

Credit Hours: 3

Focus on digital synthesis targeting FPGAs as a way of obtaining rapid prototypes of digital circuits.

Tampa | College of Engineering | Electrical Engineering

EEL 6752 Digital Signal Processing II

Credit Hours: 3

Fast algorithms, FFT, fast convolution; DCT, CZT. Random signals. Linear prediction, application to speed coding. Spectrum estimation. Quantization effects. Pencil-of-functions method. Adaptive filtering and equalization.

Prerequisite(s): EEE 6502
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6753 Digital Signal Processing III

Credit Hours: 3

Advanced topics in digital signal processing, e.g., A. adaptive arrays, beam forming and applications to radar and sonar; B. multi-rate filtering, multi-resolution analysis, sub-band analysis, wavelet transforms and applications to images and other large-scale measurements; C. noise cancellation; and D. inverse problems, such as CT reconstruction.

Prerequisite(s): EEE 6502 or EEL 6752
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6764 Principles of Computer Architecture

Credit Hours: 3

Arithmetic algorithms, CPU speedup techniques, memory hierarchies, virtual memory, input-output. Study of the number systems and the algorithms used for digital arithmetic computation with emphasis on their implementation, speed and reliability considerations.

Prerequisite(s): CDA 4100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Computer Science and Engineering

EEL 6787 Data Network, Systems, and Security

Credit Hours: 3

The objective of this course is to provide a technical and operational introduction to data/computer communication networks, including network management and security.

Tampa | College of Engineering | Electrical Engineering

EEL 6846 Coding Theory

Credit Hours: 3

Error-correcting codes, algebraic block codes, linear codes and feedback shift registers; BCH codes; convolutional codes; burst error correcting codes; arithmetic codes; decoding methods.

Prerequisite(s): EGN 5423
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6908 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Engineering | Electrical Engineering

EEL 6935 Selected Electrical Topics

Credit Hours: 1-3

Selected Topics in Electrical Engineering.

Tampa | College of Engineering | Electrical Engineering

EEL 6936 Special Topics

Credit Hours: 1-3

Selected topics.

Prerequisite(s): EEL 6427
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Electrical Engineering

EEL 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Engineering | Electrical Engineering

EEL 7910 Directed Research

Credit Hours: 1-19

Tampa | College of Engineering | Electrical Engineering

EEL 7931 Special Topics in Communications

Credit Hours: 3

Advanced topics in communications such as synchronization, spread-spectrum communications, fading channels, large constellation signaling schemes, mobile radio, statistical multiplexing, performance measurement, etc.

Tampa | College of Engineering | Electrical Engineering

EEL 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Engineering | Electrical Engineering

EES 6107 Biological Principles of Environmental Engineering

Credit Hours: 3

This course improves the student's knowledge and problem solving skills with respect to the Biological Principles used by Environmental Engineers to design biological processes. Students will learn about microbial physiology and metabolism.

Tampa | College of Engineering | Civil and Environmental Engineering

EEX 5705 Seminar in Preschool Handicapped

Credit Hours: 2

Intended to familiarize the education student with the wide range of needs and services of the preschool children with disabilities and their families and how they coordinate with educational services.

Tampa | College of Education | Teaching and Learning

EEX 5752 Working with Families: A Pluralistic Perspective

Credit Hours: 3

The impact of the socio/cultural environment on the education of at-risk children and children with disabilities; family systems theory, principles of multi-cultural education, strategies for working effectively with families of school-age children, diverse cultures and family structures represented in school populations today.

Prerequisite(s): Introductory course in special education

Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EEX 6025 Trends and Issues in Special Education

Credit Hours: 3

Survey of all exceptionalities including current trends and issues related to the field of special education.

Tampa | College of Education | Teaching and Learning

EEX 6051 Creating Positive Learning Environments for Students with Disabilities

Credit Hours: 6

This course presents an overview of assessment, behavior management, and instructional planning for students with disabilities. It also incorporates content about the historical and legal foundations of special education and theories and research that focus on defining, describing and intervening with students who have learning disabilities, behavior disorders, mild-moderate mental retardation, mild to moderate developmental disabilities, and physical disabilities.

Tampa | College of Education | Teaching and Learning

EEX 6065 Collaborative Transition and Career Planning for Students with Low Incidence Disabilities

Credit Hours: 3

This course offers an analysis of collaborative, interdisciplinary transition planning strategies and explores issues surrounding the development and use of functional, community-based curriculum for adolescents with severe or profound disabilities.

Tampa | College of Education | Teaching and Learning

EEX 6222 Advanced Psychoeducational Assessment of Exceptional Students

Credit Hours: 3

Theory and methodology associated with norm-referenced, criterion-

referenced, curriculum-based, ecological, and psychoneurological assessment procedures for exceptional students.

Tampa | College of Education | Teaching and Learning

EEX 6224 Developing Individualized Educational Programs for Students with Disabilities

Credit Hours: 6

This 6-hour course reinforces and extends competencies in assessment, behavior management, legal and ethical foundations of special education, instructional planning, working with families, collaboration, and characteristics of disabilities. Content emphasizes knowledge and skills needed by teachers who are working with students who have mild disabilities and those from diverse cultural, socioeconomic and ethnic areas.

Prerequisite(s): EEX 6051
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EEX 6234 Identification and Assessment of Individuals with Low Incidence Intellectual Disabilities and ASD

Credit Hours: 3

Critical analysis of the processes in place to identify students with severe/profound intellectual disabilities and/or autism spectrum disorder (ASD). Explores curriculum instruction and assessment in a least restrictive environment.

Tampa | College of Education | Teaching and Learning

EEX 6245 Transitional Programming for the Adolescent and Young Adult Exceptional Student

Credit Hours: 3

Procedures for implementing educational programs with exceptional adolescents. Includes educational programming, alternative programs, community resource coordination, career/occupational education, and advocacy.

Tampa | College of Education | Teaching and Learning

EEX 6247 Implementing Programs for Students with Disabilities

Credit Hours: 6

Course emphasizes instructional approaches for implementing reading, math, language arts and social skills instruction in conjunction with classroom management for students with emotional, learning and/or cognitive disabilities. Majors only. Not repeatable

Prerequisite(s): EEX 6224
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EEX 6248 Instructional Approaches for Exceptional Populations

Credit Hours: 3

In-depth study of instructional strategies that are effective when teaching students with emotional disturbance, mental retardation, and learning disabilities. Content includes techniques for curriculum adaptation, IEP development; direct, data-based and metacognitive strategy instruction; and micro-computer applications.

Tampa | College of Education | Teaching and Learning

EEX 6307 Qualitative Research in Special Education

Credit Hours: 3

Graduate research seminar that introduces students to the philosophies, methods, epistemologies & ethical foundations of qualitative research for those interested in students with disabilities & their families; non restrictive; repeatable for credit.

Prerequisite(s): one graduate level course in research design or methods
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EEX 6476 Curriculum and Instruction for Students with Low Incidence Disabilities

Credit Hours: 3

Analysis of current issues and best practices in assessment for teaching, curriculum content, and instruction for students with severe disabilities and the provision of educational services within inclusive general education settings and home communities.

Tampa | College of Education | Teaching and Learning

EEX 6511 Administration of Exceptional Student Programs

Credit Hours: 3

Procedures that local, state, and national administrators may use to implement services for exceptional students.

Tampa | College of Education | Teaching and Learning

EEX 6602 Observational Methods and Functional Assessment

Credit Hours: 3

Provide students with instruction in functional assessment procedures and direct observation methods to be used consistent with the principles of applied behavior analysis in mental health and education settings.

Tampa | College of Education | Teaching and Learning

EEX 6612 Management and Motivation of Exceptional and At-Risk Students

Credit Hours: 3

Available to non-majors. Focuses on approaches to classroom management and motivational strategies when working with exceptional students. Content includes applied behavior analysis techniques, psychoeducational approaches, and social skills training.

Prerequisite(s): Introductory course in special education
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EEX 6619 Positive Behavior Support Low Incid. Intellectual Disab. & ASD

Credit Hours: 3

Knowledge and skills necessary to develop, implement, and evaluate the impact of positive behavior support for students with s/pintellect. disab and/or autism spectrum disorder. Communicative function of challenging behaviors, teaching new skills & prevention.

Tampa | College of Education | Teaching and Learning

EEX 6706 Education of the Preschool Handicapped Child

Credit Hours: 3

Education of children ages birth through five with special needs. Basic concepts, curricular intervention strategies, and organizational structures are covered.

Tampa | College of Education | Teaching and Learning

EEX 6732 Consultation and Collaboration in Special Education

Credit Hours: 3

Theories of consultation and collaboration. Overview of service delivery models in special education.

Prerequisite(s): Introductory course in special education
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EEX 6767 Assistive Technology for Students with Low Incidence

Credit Hours: 3

This course is an introduction to educational and assistive technology

used for instruction of students w/ low incidence disabilities with emphasis on students w/ asd. Strategies for at devices include augmentative/alternative communication systems.

Tampa | College of Education | Teaching and Learning

EEX 6906 Independent Study: Special Education

Credit Hours: 1-6

Independent study in which students must have a contract with an instructor.

Tampa | College of Education | Teaching and Learning

EEX 6939 Advanced Seminar: Paradigms, Practices, and Policies in Special Education

Credit Hours: 3

An advanced graduate seminar stressing cross-categorical relationships. Topics include research that deals with paradigms for providing service, service models, and legal mandates.

Tampa | College of Education | Teaching and Learning

EEX 6943 Practicum in Exceptional Student Education

Credit Hours: 1-4

Supervised field work in exceptional student education with children (including preschool handicapped) who have learning disabilities, mental handicaps, emotional and behavioral disabilities, physical disabilities, or multiple disabilities.

Tampa | College of Education | Teaching and Learning

EEX 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of Education | Teaching and Learning

EEX 7301 Selected Topics in Special Education

Credit Hours: 1-8

Identification and study of ethical and research issues in special education. Opportunity will be provided for the student to gather and process data, as appropriate, culminating in a written report and/or oral presentation to fellow student researchers.

Prerequisite(s): EEX 7341
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EEX 7341 Research Studies and Their Implications in the Education of Exceptional Children

Credit Hours: 3

This course will involve a study of current research and research methods used in exceptional child education. The transition from theory to practice will be made through the examination and discussion of implications in the field of special education that can be drawn from the research.

Prerequisite(s): EDF 6432, EDF 6481
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EEX 7342 Making your Research Accessible

Credit Hours: 3

This doctoral seminar critically examines performance theories and performance and qualitative arts-based research methods as a mechanism for disseminating research findings and making research more accessible to the community in which it takes place.

Tampa | College of Education | Teaching and Learning

EEX 7346 Crit. Analysis Theories & Research on Instructional Practices

Credit Hours: 3

This course provides doctoral students with an opportunity to critically examine the research base in SPED instructional practice and make connections to related theories and educational policy.

Tampa | College of Education | Teaching and Learning

EEX 7425 Special Education Leadership Studies

Credit Hours: 1-2

Introduction to doctoral studies in the Department of Special Education. Discussion forum for new students, mentoring and support.

Tampa | College of Education | Teaching and Learning

EEX 7428 Teacher Education in Special Education: Conceptual

Credit Hours: 3

This four-semester seminar focuses on teacher education in special education.

Tampa | College of Education | Teaching and Learning

EEX 7429 Special Education Teacher Education

Credit Hours: 3

This seminar will explore historical foundations of teacher education and special education specifically. Professional development and pathways to teaching will be explored. Existing research in SPED teacher preparation will be reviewed.

Tampa | College of Education | Teaching and Learning

EEX 7516 Critical Analysis of Compensatory, Remedial, Special Education

Credit Hours: 3

The purpose of this course is to engage students in intensive study of the relationship between social policy and educational services for students who have been marginalized because of disability, race, poverty, and/or native language.

Tampa | College of Education | Teaching and Learning

EEX 7744 Curriculum and Instructional Issues in Urban Special Education

Credit Hours: 3

The purpose of this course is to review and critically examine the theoretical and research literature on the interactions of race, culture, class, and disability on the schooling experiences of urban (ethnic minority and impoverished) children and their families. The course also takes into account that ethnic minority and poor children may or may not reside in urban areas and as a result of school and community desegregation movements, those learners may also attend suburban and rural schools, in addition to urban schools. The course will provide varied formats for graduate students to identify and address critical issues and trends in urban special education and related services areas that impact outcomes for minority learners across social classes and impoverished learners from majority cultural backgrounds.

Tampa | College of Education | Teaching and Learning

EEX 7745 Historical, Ethical, and Disciplinary Foundations of Special Education

Credit Hours: 3

Historical, Ethical, and Disciplinary Foundations of Special Education provides doctoral students a critical understanding of the social, political, ethical, and legal contexts that shaped the research, policies, and practices in the field of Special Education during the twentieth century.

Tampa | College of Education | Teaching and Learning

EEX 7746 Ethics in Teacher Education and Teacher Development

Credit Hours: 3

This course will focus on the philosophical and theoretical perspectives of ethics and ethical decision making as they relate to the roles and responsibilities of teacher educators in the preparation and professional development of teachers.

Tampa | College of Education | Teaching and Learning

EEX 7797 Language and Learning Variability in Urban Schools

Credit Hours: 3

This seminar explores the opportunities and challenges facing urban schools as cultural identity construction sites by focusing on the

experiences of students and their families as well as language, power and politics in education, and social justice.

Tampa | College of Education | Teaching and Learning

EEX 7815 Research Seminar

Credit Hours: 1-9

This seminar, taken each semester of the first and second years of the doctoral program, will contribute to the development of the skills and values that lead to the creation of new knowledge and its application to the field of special education in order to improve outcomes for students who have disabilities and their families. Issues in urban schools will be emphasized.

Tampa | College of Education | Teaching and Learning

EEX 7868 Fieldwork with Exceptional Students

Credit Hours: 1-5

Practical field experience in curriculum development, classroom teaching, supervision, and/or administrative areas in special education.

Tampa | College of Education | Teaching and Learning

EEX 7910 Directed Research

Credit Hours: 1-19

This course provides higher education program graduate students with an opportunity for directed research under the supervision of an higher education program faculty member.

Tampa | College of Education | Teaching and Learning

EEX 7911 Specialized Study in: Mental Retardation, Behavior Disorders, Specific Learning Disabilities, and Gifted Education

Credit Hours: 1-8

The specialized study enables advanced exploration of knowledge in an area of interest to the student in special education.

Tampa | College of Education | Teaching and Learning

EEX 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Teaching and Learning

EGI 5051 Nature and Needs of the Gifted

Credit Hours: 3

This survey course examines the characteristics and educational needs of children and youth who are gifted, including those from special populations. Emphasis is on giftedness as defined historically, nationally and locally. The course also explores changing views of intelligence and talent development related to policy and practice in gifted education as well as the processes of identification and programming.

Tampa | College of Education | Teaching and Learning

EGI 5307 Theory and Development of Creativity

Credit Hours: 3

Exploration of the concept of creativity, its factors, measurement, and application to education. Opportunities are given to work with children in a laboratory setting and to prepare materials to be used with small groups of children.

Tampa | College of Education | Teaching and Learning

EGI 6232 Advanced Educational Strategies for the Gifted

Credit Hours: 3

Curriculum adjustments, methods and techniques, as well as classroom organizations necessary for teaching students who are gifted will be the focus of this course. Emphasis will also be on curriculum in gifted programs within the context of school reform and restructuring.

Prerequisite(s): EGI 5051
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EGI 6415 Consultation, Counseling, and Guidance Skills for Gifted Students

Credit Hours: 3

Primary emphasis of this course will be to provide an awareness, knowledge, and understanding of the unique guidance and counseling needs of students who are gifted and talented or from special populations.

Tampa | College of Education | Teaching and Learning

EGI 6936 Seminar in Education of the Gifted: Special Population

Credit Hours: 3

This seminar will provide a critical survey of the research, issues, policy, ethics, and practices related culturally diverse, economically disadvantaged, limited, English proficient, twice exceptional, highly gifted, or very young.

Tampa | College of Education | Teaching and Learning

EGI 6943 Supervised Practicum in Gifted Education

Credit Hours: 1-12

Planned experiences working with students who are gifted, program development and administration, or an individualized inquiry of a specific issue related to gifted education.

Tampa | College of Education | Teaching and Learning

EGN 5421 Engineering Applications for Vector Analysis

Credit Hours: 3

Vector methods in electromagnetism and fluid mechanics. Vector operators, line and flux integrals, potential and transport theorems, applications.

Tampa | College of Engineering | Interdisciplinary Engineering

EGN 5422 Engineering Applications of Partial Differential Equations

Credit Hours: 3

Power series solutions for ordinary differential equations, Sturm-Liouville theory, special functions. Vector methods with generalized coordinates. Separation of variables for partial differential equations. Green's functions. Calculus of variations. Numerical methods.

Tampa | College of Engineering | Interdisciplinary Engineering

EGN 5423 Neural Networks and Mathematics for Communication

Credit Hours: 3

Advanced matrix algorithms: LU and QR factorizations, least-squares, pseudoinverse. Techniques for optimization.

Tampa | College of Engineering | Interdisciplinary Engineering

EGN 5424 Engineering Applications of Complex Analysis

Credit Hours: 3

Analytic functions, conformal mapping, residue theory, Laurent series, transforms. Applications to various problems in engineering and physics.

Tampa | College of Engineering | Interdisciplinary Engineering

EGN 5940 Professional Engineering Internship

Credit Hours: 0-6

Professional or interdisciplinary work period in engineering or career-related field.

Tampa | College of Engineering | Interdisciplinary Engineering

EGN 6333 Continuum Mechanics

Credit Hours: 3

This course covers the fundamental mathematical and physical principles

of Newtonian Mechanics as applied to continuous media, including solids & fluids, and complete linear & non-linear description of kinematics and equilibrium in the Lagrangian frame.

Tampa | College of Engineering | Civil and Environmental Engineering

EIN 5174 Total Quality Management Concepts

Credit Hours: 3

This course will examine the methodology and procedures that companies use to improve quality and its operational benefits, including the management transformation (paradigm shift) that is evolving. Unrestricted. Nonrepeatable for credit.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 5182 Principles of Engineering Management

Credit Hours: 3

Introduction to the fundamentals of planning, organizing and leadership as needed by engineers, scientists, and other professionals considering managerial positions.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 5201 Creativity in Technology

Credit Hours: 3

Designed to aid engineers, and others, re-open the creativity within themselves. It is focused on the student and his/her interests in technology and innovation. Graduate students and senior undergraduates.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 5275 Work Physiology and Biomechanics

Credit Hours: 3

Human physiological limitations encountered in design, analysis and evaluation of man-machine systems.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 5350 Technology and Finance

Credit Hours: 3

A course for technical managers that focuses on how financial and economic principles are utilized to make technical investments and manage technical enterprises.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 5452 Engineering a Lean Enterprise

Credit Hours: 3

Engineering the Lean Enterprise introduces you to one of the most successful strategies in operations: lean manufacturing, as seen at Toyota and other companies. Lean manufacturing is a philosophy that applies both on and off the factory floor.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 5510 Manufacturing Systems Analysis

Credit Hours: 3

The study of systems of manufacturing entities such as machine tools, robots, and materials handlers. Emphasis is on mathematical description of integrated systems and system optimization.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6106 Technology and Law

Credit Hours: 3

Selected topics related to the relationships between and among technology, law and social policy, including governmental regulation, products liability, professional liability, contract negotiation and formation, and developments and trends affecting engineering professionals.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6108 EM-Human Relations

Credit Hours: 3

Human relations, understanding oneself, understanding other people, influencing and motivation performance, improving moral and discipline, and self appraisal and analysis for the technical manager.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6112 Information Systems Design for Engineers

Credit Hours: 3

This course introduces students to the design and implementation of information systems, with special emphasis on industrial applications. The topics to be covered include the relational database model, structured query language, and design methodologies.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6121 Technology and Markets

Credit Hours: 3

Marketing strategy and its relationship to the development of technology from the viewpoint of interaction between the technical enterprise and its industrial and government customers.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6145 Project Management

Credit Hours: 3

Provide principles and techniques for planning, scheduling and managing projects in engineering and related environments. Applies analytical tools and techniques including software to solve project management problems. Not restricted. Non-repeatable.

Prerequisite(s): EGN 3443
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6154 Technical Entrepreneurship

Credit Hours: 3

A comprehensive study of developing and starting an engineering venture. Student teams work out a business plan for a company to develop, manufacture, and distribute a technical product or service.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6177 Total Quality Management Seminar

Credit Hours: 3

Study and analysis of TQM Principles through discussion, guest lecturers, critiques of published articles. A variety of quality techniques will be examined to determine their level of adoption and effectiveness. Unrestricted. Nonrepeatable for credit.

Prerequisite(s): EIN 5174
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6178 ISO 9000/14000

Credit Hours: 3

Study and analysis of ISO 9000/14000 publications with a view to understanding the documentation process and auditing process for registration purposes and the relationship to other quality systems and programs. Unrestricted. Nonrepeatable for credit.

Prerequisite(s): EIN 5174
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6179 Advanced TQM Methods: Six Sigma

Credit Hours: 3

This course is a presentation of Six Sigma in industry: details of the methodology that comprise it, and how it relates to Total Quality Management. This course is restricted to students pursuing majors in the IMSE Department. Nonrepeatable for credit.

Prerequisite(s): EIN 5174
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6183 Engineering Management Policy and Strategy

Credit Hours: 3

Strategic planning and policy formulation in technical and scientific organizations. General managers in the middle. Translation of strategic plans into action plans and implementation of the strategic change process. This is a capstone course in the EM program to be taken during the last semester of the student's program.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6215 Engineering System Safety

Credit Hours: 3

The theory and practical implications of the concept of systems safety as these relate to the life cycle of a product or system. Analysis of the fundamental concepts, design implications, and specifications of safety in human machine environments.

Prerequisite(s): Statistics.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6216 Occupational Safety Engineering

Credit Hours: 3

Introduction to the principles of designing, maintaining, and managing a workplace free from hazards. Covers mechanical hazards, fall and lifting hazards, climatic and environmental hazards, fire and explosive hazards, and pressure hazards. Considers design issues, warnings, and personal protective equipment. Term project required.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6217 Construction Safety Engineering

Credit Hours: 3

Course based on OSHA course 510; covers applicable standards to industry's most common violations; examples of accidents resulting from ignoring standards; documented incidents are researched. Completion of course includes receipt of 30-hour OSHA Card.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6247 Engineering Information Processing

Credit Hours: 3

A study of human information processing theories and measurement techniques as applied to engineering problems emphasizing perceptional, cognitive, and learning aspects of interpersonal and human-computer communication.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6319 Work Design and Productivity Engineering

Credit Hours: 3

Foundations of motivated work performance, job satisfaction and organizational productivity. Analysis of job content and job context, comparison of different concepts for improving organizational effectiveness; suggestions for productivity improvements through effective work redesign.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6336 Production Control Systems

Credit Hours: 3

Forecasting models, development of production plans, loading and scheduling models and basic inventory models. Use of MRP. Design and evaluation of production control systems.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6386 Management of Technological Change

Credit Hours: 3

A study of problems encountered by managers in the planning, organizing, directing, and controlling of resources in technology-based organizations.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6392 New Product Development

Credit Hours: 3

Course focused on various aspects of the new product development process including market sizing, concept testing, financing, and protecting intellectual property.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6430 Overview of Regulated Industries

Credit Hours: 3

This course provides students with basic information on regulated industries, emphasizing challenges experienced in medical device development, manufacture and commercialization with regard to regulatory requirements. Unrestricted. Nonrepeatable.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6431 Regulated Quality Systems and Control

Credit Hours: 3

This course provides students with information to design quality systems for regulated industries, emphasizing medical device manufacturing. The application of various statistical techniques to the control of industrial processes will be used.

Prerequisite(s): EIN 6430
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6432 Regulated Product Approval Process

Credit Hours: 3

The course provides students with information to collaborate effectively with the FDA to navigate the product approval process, emphasizing medical devices. The underlying scientific, regulatory and quality processes for submission will be reviewed.

Prerequisite(s): EIN 6430
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6433 Human Factors Engineering in Medical Devices

Credit Hours: 3

The course provides students with information for the ergonomic design and operability of medical devices. These systematic designs are critical in improving the safety of medical devices by reducing the probability of user error.

Prerequisite(s): EIN 6430
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6434 Design Controls for Medical Devices

Credit Hours: 3

The course provides students with information to establish procedures to effectively control the design requirements and specifications for medical devices. The design process will be examined to apply the best approaches for verification and validation.

Prerequisite(s): EIN 6430
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6435 International Regulations for Medical Devices

Credit Hours: 3

The course provides students with information regarding the major global compliance issues related to medical devices. The initiatives of the Global Harmonization Task Force to facilitate international trade without compromising safety will be explored.

Prerequisite(s): EIN 6430
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6518 Systems Integration

Credit Hours: 3

The planning and process that results integration of components, various functions, organizations and how integrated work together or share resources to produce an integrated system.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6520 Systems Modeling and Performance Analysis

Credit Hours: 3

This course is a course in modeling and performance analysis of systems. We will study both discrete and continuous systems, with an emphasis on modeling, performance analysis and control of these systems.

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6934 Special Industrial Topics I

Credit Hours: 1-3

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6935 Special Industrial Topics II

Credit Hours: 1-3

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6936 Special Industrial Topics III

Credit Hours: 1-3

Tampa | College of Engineering | Industrial and Management Systems Engineering

EIN 6971 Thesis: Master's

Credit Hours: 1-3

Tampa | College of Engineering | Industrial and Management Systems Engineering

ELD 6015 Advanced Theories and Practices in Specific Learning Disabilities

Credit Hours: 3

Various conceptual and/or theoretical models are reviewed; current trends and issues related to education of children with specific learning disabilities.

Prerequisite(s): Introductory course in exceptional child education

Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

ELD 6147 Educational Strategies for Student with Specific Learning Disabilities

Credit Hours: 3

Advanced educational procedures and materials development for the student with specific learning disabilities. For certification.

Prerequisite(s): ELD 6015, EEX 6222
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EMA 5326 Corrosion Control

Credit Hours: 3

Provide understanding of corrosion fundamentals. Introduce design for corrosion detection, protection, and control. Acquire research project experience.

Prerequisite(s): EGN 3365
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

EMA 6001 Advance Materials

Credit Hours: 3

Principles of structure, structure modification and properties of materials with emphasis on structure-property relationships and modern theory of solids.

Tampa | College of Engineering | Chemical and Biomedical Engineering

EMA 6510 Characterization of Materials

Credit Hours: 3

Designed to help students engineers and technicians who have little to moderate background in materials analysis to realize and or gain and deeper understanding of the many analytical characterization methods available.

Tampa | College of Engineering | Chemical and Biomedical Engineering

EME 5317 Technology Leadership in Education

Credit Hours: 3

Selecting, organizing, and using major types of instructional technology and equipment in various school curricula and educational programs. Explores the transformational power of emerging technologies in schools.

Tampa | College of Education | Educational and Psychological Studies

EME 5403 Computers in Education

Credit Hours: 3

A survey course designed to introduce practicing teachers to microcomputer technology and its function in the classroom to augment the teaching and learning processes. Objectives include the use and evaluation of educational software, classroom use of computers, instructional computing research, generic applications software (word processors, database managers, etc.), programming, disk operating systems, and microcomputer hardware.

Tampa | College of Education | Educational and Psychological Studies

EME 6016 Digital Citizenship and Online Safety

Credit Hours: 3

This course provides an overview of basic digital citizenship concepts and a critical view of online safety issues with a focus on youth and educational settings.

Tampa | College of Education | Educational and Psychological Studies

EME 6053 Internet in Education

Credit Hours: 3

The course is completely online.Topics include: educational resources, copyright and safety issues, webpage construction (HTML), and evaluation of websites.

Tampa | College of Education | Educational and Psychological Studies

EME 6055 Current Trends in Instructional Technology

Credit Hours: 3

Development of concepts, strategies, and materials for the use of computer technology in the enhancement of instruction. The course explores the impact that computer technology can have on the nature of the teaching/learning process.

Tampa | College of Education | Educational and Psychological Studies

EME 6157 Game Design & Development for Learning

Credit Hours: 3

Students learn about the structure of computer games, and the design and development of games for learning. Students work in interdisciplinary teams designing/developing a game for learning.

Prerequisite(s): EME 6930
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EME 6207 Web Design

Credit Hours: 3

This course focuses on the design and development of instructional and informational web sites.

Tampa | College of Education | Educational and Psychological Studies

EME 6208 Interactive Media

Credit Hours: 3

Focuses on the design, development, and implementation of interactive media in instructional settings. Examples include interactive presentations, digital audio & video, digital photography, virtual worlds, as well as basic web publishing.

Tampa | College of Education | Educational and Psychological Studies

EME 6209 Digital Video

Credit Hours: 3

This course addresses concepts issues and practices associated with creating effective instructional DVD videos Included in the course topics are production mgmt storyboarding camera lighting techniques editing graphics hardware systems.

Tampa | College of Education | Educational and Psychological Studies

EME 6215 Instructional Graphics

Credit Hours: 3

Advance knowledge and application of the principles underlying the design and use of graphics in instructional settings.

Tampa | College of Education | Educational and Psychological Studies

EME 6235 Technology Project Management

Credit Hours: 3

Introduction to the basic processes of project management for instructional design projects. Students will be introduced to organizational issues, methods of planning, and techniques for managing the business and creative processes.

Prerequisite(s): EDF 6284
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EME 6346 Data Visualization in Education

Credit Hours: 3

Students will learn how to communicate effectively using data in reporting. In addition, students will be able to create graphs, images, diagrams, and animations to convey messages to differing constituents in educational settings.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EME 6347 Digital Media and Learning

Credit Hours: 3

In this course students will be introduced to the sociological and critical literatures on instructional technology, primarily via the Digital Media and Learning (DML) research network.

Tampa | College of Education | Educational and Psychological Studies

EME 6348 Predictive Learning Analytics

Credit Hours: 3

This course will examine how educational professionals can leverage data to promote student success. Student will learn how to use data modeling to effectively identifying at-risk students and create programs to support those students.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EME 6356 Introduction to Big Data and Learning Analytics

Credit Hours: 3

This course will explore the design and implementation of large databases used for educational planning, evaluation, and assessment. In addition, the course will investigate the analysis of data for the purposes of optimizing student learning.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EME 6419 Motivational Design for Learning Technology

Credit Hours: 3

This course explores the design principles of learner motivation in technology-enhanced learning environments. Students will learn various motivational design concepts and also be engaged in the motivational design process.

Tampa | College of Education | Educational and Psychological Studies

EME 6425 Technology for School Management

Credit Hours: 3

This course provides information and skills necessary for administrators and teachers to effectively use the computer and application software to manage information. Students use programs such as word processors, database managers, and spreadsheets to facilitate management tasks at the school and classroom level. In addition, general computer education topics are covered which provide for the computer literacy of school administrators.

Tampa | College of Education | Educational and Psychological Studies

EME 6457 Distance Learning

Credit Hours: 3

This online course about distance learning is designed to provide an integrated framework to explore theory within practice. The course will explore all types of distance and distributed learning—not just online learning.

Tampa | College of Education | Educational and Psychological Studies

EME 6613 Development of Technology-Based Instruction

Credit Hours: 3

Application of computer-based instructional design principles to the development of technology-based instruction. This course also incorporates state-of-the-art materials and methods involving digital technologies.

Prerequisite(s): EDF 6284
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EME 6614 Games Analytics for Learning

Credit Hours: 3

Students first learn theory & practice of game analytics, i.e., using games to gather data for assessment of learning; then fine-tune a game with iterative cycles of formative evaluation & revision; and finally gather a data set & analyze it.

Prerequisite(s): EME 6157
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EME 6817 Data in Assessment and Accreditation

Credit Hours: 3

This course will explore the role of data in assessment and accreditation. Educational practitioners will gain an understanding of how assessment can inform their work and how data collection and analysis can be critical to a successful accreditation.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EME 6906 Independent Study in Instructional Technology

Credit Hours: 1-6

Independent study under the direction of an IT faculty member. Student must have contract with instructor.

Tampa | College of Education | Educational and Psychological Studies

EME 6930 Programming Languages for Education

Credit Hours: 3

Development of concepts, strategies, and materials for using programming languages in educational settings. Separate sections will focus on different programming languages such as LOGO, BASIC, Hyperscripting, Pascal, Advanced Pascal.

Tampa | College of Education | Educational and Psychological Studies

EME 6936 Applications of Computers as Educational Tools

Credit Hours: 3

Selected topics in the application of computing and related technology to the teaching and learning processes. Separate sections will focus on topics such as telecommunications, image and sound processing, interactive media, artificial intelligence, data acquisition, and information systems.

Tampa | College of Education | Educational and Psychological Studies

EME 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-9

The purpose of the thesis/project(Education Specialist student requirement)is to provide an opportunity for the student to apply knowledge gained in the program to the resolution of significant needs arising from professional practice.

Tampa | College of Education | Educational and Psychological Studies

EME 7458 Research in Distance Learning

Credit Hours: 3

An on-line course about distance learning designed to provide an integrated framework to explore theory within practice. Topics include distance technologies; implications for teaching and learning; issues and trends; and research.

Tampa | College of Education | Educational and Psychological Studies

EME 7615 Instructional Game Design for eBooks

Credit Hours: 3

Instructional design and development of games in eBooks to promote reading comprehension, analysis of existing research and participation in new research on games to promote reading comprehension. Focus is games for eBooks for web and portable devices.

Tampa | College of Education | Educational and Psychological Studies

EME 7631 Research in Technology Project Management

Credit Hours: 3

A graduate level course that examines project management and provides tools and process to apply sound project management principles to the field of instructional design and technology. Topics include project management issues related to time, resources, technical, and people skills.

Prerequisite(s): EDF 6284
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

EME 7910 Directed Research in Instructional Technology

Credit Hours: 1-19

This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.

Tampa | College of Education | Educational and Psychological Studies

EME 7938 Computer-Augmented Instructional Paradigms in Education

Credit Hours: 3

Seminar examining theory and application of computers and related technology in teaching and learning.

Tampa | College of Education | Educational and Psychological Studies

EME 7939 Research in Technology-Based Education

Credit Hours: 3

Seminar examining in-depth research on the uses of computers and related technology on teaching and learning. Also includes investigation on role of computers and related technology as research instrumentation.

Tampa | College of Education | Educational and Psychological Studies

EME 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Educational and Psychological Studies

EML 6060 Advanced Engineering Math II

Credit Hours: 3

This course covers matrices, systems of linear and nonlinear differential equations, vector calculus, and functions of a complex variable.

Tampa | College of Engineering | Mechanical Engineering

EML 6069 Advanced Mathematics for Mechanical Engineers

Credit Hours: 3

Basic theory of ordinary and partial differential equations useful in applications. First- and second-order equations, separation of variables, Fourier series, Laplace transforms.

Prerequisite(s): Undergraduate Calculus, Undergraduate Differential Equations.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6105 Advanced Thermodynamics and Statistical Mechanics

Credit Hours: 3

Topics in classical thermodynamics, some elementary subjects in statistical mechanics and some applications in combustion.

Tampa | College of Engineering | Mechanical Engineering

EML 6154 Advanced Conduction Analysis

Credit Hours: 3

Multi-dimensional heat transfer. Emphasis on solution techniques, exact and numerical.

Prerequisite(s): EML 4124, EML 3041
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6157 Radiation

Credit Hours: 3

Review of basic principles of radiation, grey bodies and real surfaces, calculation of shape factors, absorbing gases.

Prerequisite(s): EML 4124
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6223 Synthesis of Vibrating Systems

Credit Hours: 3

Advance topics in vibration. Random vibration in mechanical systems. Auto-correlation and power spectral density. Response of single and multidegree of freedom systems to random excitation. Frequency response function and coherency measurements. Contents variable.

Prerequisite(s): EML 4220
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6232 Composite Laminated Materials

Credit Hours: 3

Fundamental relationships for predicting the mechanical and thermal response of multi-layered materials and structures. Micromechanical and macromechanical relationships are developed for laminated materials with emphasis on continuous filament. Material, structural and strength optimization to design laminated composite materials using user-friendly software.

Prerequisite(s): EML 3500
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6273 Advanced Dynamics of Machinery

Credit Hours: 3

Detailed study of velocities, accelerations and forces in machines with parts having rotating, reciprocating, and combined motion.

Prerequisite(s): EML 3624
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6290 Micro and Nano Manufacturing

Credit Hours: 3

Covers the fundamental understanding of design, fabrication, and applications of microelectromechanical systems (MEMS) and nanomanufacturing processes including sensing and actuation of mechanical, optical and microfluidic devices.

Prerequisite(s): EGN 3365
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6311 Advanced Controls

Credit Hours: 3

This course introduces students to the concepts in feedback control systems using state-space methods. Topics covered include system modeling, system analysis, and feedback control design (theory and illustrations).

Tampa | College of Engineering | Mechanical Engineering

EML 6570 Principles of Fracture Mechanics

Credit Hours: 3

Introduction to the mechanics of brittle and ductile fracture. Linear elastic fracture, elastic-plastic fracture, testing, metals and non-metal materials, and fatigue fracture.

Prerequisite(s): EML 3500
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6594 Haptics

Credit Hours: 3

Course covers the theory and implementation of haptic interfaces and rendering, teleoperation, modeling, control and stability of feedback for robotic systems and virtual environments, and introduces the related human haptic sensing capabilities.

Prerequisite(s): EML 3041, EML 4312
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6653 Applied Elasticity

Credit Hours: 3

Students will apply the fundamentals of elasticity to engineering problems. Practical problems will be solved and advantages of using particular methods will be illustrated.

Prerequisite(s): EML 3500
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6713 Advanced Fluid Mechanics

Credit Hours: 3

Introduction to computational problem solutions in fluid mechanics and heat and mass transfer as applied to mechanical engineering. The emphasis is on the formulation and solution of computational engineering problems.

Tampa | College of Engineering | Mechanical Engineering

EML 6714 Mechanics of Compressible Fluids

Credit Hours: 3

Introduction to kinetic theory of gases. Compressible flow equations. Isentropic flow. Flow with friction and heat transfer. Compression and expansion in supersonic flow: normal and oblique shock waves, Prandtl-Meyer expansions.

Prerequisite(s): EGN 3343, EML 3701
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Mechanical Engineering

EML 6801 Robotic Systems

Credit Hours: 3

Overview of existing industrial and specialized robot types and operation; vision systems; tactile sensors; ranging and proximity techniques; actuation/transmission methods; power sources; autonomous vehicle mobility and navigation methods; and artificial intelligence.

Tampa | College of Engineering | Mechanical Engineering

EML 6808 Mechanics and Control of Robotic Manipulators

Credit Hours: 3

The purpose of this course is to understand the mechanocs and control of robot manipulators. Topics include: Spatial descriptions and transformations; manipulator kinematics; manipulator dynamics; path planning and trajectory generation; position and force control implementation.

Tampa | College of Engineering | Mechanical Engineering

EML 6907 Independent Study

Credit Hours: 1-6

Independent study in which students must have a contract with an

instructor.

Tampa | College of Engineering | Mechanical Engineering

EML 6930 Special Problems I

Credit Hours: 1-3

Tampa | College of Engineering | Mechanical Engineering

EML 6931 Special Problems II

Credit Hours: 1-3

Tampa | College of Engineering | Mechanical Engineering

EML 6971 Thesis: Master's

Credit Hours: 2-6

Tampa | College of Engineering | Mechanical Engineering

EML 7915 Directed Research

Credit Hours: 1-6

Tampa | College of Engineering | Mechanical Engineering

EML 7980 Dissertation: Doctoral

Credit Hours: 2-12

Tampa | College of Engineering | Mechanical Engineering

EMR 6052 Advanced Theories and Practices in Mental Retardation

Credit Hours: 3

In-depth study of the complex social and biological aspects of mental retardation with particular reference to effects on education.

Prerequisite(s): introductory course in exceptional student education.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EMR 6255 Educational Strategies for the Mentally Retarded

Credit Hours: 3

In-depth study of the specific curriculum and methodological problems in teaching students with mental retardation. For certification.

Tampa | College of Education | Teaching and Learning

ENC 6261 Professional and Technical Communication

Credit Hours: 3

We`ll engage with Professional writing as a workplace practice, as a theoretical locus, as a historical object, a protean disciplinary endeavor that spans several departments, and a pedagogical practice.

Tampa | College of Arts and Sciences | English

ENC 6319 Scholarly Writing for Publication in English Studies

Credit Hours: 3

Methods of writing and publishing scholarly articles, monographs, and textbooks in rhetoric and composition, literary scholarship, and criticism. Required for Literature majors.

Tampa | College of Arts and Sciences | English

ENC 6333 Contemporary Rhetorics

Credit Hours: 3

This course examines the impact of postmodern theories on theory and practice of rhetoric—particularly the rhetoric of rhetoric and composition. The course examines ways post modern rhetoric lends itself to the developing media and complexity theory.

Tampa | College of Arts and Sciences | English

ENC 6336 Studies in the History of Rhetoric

Credit Hours: 3

Examines the evolving relationship between rhetoric and composition from antiquity to the present.

Tampa | College of Arts and Sciences | English

ENC 6421 Studies in Rhetoric and Technology

Credit Hours: 3

Examines the intersection of Rhetoric and technology, with emphasis on contemporary critical issues in composition studies.

Tampa | College of Arts and Sciences | English

ENC 6422 New Media Production

Credit Hours: 3

Beyond familiarity with the ethical and epistemological implications of new media, 21st century rhetoricians require knowledge of new media communicative tools and techniques. They include html, css, javascript,blogging, podcasting, vblogging,and Flash.

Tampa | College of Arts and Sciences | English

ENC 6700 Studies in Composition Theory

Credit Hours: 3

Major theories and models of composing. Selected theorists include Rohman, Emig, Sommers, Flowers, and Hayes.

Tampa | College of Arts and Sciences | English

ENC 6720 Studies in Composition Research

Credit Hours: 3

Examines and evaluates a broad range of important research studies conducted in composition and a variety of research techniques such as descriptive statistics, qualitative research design, and measurement and evaluation. Instruction in how to conduct composition research.

Tampa | College of Arts and Sciences | English

ENC 6740 Theory and Development of Writing Programs

Credit Hours: 3

Operating theories of and administrative procedures for implementing writing programs on various levels; focuses on remedial, freshman, advanced, and technical writing programs as well as writing centers.

Tampa | College of Arts and Sciences | English

ENC 6745 Teaching Practicum

Credit Hours: 3

To supplement and deepen theoretical and practical experiences during the first teaching semester. To combine and apply different theoretical approaches to teaching writing in actual classroom practice.

Tampa | College of Arts and Sciences | English

ENG 6005 Scholarly Research and Writing

Credit Hours: 3

PhD students will improve their skills with advanced research methods in preparation for writing the prospectus and dissertation, work on conference papers and journal articles, and research the job market and the challenges that face new faculty.

Tampa | College of Arts and Sciences | English

ENG 6009 Introduction to Graduate Study

Credit Hours: 3

New graduate students will read about the discipline, learn the methods of scholarly research and inquiry, and adjust their academic skills for graduate-level work. The course will also introduce them to some key research databases and resources.

Tampa | College of Arts and Sciences | English

ENG 6018 Studies in Criticism and Theory I

Credit Hours: 3

This course examines selected controversies in literary criticism and scholarship from the classical period to 1800, including problems of imitation, the quarrel between Ancients and Moderns, the ethics of the imagination, and the roles of women critics.

Tampa | College of Arts and Sciences | English

ENG 6019 Studies in Criticism and Theory II

Credit Hours: 3

This course focuses on important trends in contemporary literary criticism with the major theoretical texts that inform these trends.

Tampa | College of Arts and Sciences | English

ENG 6067 History of the English Language

Credit Hours: 3

This course traces the evolution of the English Language from its early Germanic and Scandinavian roots to its emergence in time as tantamount to a universal language. The course uses literary works to show the stages of dramatic change.

Tampa | College of Arts and Sciences | English

ENG 6145 Rogue Cinema

Credit Hours: 3

Examine films by revolutionary filmmakers who have deviated significantly and strategically from earlier traditions, considering how these filmmakers challenged cinematic, intellectual, aesthetic, and cultural codes beginning in 1915.

Tampa | College of Arts and Sciences | English

ENG 6916 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | English

ENG 6939 Graduate Seminar in English

Credit Hours: 3

Intensive small-group discussion as well as shared and individual guided research in one of the student's areas of concentration.

Tampa | College of Arts and Sciences | English

ENG 6946 Internship

Credit Hours: 3

This course consists of supervised work-and-learning experience in professional and technical communication or related fields under the direction of a University faculty member and an employee of a participating firm.

Tampa | College of Arts and Sciences | English

ENG 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | English

ENG 7916 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | English

ENG 7939 Doctoral Seminar

Credit Hours: 1

Individual guided research in a student's area of doctoral specialty. Restricted to majors. Repeatable once for credit (total of 2 credits) counting as requirements toward the degree.

Tampa | College of Arts and Sciences | English

ENG 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Arts and Sciences | English

ENL 6206 Studies in Old English

Credit Hours: 3

A study of Old English language, prose style, poetry.

Tampa | College of Arts and Sciences | English

ENL 6216 Studies in Middle English

Credit Hours: 3

Selected focused studies in language and in various authors and writings, 1100-1500; Chaucer, the Pearl poet, Everyman, ballads, drama.

Tampa | College of Arts and Sciences | English

ENL 6226 Studies in Sixteenth-Century British Literature

Credit Hours: 3

Selected focused studies in sixteenth-century British literature; Shakespeare, Sidney, Spenser, Marlowe, and others.

Tampa | College of Arts and Sciences | English

ENL 6228 Studies in Seventeenth-Century British Literature

Credit Hours: 3

Selected focused studies in British literature, 1600-1660; Bacon, Donne, Jonson, Herbert, Milton, and others.

Tampa | College of Arts and Sciences | English

ENL 6236 Studies in Restoration and Eighteenth-Century British Literature

Credit Hours: 3

Selected focused studies in Restoration and Eighteenth-Century British literature: Dryden, Defoe, Pope, Swift, Fielding, Sheridan, Johnson, Boswell, and others.

Tampa | College of Arts and Sciences | English

ENL 6246 Studies of the English Romantic Period

Credit Hours: 3

A study of pre-Romantic and Romantic prose, fiction, nonfiction, and poetry.

Tampa | College of Arts and Sciences | English

ENL 6256 Studies in Victorian Literature

Credit Hours: 3

A study of Victorian poetry, fiction, non-fictional prose, and drama.

Tampa | College of Arts and Sciences | English

ENL 6276 Studies in Modern British Literature

Credit Hours: 3

A study of Irish and English drama, the modern novel, poetry, criticism, and the short story.

Tampa | College of Arts and Sciences | English

ENT 6016 New Venture Formation

Credit Hours: 3

An introductory entrepreneurship course. Students learn to develop venture ideas, evaluate venture opportunities and understand financial, marketing, and managerial needs of a venture.

Prerequisite(s): ACG 6025, MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

ENT 6116 Business Plan Development

Credit Hours: 3

Course is designed to enable students to prepare and present a business/venture plan. Students can prepare a plan for their own venture or a "client organization."

Prerequisite(s): ACG 6025, MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

ENT 6119 Mergers and Acquisitions: An Entrepreneurial Perspective

Credit Hours: 3

This course introduces students to the serious professional art and science of doing successful deals. Students are introduced to all aspects and stages of the merger/acquisition process and how to effectively manage the inherent challenges.

Prerequisite(s): Completion of Entrepreneurship core or business foundation courses in accounting, finance, and marketing (ACG 6026, FIN 6406, MAR 6815 or equivalents)
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

ENT 6126 Strategies in Technology Entrepreneurship

Credit Hours: 3

Students will learn that entrepreneurial opportunities are both identified in the existing socioeconomic environment and created through innovation. Students will learn theory based models and their application through case studies and a final project.

Tampa | Muma College of Business | Marketing

ENT 6186 Strategic Market Assessment

Credit Hours: 3

This course is designed to enable the student to gain an in-depth understanding of the techniques used to analyze market opportunities for new inventions and intellectual properties.

Tampa | Muma College of Business | Marketing

ENT 6312 Intellectual Property

Credit Hours: 3

This course focuses on aspects of Intellectual Property Law and related concepts that are relevant to aspiring entrepreneurs and technology development professionals.

Tampa | Muma College of Business | Marketing

ENT 6415 Fundamentals of Venture Capital and Private Equity

Credit Hours: 3

The purpose of the course is to convey five primary areas of knowledge: learning to think like an investor, the capital raising process, how to perform business valuations, securities law, and what venture capitalists do.

Tampa | Muma College of Business | Marketing

ENT 6506 Social Entrepreneurship

Credit Hours: 3

Provides knowledge and skills to create, fund, launch, and grow a new social enterprise.

Tampa | Muma College of Business | Marketing

ENT 6606 New Product Development

Credit Hours: 3

This course is designed to prepare both business and engineering students to contribute to the development of strategies and tasks relevant to new product introductions. The skills developed will enable students to analyze and develop product strategies.

Tampa | Muma College of Business | Marketing

ENT 6619 Creativity and Design

Credit Hours: 3

This course presents a broad framework of creativity and its applications in business.

Tampa | Muma College of Business | Marketing

ENT 6706 Global Entrepreneurship

Credit Hours: 3

Provides knowledge and skills to create, fund, launch, and grow a new international enterprise.

Tampa | Muma College of Business | Marketing

ENT 6930 Special Topics in Entrepreneurship

Credit Hours: 3

A special topics section for students pursuing their MS in Entrepreneurship and Applied Technology. Faculty will periodically offer elective courses on topics of interest.

Tampa | Muma College of Business | Marketing

ENT 6947 Advanced Topics in Entrepreneurship

Credit Hours: 3

Provides students the opportunity to apply the skills and knowledge acquired in previous entrepreneurship courses. Students gain practical experience through an internship or writing a business plan.

Tampa | Muma College of Business | Marketing

ENV 5103 Air Pollution Control

Credit Hours: 3

Behavior and effects of atmospheric contaminants and the principles of making measurements in the air environment. Basic concepts of meteorology and control technology are discussed. Regulatory aspects and air pollution standards are covered.

Prerequisite(s): EGN 3353
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 5334 Hazardous Waste Management and Remedial Action

Credit Hours: 3

Introduction to hazardous waste management and remediation: RCRA regulatory concepts, definitions, aspects of hazardous waste management from within the plant to final disposal. History of hazardous waste cleanup leading to CERCLA and its amendments, site investigations; site control; those aspects of treatment that are unique to remedial action.

Prerequisite(s): ENV 5345, ENV 6519
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 5345 Solid Waste Control

Credit Hours: 3

Introduction to solid waste management, including its definition as an umbrella for hazardous waste: regulatory concepts; waste types, quantities, and characterization; collection and recycling; facility siting; disposal; thermal treatment.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 5504C Environmental Engineering Processes

Credit Hours: 3

Theory, experimental investigation, and modeling of operations and processes in engineered and natural systems. Laboratory evaluation of unit operations and process used in water and wastewater treatment including chlorination, activated carbon adsorption, biological treatment, gas/liquid mass transfer, filtration, coagulation, flocculation, and settling. This course is restricted to majors, has no external laboratory section associated with the course, is not available on an S/U basis only, is not cross-listed with another department or college.

Prerequisite(s): ENV 4001, ENV 4004L, ENV 4417
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6002 Physical and Chemical Principles in Environmental Engineering

Credit Hours: 3

Investigates how chemical properties, physical processes, and environmental characteristics all influence the fate and transport of chemicals in natural and engineered systems. Includes theory, practical examples, and laboratory experiments.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6070 Resilient and Sustainable Infrastructure (RESIN)

Credit Hours: 3

Learn about the impact of climate change and extreme events on infrastructure for urban settings. Topics include green and resilient approaches for water, energy, transportation and other critical infrastructure systems.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6105 Air Pollution Fundamentals

Credit Hours: 3

A graduate level survey of air pollution fundamentals, including physics/chemistry of air pollution, sources and emissions estimation, Gaussian dispersion models, exposures and effects, measurement/monitoring, and management/control.

Prerequisite(s): College calculus, college chemistry.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6337 Environmental Site Assessment

Credit Hours: 3

All of the fundamental elements of Environmental Site Assessments, including a review of pertinent laws and regulations, the process of interviews, file reviews, and the site reconnaissance, through the use of procedures based on the Scientific Method.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6438 Physical & Chemical Processes for Treatment of Drinking Water

Credit Hours: 3

Theory, analysis, and design of physical and chemical processes typically used for treatment of U.S. public water supply.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6510 Sustainable Development Engineering

Credit Hours: 3

Study of the application of appropriate and sustainable engineering solutions and technology to control environmental pollutants found in a developing world setting and smaller communities in North America.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6518 Environmental Field Sampling

Credit Hours: 3

This course is designed to provide students with an interest in the field of environmental science/engineering, with the highest level of practical, hands-on environmental field training to help them advance their careers.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6519 Physical and Chemical Processes for Groundwater Remediation

Credit Hours: 3

Theory and design of processes used in advanced water and wastewater treatment, including membrane processes, absorption, electrodialysis, ozonation, irradiation.

Prerequisite(s): ENV 6666
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6539 Sludge Treatment and Disposal

Credit Hours: 3

Examines the physical, chemical, and biological unit operations and processes utilized in treating and disposing of sludges produced at water and wastewater treatment facilities.

Prerequisite(s): ENV 6667
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6564 Environmental Engineering Design

Credit Hours: 3

An engineering design experience for Environmental Engineering graduate students. Students will work in teams on real world design projects in water or wastewater treatment.

Prerequisite(s): ENV 6002, EES 6107
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6614 Quantitative Environmental Risk Analysis

Credit Hours: 3

Quantitative approach to the determination of risk. Focus is on environmental and control and protection, but techniques apply widely. Covers assessment of risk factors, failure, contaminant transport, and health effects. Includes discussion of significance, implementation, and policy. Course project involves the development of small risk analysis model.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6617 Green Engineering for Sustainability

Credit Hours: 3

Offers an overview of principles of green engineering including innovation, inherency, interdisciplinary, integration, and international, with an emphasis on applications of green engineering principles in different design stages.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6666 Aquatic Chemistry

Credit Hours: 3

An introduction to the form, structure, and chemical activities of the important processes essential to treatment of domestic and industrial wastewater.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6667 Environmental Biotechnology

Credit Hours: 3

Study of biochemical relations and processes in treatment of pollutants with emphasis on control of effluents for the protection of water quality. CI.

Tampa | College of Engineering | Civil and Environmental Engineering

ENV 6935 Environmental & Water Resources Engineering (EWRE) Seminar

Credit Hours: 1

This course consists of oral presentations made by EWRE students, faculty members, and outside speakers on their current topics of environmental and water resource engineering.

Tampa | College of Engineering | Civil and Environmental Engineering

ENY 5505C Aquatic Entomology

Credit Hours: 4

Taxonomy, development, and ecology of aquatic insects with emphasis on local forms. Fieldwork required. Lecture and Laboratory.

Prerequisite(s): ENY 3004C, CHM 2210, MAC 1105 or higher-level MAC course
Corequisite(s): None.
Co-Prerequisite(s): PCB 3023 or PCB 3043 or PCB 3063 or PCB 3712 and CHM 2211

Tampa | College of Arts and Sciences | Biology - Integrative

EPD 5051 Advanced Theories in Motor and Physical Disabilities

Credit Hours: 3

Biological and functional aspects of motor and physical health disabilities, including dysfunctions in central nervous system covering motor, sensory, language and psychological disorders.

Prerequisite(s): EEX 4012
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EPD 5321 Educational Strategies for Physically and Multi-handicapped Students

Credit Hours: 3

Educational management of students with cerebral palsy, motor disabilities and multihandicapped conditions including rehabilitation and other community services.

Prerequisite(s): EPD 5051
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

EPD 6944 Supervised Practicum in Motor Disabilities

Credit Hours: 3-12

Supervised graduate practicum encompassing teaching and supervising experiences in public/private educational or vocational programs for students with physical disabilities in the classroom, hygiene, and educational implications.

Prerequisite(s): EEX 4012
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

ESE 5342 Teaching the Adolescent Learner

Credit Hours: 3

Emphasis is placed on adolescent developmental and learning needs linking them to practices in the classroom appropriate to the diverse secondary education population (ESOL, special education, multicultural, at-risk, etc.) in preparation for planning responsive standards-based instruction.

Tampa | College of Education | Teaching and Learning

ESE 5344 Classroom Management for a Diverse School and Society

Credit Hours: 3

This course covers practical, theoretical, philosophical and ethical aspects of school and society, the education profession, and secondary schools with particular focus on classroom management, school violence, school safety, educational law and other critical social issues.

Tampa | College of Education | Teaching and Learning

ESE 6256 Problems in Curriculum Instruction: Secondary

Credit Hours: 1-3

For teachers, supervisors, and administrators. Curricular and instructional problems of the secondary school. Common problems or problems of special interest to the participants. Normally, for certification requirements only.

Prerequisite(s): EDG 4620, EDG 6627.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

ESE 6906 Independent Study: Secondary Education

Credit Hours: 1-6

Independent study in which students must have a contract with an instructor.

Tampa | College of Education | Teaching and Learning

ESE 7220 Curriculum Frameworks in Teacher Education

Credit Hours: 3

This course introduces and informs advanced graduate students about the conceptions of curriculum development related to teacher preparation, exploring topics related to the comprehensive process of certification, standards, governance, and accreditation.

Tampa | College of Education | Educational and Psychological Studies

ESE 7343 Teaching and Learning in the Content Area

Credit Hours: 3

Examine aspects of sec reform movement & effect on various content fields associated with sec sch. Attention is given to motives for school reform, public policy issues associated, effect of reform, & how school reform movements affect teaching & learning.

Tampa | College of Education | Teaching and Learning

ESE 7346 Collegiate Teaching in Secondary Education

Credit Hours: 3

This course prepares new phd students for successful teaching in secondary education. Special attention will be given to the state of collegiate teaching, understanding how people learn, facilitating student learning,and becoming a reflective educator.

Tampa | College of Education | Teaching and Learning

ESE 7910 Directed Research in Secondary Education

Credit Hours: 1-19

Directed research under the direction of a faculty member in Secondary Education. Student must have contract with instructor.

Tampa | College of Education | Teaching and Learning

ESI 5219 Statistical Methods for Engineering Managers

Credit Hours: 3

Study of statistical methods applied to engineering management problems involving estimation and prediction under conditions of uncertainty.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 5236 Reliability Engineering

Credit Hours: 3

Fundamental concepts of reliability. Estimation of reliability of systems and components. Measures of availability, maintainability and reliability.

Prerequisite(s): ESI 5219, EGN 3443
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 5306 Operations Research for Engineering Management

Credit Hours: 3

Linear programming, non-linear programming, queuing, inventory, network analysis.

Prerequisite(s): ESI 5219
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 5522 Computer Simulation

Credit Hours: 3

Design of discrete and continuous simulation models. Model validation and verification. Statistical analysis of simulation model output.

Prerequisite(s): ESI 4521
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6213 Stochastic Decision Models I

Credit Hours: 3

Study of the theory behind the statistical techniques applied to the solving of engineering problems.

Prerequisite(s): ESI 5219
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6246 Advanced Statistical Design Models

Credit Hours: 3

Introduces theory and applications in the design & analysis of experiments. Students learn skills and techniques to develop successful experiments that can lead to reduced development lead time, enhanced process performance, and improved product quality.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6247 Statistical Design Models

Credit Hours: 3

Design of experimental mathematical models. Application of advanced analysis of variance techniques as applied to industrial problems.

Prerequisite(s): ESI 5219
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6324 Engineering the Supply Chain

Credit Hours: 3

The course will focus on the discussion of analytical optimization models and tools. To learn how logistical decisions impact the performance of a firm as well as an entire supply chain. To understand supply chain structures and logistical capacities.

Prerequisite(s): ESI 4312
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6340 Probabilistic Systems Analysis

Credit Hours: 3

Exposes the students to the fundamental principles and techniques of applied probability and stochastic processes. Students will be able to

formulate and solve engineering problems surrounding systems operating uunder uncertain conditions.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6346 Stochastic Decision Models II

Credit Hours: 3

Introduction to modern decision and risk analysis and utility theory. It focuses on the mathematical foundations underlying the quantification and management of risk to support dynamic decision making under uncertainty.

Prerequisite(s): ESI 6213
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6353 Risk and Decision Analysis

Credit Hours: 3

This course gives a formal introduction to risk analysis and utility theory. It focuses on the conceptual and mathematical foundations underlying the quantification and management of risk to support dynamic decision making under uncertainty.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6410 Optimization in Operations Research

Credit Hours: 3

To train students with analytical modeling techniques and solution methods for linear programming, nonlinear programming and discrete optimization. Covers professional modeling & solution software packages to solve practical problems.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6420 Non-Linear Programming

Credit Hours: 3

General theory and characteristics of NLP, as well as effective solution algorithms that can be used to solve NLP problems and support effective management decision making.

Prerequisite(s): ESI 6491
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6447 Large-scale and Computational Optimization

Credit Hours: 3

Efficient algorithm development for large-scale and computationally intensive optimization problems. Specific topics include Lagrangian relaxation, Benders' decomposition, column generation and primal-dual approximation algorithms.

Prerequisite(s): ESI 6491
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6448 Integer Programming

Credit Hours: 3

The course will present the theory and algorithms of integer programming, with emphasis on its applications in engineering. The tentative topics include integer programming formulation and relaxation and decomposition algorithms.

Prerequisite(s): ESI 6491
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6491 Linear Programming and Network Optimization

Credit Hours: 3

To provide students with the general theory and characteristics of linear programming, network flows and integer programming as well as effective solution algorithms that can be used to support effective decision making.

Prerequisite(s): ESI 4312
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6605 Engineering Data Mining

Credit Hours: 3

The course will present the theory and methods of data mining, with emphasis on applications in engineering. The topics include linear models, classification, smoothing and kernel methods, model selection and inference, and support vector machines, etc.

Prerequisite(s): ESI 6247
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6635 Advanced Analytics I

Credit Hours: 3

Data are motivating a profound transformation in the operation management in all fields of engineering and business. Navigate the overload to optimally prepare and enrich data to use as a key ingredient for powerful analytical insights.

Prerequisite(s): EIN 4606, ESI 6247
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6636 Advanced Analytics II

Credit Hours: 3

Covers broad aspects of the emerging field of data analytics, with focus on statistical learning and predictive modeling methods. Basic knowledge in probability & statistical methods and linear algebra required. Prior programming experience a plus.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6906 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 6911 Directed Research

Credit Hours: 1-19

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 7911 Directed Research

Credit Hours: 1-19

Tampa | College of Engineering | Industrial and Management Systems Engineering

ESI 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Engineering | Industrial and Management Systems Engineering

ETG 6932 Special Technical Topics

Credit Hours: 1-4

Special Topics in Technology.

Tampa | College of Engineering | Computer Science and Engineering

EVR 6101 Geomorphology for Environmental Scientists

Credit Hours: 3

Course will explore the evolution of landscapes, natural processes that alter Earth's surface, and rates of change in the surficial environment. The course will emphasize topics relevant to environmental scientists in Florida - esp. soils, karst, & coasts.

Tampa | College of Arts and Sciences | Geosciences

EVR 6216 Advances in Water Quality Policy and Management

Credit Hours: 3

Conceptual structure and practical implementation of U.S. watershed-based water quality regulations and policies. Practical application of scientific information and quantitative methods in management/policy decisions for water quality protection.

Tampa | College of Arts and Sciences | Geosciences

EVR 6320 Environmental Management

Credit Hours: 3

This course introduces the students to environmental management from technical and non-technical perspectives. The major topics covered will be water and air quality, environmental sustainability, collaboration and building consensus.

Tampa | College of Arts and Sciences | Geosciences

EVR 6408 Wildlife Ecology

Credit Hours: 3

Population ecology, animal behavior, food resources, habitat resources, wildlife diseases, predation, competition, wildlife and water, wildlife and soils, hunting and trapping, exotic wildlife, urban wildlife, and conservation.

Tampa | College of Arts and Sciences | Geosciences

EVR 6908 Environmental Science, Policy, and Management Independent Study

Credit Hours: 1-3

The courses offered under Independent Study will provide students with a greater range of more detailed information about Environmental Science, Policy, Ethics, Economics, Law and Management.

Tampa | College of Arts and Sciences | Geosciences

EVR 6921 Scholarly Presentation of Environmental Research

Credit Hours: 1-2

Discussion and practice in methods of writing, presenting, and defending cross-disciplinary environmental research. Written and oral assignments on communicating research objectives, methods, results, theory, and analysis of policy relevance.

Prerequisite(s): None.
Corequisite(s): EVR 6971
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

EVR 6922 ESP Capstone Seminar

Credit Hours: 3

A capstone graduate course that integrates issues related to science, policy and management in making decisions. Each semester, the program selects an environmental issue to serve as a case study. Some anticipated themes include global warming, water quantity and quality, air pollution and restoration.

Tampa | College of Arts and Sciences | Geosciences

EVR 6930 Research Colloquium in Environmental Science and Policy

Credit Hours: 1

Scholarly presentations by invited academic researchers and leading policy decision-makers.

Tampa | College of Arts and Sciences | Geosciences

EVR 6934 Graduate Environmental Science, Policy, and Management Selected Topics

Credit Hours: 3

Selected topics, issues and problems in Environmental Science and Policy.

Tampa | College of Arts and Sciences | Geosciences

EVR 6936 Seminar in Environmental Science

Credit Hours: 3

A seminar course that reviews a major theme or themes in environmental science that integrates knowledge and research from various scientific disciplines.

Tampa | College of Arts and Sciences | Geosciences

EVR 6937 Seminar in Environmental Policy

Credit Hours: 3

Critical assessment of environmental policy and regulatory formulation, implementation, evaluation, and revision in the context of scientific, technological, institutional, political, social and economic factors; case studies of major U.S. policies.

Tampa | College of Arts and Sciences | Geosciences

EVR 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Geosciences

EVR 7923 Doctoral Dissertation Preparation

Credit Hours: 3

This course will assist students in developing dissertation topics, to think creatively about their topics, and to draft a dissertation proposal and a dissertation outline.

Tampa | College of Arts and Sciences | Geosciences

EVR 7980 Doctoral Dissertation Research

Credit Hours: 2-15

The dissertation is an original contribution to scholarship. The research is performed under the guidance of the major professor, which determines how many dissertation hours are completed (maximum 42 hours).

Tampa | College of Arts and Sciences | Geosciences

EVS 6920 Environmental Research Interdisciplinary Colloquium

Credit Hours: 1

Interdisciplinary seminar series that exposes students to a variety of environmental topics through presentations and interactive discussions with scholars and practitioners.

Tampa | College of Engineering | Civil and Environmental Engineering

EVT 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

EXP 6608 Cognitive Psychology

Credit Hours: 3

A survey of the research and theory dealing with higher memory, language, and the higher mental processes. Core requirement for all graduate students in Psychology.

Tampa | College of Arts and Sciences | Psychology

EXP 7099 Graduate Seminar in Experimental Psychology

Credit Hours: 1-3

Seminars on topics, such as learning, perception, memory, cognitive processes, and quantitative methods.

Tampa | College of Arts and Sciences | Psychology

FIL 5469C Cinematography

Credit Hours: 4

Advanced studio work using black and white, color and sound as technical and aesthetic factors in visual, artistic productions.

Prerequisite(s): PGY 4520C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Art and Art History

FIN 6246 Advanced Money and Capital Markets

Credit Hours: 3

The study of the role of financial markets, instruments, and institutions in the economy. It includes the study of flow of funds, interest rate determination, and the pricing of capital assets.

Prerequisite(s): ECO 6708
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6326 Bank Management

Credit Hours: 3

Theory, policy and practice of commercial bank management with emphasis on strategic issues and decision making in an expanding financial services environment.

Prerequisite(s): FIN 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6406 Financial Management

Credit Hours: 2-3

The study of processes, decision structures, and institutional arrangements concerned with the acquisition and utilization of funds by a firm. The course includes the management of the asset and liability structures of the firm under both certainty and uncertainty.

Prerequisite(s): ACG 6025, ECP 6702
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6416 Advanced Financial Management

Credit Hours: 3

A synthesis of the theory and the practice of corporate finance. Particular attention is given to the role of the agency problems and agency cost in explaining why the observed consequences of financial decisions often deviate from those predicted by traditional theory.

Prerequisite(s): FIN 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6418 Working Capital Management

Credit Hours: 3

This course is designed to provide the student with an understanding of short-term financial management which includes decision making concerning sources and uses of cash flows to support short-term operations.

Prerequisite(s): FIN 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6425 Financial Policy

Credit Hours: 3

A case study approach to financial policy and strategy with emphasis on the firm's major financial decisions.

Tampa | Muma College of Business | Finance

FIN 6427 Corporate Financial Planning

Credit Hours: 3

This course is an introduction to financial planning methods. It will provide techniques to forecast the financial statements of a company, capital budgeting, cash flow analysis and valuation. It is a Finance application class for MBA students.

Prerequisite(s): FIN 6406 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6455 Financial Modeling and Analytics

Credit Hours: 3

The course offers advanced knowledge of finance and skills of using Excel for financial modeling and financial analysis. Finance concepts will be covered in class, and then modeled and analyzed in Excel.

Prerequisite(s): FIN 6406 with a minimum grade of B-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6465 Financial Statement Analysis

Credit Hours: 3

This course provides an understanding of the relationship between financial statements produced in accordance with generally accepted accounting principles (GAAP) and the information such statements contain that is useful to stakeholders.

Prerequisite(s): FIN 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6466 Financial Analysis

Credit Hours: 2

Financial analysis focuses on how information disseminated that is by a company is used by such stakeholders as managers, stockholders, creditors, and financial analysts when making decisions concerning the firm's value.

Prerequisite(s): ACG 6026, FIN 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6515 Investments

Credit Hours: 3

An examination of the risks and returns of alternative investment media within the framework of various valuation models. Special attention is given to the investment process and the criteria for investment decisions.

Prerequisite(s): FIN 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6537 Financial Options & Futures

Credit Hours: 3

This course covers financial futures and options markets and the fundamental properties and the pricing principles of these instruments. In addition, hedging and risk management strategies are covered in the course.

Prerequisite(s): FIN 6515
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6605 International Financial Management

Credit Hours: 3

The course provides a foundation for the understanding of financial management of international business. The subjects covered relate to: international finance, multinational business finance, and financial market theory.

Prerequisite(s): FIN 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6804 Theory of Finance

Credit Hours: 3

A systematic and rigorous course in the theory of finance. Topics will include the theory of choice and the allocation of financial resources, the theory of optimal investment decisions and the theory of risk and uncertainty in financial decisions. It will also cover the theoretical concepts underlying financing decisions and the cost of capital.

Prerequisite(s): FIN 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 6906 Independent Study

Credit Hours: var.

Students must have a contract with an instructor.

Tampa | Muma College of Business | Finance

FIN 6915 Directed Research

Credit Hours: var.

Tampa | Muma College of Business | Finance

FIN 6934 Selected Topics in Finance

Credit Hours: 1-4

Depending upon the scope and magnitude of the work required. Includes special lecture series.

Tampa | Muma College of Business | Finance

FIN 7808 Advanced Micro Finance

Credit Hours: 3

The study of advanced theoretical and empirical works in finance primarily relating to financial decisions at the level of the firm.

Prerequisite(s): FIN 6406, FIN 6804, ECO 6424
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 7817 Financial Markets

Credit Hours: 3

The study of advanced theoretical and empirical works in finance primarily relating to financial institutions and markets.

Prerequisite(s): FIN 6246, FIN 6515
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 7930 Selected Topics in Finance

Credit Hours: 3

A study of selected topics of current issues on the frontiers of financial thought.

Prerequisite(s): FIN 7808, QMB 7566
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 7935 Finance Research Seminar

Credit Hours: 3

Theoretical and/or empirical research on finance related problems. This course will require research papers to be written and presented. It is designed to aid the student in developing a thesis and the research methodology necessary for the doctoral dissertation.

Prerequisite(s): FIN 7930
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

FIN 7939 Executive Issues in Finance

Credit Hours: 2-4

A research seminar for executives that explores contemporary issues in finance. The specific theme of the seminar will be determined through consultations between the instructor and the students prior to the first class meeting.

Tampa | Muma College of Business | Finance

FIN 7980 Dissertation

Credit Hours: 2-19

Tampa | Muma College of Business | Finance

FLE 5145 Language Principles, Acquisition and Teaching

Credit Hours: 3

Restricted to Education majors and not repeatable for credit. Overview of applied SLA theory and components of language. Methods & techniques of comprehensible instruction and the development of oral proficiency and literacy skills for LEP children.

Prerequisite(s): FLE 5345
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

FLE 5291 Technology in the Foreign Language Classroom

Credit Hours: 3

This course is intended to prepare foreign/second language teachers to provide pedagogically sound and technologically enhanced instruction for foreign language and second language students in the K-16 realm. Basic computer literacy is recommended.

Prerequisite(s): FLE 5313, FLE 5331
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

FLE 5313 Methods of Teaching Foreign Language and ESOL in the Elementary School

Credit Hours: 3

This course is designed to provide training in the theory and methods of teaching foreign languages and ESOL in the elementary school (FLES) to both pre- and in-service teachers.

Tampa | College of Education | Teaching and Learning

FLE 5331 Methods of Teaching Foreign Language and ESOL in the Secondary School

Credit Hours: 3

This course provides for the development of knowledge and skills necessary to prepare students to assume roles as foreign language (FL) and ESOL teachers at the secondary school level. It represents the second

part of a sequence of methods courses.

Prerequisite(s): FLE 5313
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

FLE 5345 Teaching English Language Learners K-12

Credit Hours: 3

This course is restricted to Education majors and is not repeatable for credit. It is designed to prepare preprofessional teachers to provide linguistically and culturally appropriate instruction, assessment, and learning opportunities for LEP students.

Tampa | College of Education | Teaching and Learning

FLE 5366 ESOL Education in Content Areas

Credit Hours: 3

Enables participants to meet the special linguistic & cultural educational needs of limited English proficient (LEP) students in content area classes. Provides a theoretical & practical foundation for ESOL competencies in courses include ESOL infusion.

Tampa | College of Education | Teaching and Learning

FLE 5895 Dual Language Education

Credit Hours: 3

This course is for teachers who are interested in bilingual education. The aim is to deconstruct the philosophical, theoretical, political, social and educational underpinning of instruction (K-16) when it is delivered through two languages.

Tampa | College of Education | Teaching and Learning

FLE 5946 Practicum in Foreign Language/ESOL Teaching

Credit Hours: 3

This course prepares students for their internship by providing a structured pre-internship experience while meeting regularly in a university class. Opportunity to see teachers in action.

Prerequisite(s): FLE 5313
Corequisite(s): FLE 5331
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

FLE 6167 Cross-Cultural Issues in Teaching ESOL

Credit Hours: 3

Designed for K-12 & adult educ environment to help participants develop awareness & understanding of the major cultures represented by the different language groups within the State of Florida (teach cultural awareness & cross-cultural understanding).

Tampa | College of Education | Teaching and Learning

FLE 6639 Second Language Reading and Literacy

Credit Hours: 3

Explores theoretical issues in L2 language and literacy learning from a sociocultural perspective an covers seminal perspectives on L2 language development.

Tampa | College of Education | Teaching and Learning

FLE 6665 Current Trends in Secondary Foreign Language Education

Credit Hours: 3

Designed for experienced classroom teachers, theoretical and practical implications of recent programs and methodology. Instructional practices in the teaching of foreign languages. Individual projects.

Prerequisite(s): FLE 4314, FLE 4333
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

FLE 6829 Graduate Instruction Methods

Credit Hours: 1-4

Special course to be used primarily for the training of graduate teaching assistants.

Tampa | College of Education | Teaching and Learning

FLE 6906 Independent Study in Foreign Language Education

Credit Hours: 1-6

Independent Study in which students must have a contract with an instructor. Rpt. S/U

Tampa | College of Education | Teaching and Learning

FLE 6932 Selected Topics in Second Language Acquisition

Credit Hours: 3

This course would provide a flexible format to offer specialized courses in second language acquisition not available in the regular curriculum. This would allow faculty to address issues at the frontiers of the field in second language acquisition. Repeat as topics vary

Tampa | College of Education | Teaching and Learning

FLE 6947 Internship for Secondary Education in Foreign Language

Credit Hours: 6

Students will work with a cooperating teacher and university supervisor to complete their internship requirements in a classroom setting assigned by the university.

Tampa | College of Education | Teaching and Learning

FLE 7367 Sociocultural Theory in Second Language Acquisition

Credit Hours: 3

1. Examines the theoretical contributions of Vygotskian theory and explores the development of sociocultural theory based on Vygotsky and extending to contemporary post-Vygotskian theories and practices in the field of SLA.

Tampa | College of Education | Teaching and Learning

FLE 7700 Applications of Technology in Second Language Acquisition

Credit Hours: 3

This course introduces key approaches to computer-assisted language learning (CALL). Students learn about pedagogical approaches and assessment in CALL. Students share ideas on blogs and in class discussions, and design and execute a pilot study.

Tampa | College of Education | Teaching and Learning

FLE 7939 Advanced Seminar in Foreign Language Education

Credit Hours: 3

Advanced readings and discussion of theories, perspectives and issues in foreign/second language education from K-20, including examination of current practices, action research, accreditation, certification, teacher development, and assessment in the field.

Prerequisite(s): FLE 6665
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

FOL 5906 Directed Study

Credit Hours: 1-3

Prerequisite(s): FOL 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FOW 6805 Bibliography

Credit Hours: 1

Research methods. Includes familiarity with major journals and bibliographies, with a practicum.

Tampa | College of Arts and Sciences | World Languages

FRE 5425 Advanced Written Expression

Credit Hours: 3

Course is designed to give advanced training in free composition in French.

Prerequisite(s): FRE 4421
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRE 5566 Contemporary France

Credit Hours: 3

An advanced course in French civilization and culture including a study of recent social, artistic and political trends as well as various current intellectual movements. Text and discussions in French.

Prerequisite(s): FRE 3500
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRE 6910 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | World Languages

FRE 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | World Languages

FRW 5222 Classical Prose and Poetry

Credit Hours: 3

Emphasis on Malherbe, Descartes, Pascal, La Fontaine, and Boileau.

Prerequisite(s): FRW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5226 20th Century Poetry and Theatre

Credit Hours: 3

Valery, Claudel, Anouilh, Motherland, Sartre, Ionesco.

Prerequisite(s): FRW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5286 The 20th Century Novel

Credit Hours: 3

Proust, Gide, Mauriac, Malraux, Camus, Robbe-Grillet.

Prerequisite(s): FRW 4100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5314 Classical Drama

Credit Hours: 3

Corneille, Moliere, and Racine.

Prerequisite(s): FRW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5415 Literature of the Middle Ages

Credit Hours: 3

Major genres, including epics, Arthurian romances, drama and lyric poetry. Reading in modern French translation.

Prerequisite(s): FRW 4100 or FRW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5425 Literature of the Renaissance

Credit Hours: 3

A study of Renaissance French humanism including Rabelais, Montaigne, and Pleiade poets.

Prerequisite(s): FRW 4100 or FRW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5445 18th Century Literature

Credit Hours: 3

The classical tradition and the new currents of thought in the Age of Enlightenment.

Prerequisite(s): FRW 4100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5535 Romanticism and Early Realism

Credit Hours: 3

A study of the romantic and early realistic movements with emphasis on Lamartine, Vigny, Musset, Hugo, and Balzac.

Prerequisite(s): FRW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5556 Naturalism and Realism

Credit Hours: 3

A detailed study of realism and naturalism with emphasis on Flaubert, Zola, les Goncourt, Maupassant, and Daudet.

Prerequisite(s): FRW 4100 or FRW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

FRW 5745 French Literature of Quebec

Credit Hours: 3

Overview of the main representative literary works in French from Quebec in all genres (poetry, drama, novel, short story) as well as a survey of the main traits of Quebec history & culture. Open to non-majors. Not repeatable for credit. Taught in French.

Tampa | College of Arts and Sciences | World Languages

FRW 5755 African and Caribbean Literature

Credit Hours: 3

An overview of the main representative literary works in French from North and SubSahara Africa as well as the Caribbean. Open to non-majors and not repeatable for credit. Course taught in French.

Tampa | College of Arts and Sciences | World Languages

FRW 5829 An Introduction to Modern French Literary Criticism

Credit Hours: 3

A graduate elective 3 credit course entirely taught in French, which offers a survey of the main trends and methods in 20th Century literary criticism, the French having been at the avant-garde of the field.

Tampa | College of Arts and Sciences | World Languages

FRW 5934 Selected Topics

Credit Hours: 1-3

Study of an author, movement or theme.

Tampa | College of Arts and Sciences | World Languages

FRW 6405 Old French

Credit Hours: 3

An introduction to the Old French language and literature. Readings from representative texts.

Tampa | College of Arts and Sciences | World Languages

GEA 6195 Seminar in Advanced Regional Geography

Credit Hours: 3

Analytic study of a selected region of the world.

Tampa | College of Arts and Sciences | Geosciences

GEA 6215 Seminar in North American Geography

Credit Hours: 3

Advanced survey of historical and contemporary issues in North American geography including: west and non-west exchange, revolutionary transformation, nation-building, regional disparities, and continental relations among states.

Tampa | College of Arts and Sciences | Geosciences

GEA 6406 Seminar in Latin American and Caribbean Geography

Credit Hours: 3

Readings and discussions organized around an examination of regional and systematic analysis of selected topics of Latin American and Caribbean geography. Emphasis is on combining physical and cultural analysis of this region.

Tampa | College of Arts and Sciences | Geosciences

GEA 6504 Seminar in European Geography

Credit Hours: 3

Readings and discussions organized around an examination of regional and systematic analysis of selected topics of European Geography. Emphasis is on combining physical and cultural analysis of this region.

Tampa | College of Arts and Sciences | Geosciences

GEA 6745 Asian Geography Seminar

Credit Hours: 3

Analysis of regional divisions and spatial variations within Asia. Examines the significance of Asia in the global context. Focus on political, economic, cultural, and historical geographies, including development, environment, religion, and gender.

Tampa | College of Arts and Sciences | Geosciences

GEB 6215 Communication Skills for Managers

Credit Hours: 2

One of six Advanced Tools courses required for the MBA, Communication Skills for Managers focuses on developing the oral and written communication and presentation skills essential to projecting a professional image and influencing others.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 6224 Improvisation in Business Organizations

Credit Hours: 3

Facilitates learning and skill building based on organization studies research on business improvisation. Students will participate in a variety of experiential exercises and cases from organizational behavior and theatrical improvisation.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 6226 Leadership Speaker Series

Credit Hours: 1

This course addresses a range of issues that impact how leaders craft strategies, create commitment, communicate effectively, delegate, and lead by example. A diverse group of individuals will deliver thought-provoking presentations and lead discussions.

Tampa | Muma College of Business | Marketing

GEB 6228 Management Through Constructive Persuasion

Credit Hours: 3

Effective persuasion is the ability to deliver a message that leads to others' support, which includes consensus building, motivating and convincing others. The course explores persuasion methods and applies them in a contemporary business setting.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 6445 Social, Ethical, Legal Systems

Credit Hours: 2

A study of the influence of social, cultural, legal, and political environment of institutional behavior, including the changing nature of the business system, the public policy process, corporate power, legitimacy and managerial autonomy, and organizational reactions to environmental forces.

Tampa | Muma College of Business | Marketing

GEB 6457 Ethics, Law and Sustainable Business Practices

Credit Hours: 3

Examines ethical and legal responsibilities of business for triple bottom line performance of prosperity, social justice, and concern for the natural environment.

Prerequisite(s): GEB 6445
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

GEB 6527 Lean Six Sigma

Credit Hours: 3

In this course students gain experience with process improvement from a Lean and Six Sigma perspective. The course shows Lean as a management philosophy to eliminate waste, and Six Sigma as tools and ideas to reduce variation and improving quality.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 6865 Business Problems Analysis

Credit Hours: 3

This is a capstone class that is delivered using case method. Business cases can be written or life. The delivery of the class can include but not limited to book reports, discussions, debates and lecture.

Prerequisite(s): ACG 6025, ACG 6075, FIN 6406, ECP 6702, ECO 6708, MAN 6055, MAR 6815, QMB 6305, QMB 6603, GEB 6445, MAN 6147
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 6895 Integrated Business Applications

Credit Hours: 3-4

Part I of advanced study of business decision-making processes under conditions of risk and uncertainty, including integrating analysis and policy formation at the general management level.

Prerequisite(s): ACG 6026, ECO 6005, MAN 6147, MAR 6815, ISM 6021, FIN 6406, QMB 6305, FIN 6466, MAN 6726
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

GEB 6896 Integrated Business Applications II

Credit Hours: 3

Part II of advanced study of business decision-making processes under conditions of risk and uncertainty, including integrating analysis and policy formation at the general management level.

Prerequisite(s): GEB 6895
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

GEB 6898 MBA Capstone for Analytics, Compliance & Cybersecurity

Credit Hours: 3

An MBA capstone course that combines case discussions of real world situations in the areas of analytics, cybersecurity and risk management with a substantial individual project.

Prerequisite(s): FIN 6466, MAN 6726
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 6930 Selected Topics

Credit Hours: 1-3

The content and organization of this course will vary depending on student demand and faculty interest.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 7939 Executive Issues in Business

Credit Hours: 2-4

A research seminar for executives that explores contemporary issues in business. The specific theme of the seminar will be determined through consultations between the instructor and the students prior to the first class meeting.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 7980 Dissertation

Credit Hours: 1-8

Research and writing of a dissertation on a business topic.

Prerequisite(s): GEB 7981
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Business Administration

GEB 7981 Dissertation Preparation

Credit Hours: 4

Preparing a dissertation proposal on a business topic.

Tampa | Muma College of Business | Information Systems and Decision Sciences

GEB 7982 Research and Writing Skills for Doctoral Students

Credit Hours: 3

A research course for executive students on searching and citing research literature, preparing submissions for publication and assessing the suitability of publication outlets. The course emphasizes the effective use of electronic library resources.

Tampa | Muma College of Business | Business Administration

GEO 6058 Geographic Literature and History

Credit Hours: 3

The origins and development of the discipline as revealed through an examination of the principal written sources. Special attention paid to leading personalities and modern periodicals.

Tampa | College of Arts and Sciences | Geosciences

GEO 6115 Advanced Field Techniques

Credit Hours: 3

Field examination of one region. Students will complete field work in human and physical geography in a selected area.

Tampa | College of Arts and Sciences | Geosciences

GEO 6116 Perspectives on Environmental Thought

Credit Hours: 3

Analysis of the evolution of the major schools of environmental thought from antiquity to present-day green analysis, deep ecology, ecofeminism, and post-modern ecology.

Prerequisite(s): GEO 6058
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6119 Geographical Techniques and Methodology

Credit Hours: 3

Analytic study of a technique or investigation into an aspect of methodology.

Tampa | College of Arts and Sciences | Geosciences

GEO 6166 Multivariate Statistical Analysis

Credit Hours: 3

Examination of advanced statistical approaches used by geographers. Descriptive, spatial and inferential statistics and multi-variate analysis are highlighted.

Prerequisite(s): GEO 3164C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6209C Physical Geography Seminar

Credit Hours: 3

Analytic study of one or more topics from physical geography. Selected problems may include hydrology, physiography, meteorology, climatology, soils, vegetation, etc.

Tampa | College of Arts and Sciences | Geosciences

GEO 6215 Geomorphology Seminar

Credit Hours: 3

An advanced examination of geomorphic processes and landforms with an emphasis placed on concepts related to the formation and evolution of landscapes on a variety of scales.

Prerequisite(s): GEO 4372
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6217 Karst Geomorphology

Credit Hours: 3

An in-depth examination of the geomorphic aspects of karst landforms. The objectives, methods and results of karst geomorphic studies in which both field and laboratory analysis have been applied to geomorphic problems are reviewed.

Tampa | College of Arts and Sciences | Geosciences

GEO 6255 Weather, Climate, and Society

Credit Hours: 3

This course explores the societal impacts of weather as well as the human impact on weather and climate. Students lead and participate in discussions on topics such as weather hazards, extreme temperature and human physiology, historical civilization and extreme climate, economic value of forecasts, weather modification, urbanization and other land use change, anthropogenic aerosols, past and future climates.

Tampa | College of Arts and Sciences | Geosciences

GEO 6263 Soils Seminar

Credit Hours: 3

Examination of how earth systems influence soil formation and variation. Details analysis of soils climosequences, biosequences, toposequences, lithosequences, chronosequences, and anthrosequences.

Prerequisite(s): GEO 4372
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6286 Advances in Water Resources

Credit Hours: 3

Water resources policies are viewed from theoretical and practical perspectives focusing on management strategies in different physical and human environments.

Tampa | College of Arts and Sciences | Geosciences

GEO 6288 Hydrological Systems

Credit Hours: 3

A systematic approach to hydrology using the drainage basin as the fundamental unit of analysis is used to explore form and process, while modeling stream flows.

Prerequisite(s): GEO 4372
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6345 Technological Hazards and Environmental Justice

Credit Hours: 3

Examination of theories, debates, methods, and models that improve our understanding of human vulnerability to technological hazards and risks, with emphasis on issues of fairness and equity in the distribution and impact of hazards.

Tampa | College of Arts and Sciences | Geosciences

GEO 6347 Natural Hazards

Credit Hours: 3

Analysis of natural hazards integrating principles of physical, social, economic, political, and technical forces that affect extreme geophysical events.

Prerequisite(s): GEO 4372
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6428 Seminar in Advanced Human Geography

Credit Hours: 3

Analytic study of a problem selected from aspects of the human landscape (urban, political, economic, population, settlement).

Tampa | College of Arts and Sciences | Geosciences

GEO 6475 Political Geography Seminar

Credit Hours: 3

Advanced investigation of geopolitical issues including: the human construction of territoriality, ethnic relations, the making of nations and states, the geopolitics of localities, and environmental policy making.

Prerequisite(s): GEO 4471

Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6545 Economic Geography Seminar

Credit Hours: 3

An intensive examination of selected issues in economic geography including: regional development and decline; spatial labor market trends; business locational analysis; and comparative economic policy.

Prerequisite(s): GEO 4502
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6605 Contemporary Urban Issues

Credit Hours: 3

Advanced survey of urban issues such as: industrial restructuring and urban development, inner-city ethnic relations, the geopolitics of urban governance, and urban culture.

Prerequisite(s): GEO 3602, GEO 4604
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6627 Site Feasibility Analysis

Credit Hours: 3

A project-oriented geographic examination of urban real estate development and site feasibility practices. Hands-on course including concepts of real estate development patterns, urban growth, and site specific factors related to feasibility of specific developments.

Tampa | College of Arts and Sciences | Geosciences

GEO 6704 Advanced Transportation Geography

Credit Hours: 3

Review of transportation issues and analysis, focusing on modeling and planning for flows of goods and people. Provides a hands-on approach to use of GIS for such analysis.

Prerequisite(s): GEO 4114, GEO 4700
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GEO 6908 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Arts and Sciences | Geosciences

GEO 6918 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Geosciences

GEO 6944 Internship in Geography

Credit Hours: 3

The internship in Geography is designed to provide students the opportunity to work in an appropriate governmental agency to gain practical field experience.

Tampa | College of Arts and Sciences | Geosciences

GEO 6947 Directed Teaching

Credit Hours: 1-6

Tampa | College of Arts and Sciences | Geosciences

GEO 6970 Geographic Research Design

Credit Hours: 3

This course stresses conducting geographic research within the scientific method. It includes both quantitative and qualitative research. Specific

topics include sample design, data collection, oral presentations, written proposals and a thesis.

Tampa | College of Arts and Sciences | Geosciences

GEO 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Geosciences

GEO 7021 Doctoral Dissertation Preparation

Credit Hours: 3

This course will assist students in developing dissertation topics, to think creatively about their topics, and to draft a dissertation proposal and a dissertation outline.

Tampa | College of Arts and Sciences | Geosciences

GEO 7606 Seminar in Urban Environments

Credit Hours: 3

This seminar will explore topics in the study of urban environments such as global restructuring, race and ethnic relations, and the geopolitics of urban policy, by way of readings, discussion, and research.

Tampa | College of Arts and Sciences | Geosciences

GEO 7938 Doctoral Professional Development in Geosciences

Credit Hours: 3

This seminar prepares doctoral students for potential careers in academia: (1) choosing a career path in academia, (2) setting goals to achieve the desired type of faculty position by graduation, and (3) preparing for the job application process.

Tampa | College of Arts and Sciences | Geosciences

GEO 7980 Doctoral Dissertation Research

Credit Hours: 2-15

The dissertation is an original contribution to scholarship. The research is performed under the guidance of the major professor, which determines how many dissertation hours are completed (maximum 42 hours).

Tampa | College of Arts and Sciences | Geosciences

GER 5845 History of the German Language

Credit Hours: 3

A diachronic approach to the study of the German language. The course traces the history and development of the language from Indo-European through Germanic, Old, Middle, and New High German.

Tampa | College of Arts and Sciences | World Languages

GER 6060 German for Reading

Credit Hours: 3

Designed to provide a reading ability in German that will support research in other disciplines.

Tampa | College of Arts and Sciences | World Languages

GER 6908 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | World Languages

GEW 5606 Faust

Credit Hours: 3

Sources, form, content, and literary significance of Urfaust and Faust.

Tampa | College of Arts and Sciences | World Languages

GEW 5934 Selected Topics

Credit Hours: 1-3

Study of an author, movement or theme.

Tampa | College of Arts and Sciences | World Languages

GEY 5476 Program Evaluation in an Aging Society

Credit Hours: 3

Students develop knowledge of the purposes of evaluation research and the approaches and methodologies necessary to evaluation aging services programs and organizations.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 5501 Health Care Operations in Long Term Care

Credit Hours: 3

Addresses the health care operations of long term care facilities with a special emphasis on nursing homes and assisted living facilities Specifics include leadership management of people resources physical plant and quality improvement.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 5504 Assisted Living Facility Management

Credit Hours: 3

The course covers the material for students to sit for and pass the State of Florida Assisted Living Core examination to become a licensed assisted living administrator.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 5620 Sociological Aspects of Aging

Credit Hours: 3

Examines, within a sociological frame of reference, the interrelationships between the aged (or aging) and the structure and function of the social system and its major institutionalized subsystems.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 5630 Economics and Aging

Credit Hours: 3

Examines basic economic systems as they impact the aged. Emphasis is on applied aspects of economic planning, pensions, insurance, social security and other support systems.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 5642 Perspectives on Death and Dying

Credit Hours: 3

Study of the various psychological, medical, legal, and religious problems caused by dying and death, and how individuals and groups have responded in the past and present.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6206 Family Caregiving in Aging and Chronic Illness

Credit Hours: 3

The course will address the mental and physical health consequences, cultural diversity issues, and stress process models of caregiving, as well as clinical and public policy interventions to assist family caregivers of adults with chronic illness.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6221 Ethical and Legal Issues in Aging

Credit Hours: 3

A consideration of major ethical and legal issues in aging and their implications for policies, priorities, and services.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6222 Elder Abuse Assessment and Intervention

Credit Hours: 3

The course provides an overview of elder abuse assessment and intervention, essential knowledge for all professionals who work with or encounter older adults.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6230 Principles of Health Care Risk Management and Patient Safety

Credit Hours: 3

This course provides an overview of the various aspects of health care risk management and how the risk varies by health care setting. Case studies and exercises provide students with "real world" situations they are likely to encounter.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6321 Gerontological Case Management

Credit Hours: 3

This course examines the function of case management in meeting the care needs of the older adult. Elements of the case management process as well as ethical and legal issues in case management are covered. Not repeatable; not restricted to majors.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6325 Social Policy and Planning for Gerontologists

Credit Hours: 3

This course is designed to provide an empirical and analytical base for understanding the major issues and trends involved in existing and proposed programs and services in the field of aging at local, state, and federal levels.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6362 Geriatric Interdisciplinary Team Training

Credit Hours: 3

This course addresses the importance of interdisciplinary teams in today's health care and social service delivery systems for older adults. Issues include formation of teams, critical issues of aging, team care plans, and monitoring team functioning.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6402 Statistical Methods in Aging Research

Credit Hours: 3

The major goal of this course is to deliver fundamental quantitative research concepts that are useful in aging research. Other goals include hands-on exposure to secondary data analysis.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6403 Multivariate Statistical Analysis for Aging Research

Credit Hours: 3

This course will give students experience with many of today's advanced statistical techniques. Primary emphasis will be on the description of these methods of analysis, situations in which their application is most appropriate, and hands-on experience.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6450 Gerontological Research and Planning

Credit Hours: 3

Social research and planning methods in the field of gerontology. Directed to the consumers of research findings-person whose positions call for the ability to interpret, evaluate, and apply the findings produced by others.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6461 Retirement and Long Term Care Housing for Elderly

Credit Hours: 3

This course will focus on population trends, housing and environment theory, need and availability of affordable housing with services, adapting homes for elders, and a number of age-related housing solutions. Not

restricted to majors; not repeatable.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6500 Seminar in Principles of Administration

Credit Hours: 3

This course deals with management problems and practices in the administration of institutions in the field of aging. Consideration is given to federal and state legislation, the management of people, and fiscal management.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6600 Human Development and Aging

Credit Hours: 3

Normal aging, change and basic psychological processes will be examined from a human development perspective. Emphasis will be on middle aged and older adults in relation to Life Cycle Changes and Counseling Approaches.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6607 Alzheimer's Disease Management

Credit Hours: 3

This course will provide instruction on effective approaches for providing care to persons with Alzheimer's disease and related disorders, successful behavior management, and operating a dementia program. Not restricted to majors; not repeatable.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6613 Physical Change and Aging

Credit Hours: 3

Common, normal and pathological physical changes associated with aging will be discussed as they affect behavior. Aspects of physical and mental illness and pharmacology with gerontological relevance will be surveyed.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6614 Aging and Mental Disorders

Credit Hours: 3

Examines mental disorders among older adults and special problems faced in geriatric assessment and intervention. Reviews DSM criteria and their application to older patients, including case studies of geriatric patients with complex comorbidities.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6616 Mental Health Assessment and Intervention with Older Adults

Credit Hours: 3

Designed to provide the mental health counselor with a basic understanding of evaluation principles and the application of assessment approaches to older adults.

Prerequisite(s): GEY 6614
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6617 Gerontological Counseling Theories and Practice

Credit Hours: 3

Examination of mental health treatment modalities and approaches to counseling with older adults. Personality theories and their relationship to counseling will be included emphasizing the development of a treatment plan through the integration of assessment data.

Prerequisite(s): GEY 6614
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6618 Gerontological Group and Family Counseling

Credit Hours: 3

An advanced course directed at clinical practice with older adults. Appropriate techniques and skills will be integrated with models of psychotherapy, counseling, and personality development. Primary focus will be on intervention with groups, families, and couples.

Prerequisite(s): GEY 6614
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6626 Health, Ethnicity, and Aging

Credit Hours: 3

This course addresses aging among diverse racial and ethnic populations, cultural competency and health disparities inaccess to and utilization of services among persons from diverse racial and ethnic populations. Not restricted to majors; not repeatable.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6627 Women and Aging

Credit Hours: 3

The purpose of this course is to examine older women's lives from a feminist perspective. Factors such as longer life expectancy and gender differences in health trajectories result in a disproportionate share of older women in the United States.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6643 End of Life Care for Dementia Patients

Credit Hours: 3

This course addresses progressive degenerative dementias: Alzheimer's disease, dementia with Lewy bodies, vascular and fronto-temporal dementia, and will address treatment, medical, ethical and legal questions. Not restricted to majors. Not repeatable.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6646 Gerontological Issues and Concepts

Credit Hours: 3

This course presents the concepts, theories, and issues relevant to our aging society. Emphasis will be placed on generalized knowledge of the aging process, and implications for the individual, family, government, and society in general. Students will engage in spirited debate and gain important background that will prepare them for their other graduate work in Gerontology. Social Work, and related fields.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6901 Directed Reading

Credit Hours: 1-4

A reading program of selected topics under the supervision of a faculty member.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6910 Directed Research

Credit Hours: 1-4

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6934 Special Topics in Gerontology

Credit Hours: 3

Courses on topics such as preretirement, mental health, human services organization, and senior center administration.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6940 Field Placement

Credit Hours: 1-6

An internship in an agency or organization engaged in planning or administering programs for older people of in providing direct services for older people.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6941 Field Placement in Mental Health

Credit Hours: 1-6

A highly structured supervised counseling experience providing mental health services to older adults.

Prerequisite(s): GEY 6616, GEY 6617, GEY 6618
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 6971 Master's Thesis

Credit Hours: 3-6

The Master's Thesis for the MA in Gerontology is a research project designed to result in an original research product.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7404 Ph.D. Seminar in Grant Writing

Credit Hours: 3

This course is designed as a seminar for doctoral students pursuing a research career requiring outside funding for their research. Skills practiced include literature search, preparation of budgets, detail of research methods, and critique of proposals.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7602 Ph.D. Seminar in Health and Aging

Credit Hours: 3

This doctoral seminar focuses on issues of physical and functional health in older adults, including acute and chronic conditions. Specific content will be different each time. Repeatable twice for credit.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7604 Biomedical Aging

Credit Hours: 3

This course examines biomedical issues of aging, from the genetic to bodily systems levels. Emphasis is on cell structure, diseases of aging, cardiovascular, neurological, metabolic, and immune systems; diet/nutrition. Open to all majors; not repeatable.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7610 Psychological Issues of Aging: Interdisciplinary Perspective

Credit Hours: 3

This course provides an overview of theory & research on individual human development and aging. Emphasis is on cognition, personality, psychopathology, stress and coping, care giving, and end-of-life issues. Open to all majors and not repeatable.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7611 Ph.D. Seminar in Mental Health

Credit Hours: 3

This doctoral seminar focuses on issues of mental health in older adults, including issues like depression, anxiety, and psychopathology. Specific content will vary. Repeatable twice for credit.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7622 Ph.D. Seminar in Policy and the Elderly

Credit Hours: 3

This course is designed to offer a comprehensive examination of the major public-policy issues generated by the health care needs of those ages 65 and older and the programs/institutions that have emerged to meet these needs.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7623 Social and Health Issues in Aging

Credit Hours: 3

This is a doctoral level class that addresses both social and health aspects of aging. Emphasis is on social and family context in aging, health policies, long term care, and racial and ethnic diversity. It is open to all majors and is not repeatable.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7649 Population Aging

Credit Hours: 3

PhD students in Aging Studies and others will develop an understanding of the causes/consequences of aging & its effects on the populations of the U.S. and the world. Emphasis is on demographic, social, political, and economic processes. Not repeatable.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7651 Ph.D. Seminar in Cognition

Credit Hours: 3

This doctoral seminar focuses on issues of cognition in older adults, including learning and memory, and also addresses change and chronic conditions that affect them. Specific content will be different each time. Repeatable twice for credit.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7902 Directed Individual Study in Aging Studies

Credit Hours: 1-9

An advanced reading program of selected topics related to interdisciplinary avenues of inquiry under the supervision of an aging studies faculty member. A written contract describing the requirements must be signed by the student and faculty member prior to registration.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7911 Directed Research in Aging Studies

Credit Hours: 1-19

Research on selected topics in aging studies under the direct supervision of a member of the graduate faculty in aging studies.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7936 Proseminar in Aging Studies

Credit Hours: 1-10

Reading and discussion of current topics, books, articles, and papers in aging studies. Examination of theory and research issues in the field of gerontology. Students develop their dissertation research topics, preliminary review of literature, and present their dissertation research proposals.

Tampa | College of Behavioral and Community Sciences | Aging Studies

GEY 7980 Dissertation and Doctoral

Credit Hours: 2-12

Tampa | College of Behavioral and Community Sciences | Aging Studies

GIS 5034C Introduction to Remote Sensing

Credit Hours: 3

An introduction to the basic concepts, principles and practices of photogrammetry and remote sensing and their applications in natural resource management, measurements of structural parameters, and environmental monitoring.

Tampa | College of Arts and Sciences | Geosciences

GIS 5049 GIS for Non-Majors

Credit Hours: 3

An introduction to the concepts underlying digital thematic mapping and geographical information systems (GIS) for non-geography majors and non-geography graduate students.

Tampa | College of Arts and Sciences | Geosciences

GIS 5075 Global Positioning Systems

Credit Hours: 3

Examination of the theory, operation and application of Global Positioning Systems (GPS).

Prerequisite(s): GIS 5049
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GIS 6038C Remote Sensing

Credit Hours: 3

Study of digital image processing techniques. Topics include filtering techniques, geometric and radiometric normalization, and classification algorithms with emphasis on developing.

Prerequisite(s): GEO 4124C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GIS 6039 Remote Sensing Seminar

Credit Hours: 3

Analytic study of selected topics in remote sensing. Discussions around topics include data acquisition, sensor systems, multispectral and radar image analysis, change detection, and integration of remote sensing with GIS.

Prerequisite(s): GIS 5034C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GIS 6100 Advanced Geographic Information Systems

Credit Hours: 3

Spatial problem solving utilizing GIS mapping and statistical methods. The course is designed to give students hands-on experience in using computerized techniques for geographic analysis.

Tampa | College of Arts and Sciences | Geosciences

GIS 6103 Programming for GIS

Credit Hours: 3

Examination of the concepts and techniques for customization of Geographical Information Systems (GIS) using object-oriented programming.

Prerequisite(s): GIS 6100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GIS 6112 Spatial Database Development

Credit Hours: 3

Development and management of spatial data for use in a Geographic Information System (GIS), including creating, editing, modifying and validating spatial data.

Prerequisite(s): GIS 6100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GIS 6306 Environmental Applications of Geographic Information Systems

Credit Hours: 3

Examination of GIS applications in agriculture, forestry, wildlife management, biodiversity conservation, environmental assessment, water resources, and pollution modeling. Use of advanced GIS analysis techniques relevant to the specific applications.

Prerequisite(s): GIS 6100 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GIS 6307 GIS Seminar

Credit Hours: 3

Analytic study of selected topics in GIS. The course will familiarize students with case studies involving GIS applications in environmental studies, coastal modeling, and urban planning.

Prerequisite(s): GIS 6100
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GIS 6355 Water Resources Applications of GIS

Credit Hours: 3

Examination of GIS applications in water resources, including watershed analysis, pollution modeling, and water resources modeling. Use of advanced GIS analysis techniques relevant to the specific applications.

Prerequisite(s): GIS 6100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 5786 Geological Field Excursion

Credit Hours: 2

Lectures and 2-3 week field excursion to study regional geology, structure and lithogenesis of geologically complex terrain. Mapping and outcrop description techniques are emphasized. Destination of trip varies. Trip requires camping and vigorous physical activity. Lec.-field trip.

Tampa | College of Arts and Sciences | Geosciences

GLY 5865 Statistical Models in Geology

Credit Hours: 3

Application of statistical methods to geological problems. Emphasis on sampling plans, nature of geologic distributions, and application of analyses of variance to solving geological problems. Lec.

Prerequisite(s): STA 2023
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 5932 Selected Topics in Geology

Credit Hours: 1-4

Each topic is a course under the direction of a faculty member. All areas of geology included.

Tampa | College of Arts and Sciences | Geosciences

GLY 6075 Greenhouse-Icehouse Earth

Credit Hours: 3

This course is designed to investigate the differences between green- and icehouse climates through an examination of both the data employed to reconstruct past climates and the impact these changes have had on the Earth System.

Tampa | College of Arts and Sciences | Geosciences

GLY 6246 General Geochemistry

Credit Hours: 3

Age, formation and evolution of the earth with application of basic chemical concepts and processes that govern the distribution of elements in geologic environments.

Prerequisite(s): One year college Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6255 Tracer Geochemistry

Credit Hours: 3

The use of trace elements and isotopic ratios as tools for understanding geologic processes. The collection and interpretation of trace element/isotopic data. Lecture/Discussion/Lab.

Prerequisite(s): GLY 6246
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6285C Analytical Techniques in Geology

Credit Hours: 3

Use and application of analytical methods including X-ray, atomic absorption, ICP/MS, TEM, SEM, and other geochemical techniques. Interpretation and statistical analysis of the data acquired. Lec/Lab.

Prerequisite(s): One year college Chemistry, GLY 4310
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6285L Properties of Earth Materials

Credit Hours: 3

Physical and chemical characteristics of geological materials and methods of analysis (petrography, microscopy, x-ray and electron beam analysis, elemental and isotopic geochemistry). For graduate students with no/limited geologic backgrounds.

Tampa | College of Arts and Sciences | Geosciences

GLY 6393C Modeling of Volcanic Processes

Credit Hours: 3

Introduce and explore the different modeling approaches used in modern volcanology and learn how to use and apply a model for a particular volcanic phenomena.

Prerequisite(s): MAC 2311 with a minimum grade of C or MAC 2241 with a minimum grade of C or MAC 2281 with a minimum grade of C, MAC 2312 with a minimum grade of C or MAC 2242 with a minimum grade of C or MAC 2282 with a minimum grade of C, GLY 3311C with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6395C Topics in Igneous and Metamorphic Petrology

Credit Hours: 2-4

Detailed study of selected igneous and/or metamorphic rock associations. Targeted sites will vary each semester. Modern methods of geochemical and mineralogical analysis (EPMA, ICP/DCP, XRD) will be employed. May be repeated up to 12 hrs. Lec/Lab.

Prerequisite(s): GLY 3311C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6475C Principles of Applied Geophysics

Credit Hours: 4

Elementary treatment of gravimetric, magnetic, electric, and seismic geophysical techniques as applied to resource exploration, site investigation, and mineral deposits. Lec/Lab. Field trips.

Prerequisite(s): One year of Physics
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6492 Hydrogeology Internship Project

Credit Hours: 3

Internship project in applied hydrogeology. Required for hydrogeology-internship MS program (minimum 3 hours).

Tampa | College of Arts and Sciences | Geosciences

GLY 6557 Facies Models

Credit Hours: 3

Characterization of facies models for stratigraphic sequences representing terrestrial, transitional and marine sedimentary environments. Emphasis on textures, structures and composition of strata and their environmental interpretation in the rock record.

Tampa | College of Arts and Sciences | Geosciences

GLY 6573 Fluvial Hydrology and Geomorphology

Credit Hours: 3

The course covers the mechanics of open channel flows, primarily to

understand the potential energy available to do work, and the geomorphic responses to work, including channel initiation, sediment transport, and channel adjustment.

Prerequisite(s): MAC 2311
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6575C Coastal Sedimentation

Credit Hours: 3

Study of modern coastal sedimentary environments with emphasis on beaches, inlets, deltas, estuaries, and marshes. Analysis of sedimentary process and resulting morphology of sediment bodies. Lec/Lab. Field trips.

Prerequisite(s): GLY 4555
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6739 Selected Topics in Geology

Credit Hours: 1-4

Each topic is a course directed by a faculty member. All areas of geology are included.

Tampa | College of Arts and Sciences | Geosciences

GLY 6824 Ecohydrology

Credit Hours: 3

This course covers hydrological processes along the atmosphere-plant-soil continuum and the ways in which hydrological processes control ecological structure and function.

Prerequisite(s): MAC 2311
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6827C Advanced Hydrogeology

Credit Hours: 4

Flow systems, analytical and numerical solutions to ground-water flow problems. Emphasis on the theoretical aspects of ground-water flow systems and their interaction with the geologic framework. Lec/Lab. Field trips.

Prerequisite(s): GLY 4822, one year college calculus
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6828 Ground-Water Geochemistry

Credit Hours: 3

Chemical behavior of ground water. Includes interaction of water with aquifer materials, chemical effects of waste disposal, use of chemical tracers, and transport of hazardous chemicals. Methods of sampling and data interpretation are emphasized. Lec.

Prerequisite(s): One year of college Chemistry, GLY 4822, GLY 6246
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6836 Numerical Modeling of Hydrogeologic Systems

Credit Hours: 3

An advanced graduate course in numerical modeling of hydrogeologic systems. Topics include flow and mass transport, modeling, model calibration, model assessment. Current public domain computer codes are used, including MODFLOW, MT3D, MODPATH and LICODE.

Prerequisite(s): GLY 6827C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Geosciences

GLY 6905 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Geosciences

GLY 6910 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Geosciences

GLY 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Geosciences

GLY 7912 Directed Research

Credit Hours: 1-30

Tampa | College of Arts and Sciences | Geosciences

GLY 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Geosciences

GMS 6000 Medical Science Success Skills

Credit Hours: 1-3

This course comprises a review of the material required for the biology and physics and mathematics and verbal sections of the MCAT exam.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6001 Foundation in Biomedical Sciences

Credit Hours: 4-8

A multidisciplinary course in the cellular, molecular, biochemical, and genetic basis of biomedical sciences, designed as a comprehensive first semester course for most incoming biomedical sciences graduate students.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6002 Success Skills in Biomedical Sciences

Credit Hours: 1

This course will introduce the beginning graduate student the tasks and skills necessary for success in the Biomedical Sciences PhD program, with a emphasis on ethical principles involved.

Prerequisite(s): GMS 6091
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6004 Introduction to Medical Sciences

Credit Hours: 1-8

This course is based on medical cases hat students explore in small groups that are faculty facilitated. Each case is concluded with a series of traditional didactic lectures relevant to the case. A learning specialist will provide learning strategies.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6010 Personalized Medicine

Credit Hours: 3

The course is designed to introduce the various principles that influence the discipline of genomics and the application to personalized medicine which utilizes information on genes, proteins and the environment to prevent, diagnose and treat disease.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6012 Basic Medical Genetics

Credit Hours: 3

The course examines fundamental aspects of genetics critical to understanding the mechanisms and inheritance patterns of genetic

diseases relevant to human health including clinical, biochemical and molecular genetics, cytogenetics and genetic counseling.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6020 Neuroscience

Credit Hours: 5-6

An introduction into basic structure and function of the central nervous system. Emphasis is on an integrated approach that focuses on several levels of organization from molecular to cellular, from neural systems to behavior.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6053 Cancer Prevention

Credit Hours: 3

Provide a broad understanding of the various sources of cancer and the array of potential prevention modalities and therapeutics.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6054 Cancer Biology

Credit Hours: 3

Designed to give a broad understanding and discussion of the biology of cancer cells and the changes in cell structure and function leading to malignancy and uncontrolled cell proliferation.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6055 Case Studies in Cancer Therapy

Credit Hours: 3

This course provides an in-depth discussion of selected patient case studies in integrative oncology and is designed to assist integration of the study of the basic principles and applications of integrative oncology to patient care.

Prerequisite(s): GMS 6053, GMS 6054
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6056 Targeted Cancer Therapies

Credit Hours: 3

This course is designed to focus on exploring targeted cancer therapies for a variety of specific forms of cancer together with the application of novel therapeutic regimes.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6057 Integrative Cancer Therapies

Credit Hours: 3

This course is designed to focus on exploring integrative cancer therapies for a variety of specific forms of cancer together with the application of novel therapeutic regimes.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6058 Diet and Cancer

Credit Hours: 3

This course is designed to focus on the linkage between diet and dietary factors and cancer and to explore the role of nutritional interventions as part of novel therapies for modern approaches to cancer treatment.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6066 Molecular Medicine

Credit Hours: 11

A comprehensive introduction to molecular medicine with an emphasis on the integration of those aspects of biochemistry, cell biology and genetics that have immediate relevance to the understanding of various disease processes and their treatment.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6067 Current Topics in Molecular Medicine

Credit Hours: 1

A Journal Club in which graduate students and faculty present recent research publications of importance to molecular medicine.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6069 Translational Biotechnology

Credit Hours: 3

The course teaches how the results of biological, biomedical and bioengineering research can be translated into applicable procedures and products and enhances the information via site visits to local non-profit and for-profit biotech institutions.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6091 Responsible Conduct in Research

Credit Hours: 1

This course will introduce the beginning graduate to the principles of responsible conduct in research, and how decisions made on a daily basis in the life of a scientist depend on these core principles.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6092 Principles of Intellectual Property

Credit Hours: 3

This course focuses on the principles of intellectual property as related to protection of new technologies/products and will examine strategies using the legal structure of patents, copyrights, trademarks, and trade secrets. No restrictions or repeats.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6093 Clinical and Translational Mentored Research

Credit Hours: 1-12

Course facilitates Clinical and Translational research at USF. Restricted to majors. In class presentations by incoming and advanced students and professors with review and discussions to support students' research efforts. Repeatable: Total max 12 cr.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6094 Experimental Design and Analysis

Credit Hours: 3

A focused course designed to introduce students to the scientific method, experimental designs, approaches, and analyses that are essential to the modern biomedical research scientist.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6100 Medical Microbiology

Credit Hours: 3

Lecture, directed literature readings, and discussion form the basis to instruct graduate and advanced undergraduate students in Medical Microbiology. The course will now cover pathobiology and molecular biology of medically important bacteria.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6101 Molecular and Cellular Immunology

Credit Hours: 3-4

Lecture, directed literature readings, and discussion form the basis to instruct graduate and advanced undergraduate students in development, function, regulation, pathobiology, and conduct of research in medically relevant immunity.

Prerequisite(s): Gen Biology, Organic Chem, Genetic(rec), Biochemistry(rec), Intro Immunology(rec)
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6103 Foundations in Medical Microbiology and Immunology

Credit Hours: 4

This course is designed to provide students with a basic understanding of the immune system and basic concepts in microbiology and infectious diseases using representative pathogens. This course is for doctoral and research-oriented master's students.

Prerequisite(s): GMS 6001
Corequisite(s): None.
Co-Prerequisite(s): None.

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GMS 6104 Cellular Immunology

Credit Hours: 3

Current concepts of cellular interactions in the immune response.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6107 Advances in Virology

Credit Hours: 2

Lecture, directed literature readings, and discussion form the basis to instruct graduate and advanced undergraduate students in Medical Virology. The course will now cover pathobiology and molecular biology of medically important viruses.

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GMS 6110 Microbial Pathogenesis and Host-Parasite Interactions

Credit Hours: 3

This course examines the basic concepts in microbial pathogenesis using select medically important microorganisms as examples. It studies the reciprocal interactions that take place between human host and microbial pathogen.

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GMS 6111 Basic Medical Pathology

Credit Hours: 3

This lecture course focuses on disease processes and their causes.

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GMS 6114 Vaccines and Applied Immunology

Credit Hours: 2

Lectures and discussion concerned with the immunological aspects of vaccine development against infectious agents and cancer including discussions on mechanisms, experi- mental approaches and development problems.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6115 Medical Parasitology and Mycology

Credit Hours: 3

This course provides students with a detailed understanding of medical parasitology and mycology using select medically important parasites and fungi to examine the multi-faceted adaptations of these microbial pathogens to infect the human host.

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GMS 6130 Molecular Biology of Tumor Viruses

Credit Hours: 2

This course is focused on tumor viruses which are involved in the pathogenesis of cancer and utilized in gene therapy as vectors. The lectures will cover current concepts of the field, specific viral genes and gene products involved in cancer, and molecular mechanisms by which viruses transform normal cells to cancer cells.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6141 Basic Medical Immunology and Microbiology

Credit Hours: 3

The course focuses on the fundamental aspects of immunology and microbiology that are critical to understanding the nature of the immune

response and identify the various microbiological agents that are relevant to human health and disease.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6142 Cancer Immunology

Credit Hours: 3

Provide a broad understanding of the role of immunity in cancer biology and the potential applications of immunological methods in cancer therapies.

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GMS 6182 Introduction to Clinical Research

Credit Hours: 3

Understanding the principles that govern clinical research in health science is important in all fields of medicine.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6183 Clinical Research Methods

Credit Hours: 3

The course will provide a foundation for healthcare providers to pursue investigator-initiated clinical research. It is not restricted to majors or nonmajors and cannot be repeated for credit.

Prerequisite(s): General Biology (1 year), General Chemistry (1 year).
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6194 Biotechnology Forum

Credit Hours: 1

The course aims to provide students with an overview about the applications of modern biotechnology in industrial settings The seminars focus on the development of diagnostics therapies drugs and drug delivery systems 20 biotechnology students.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6200C Biochemistry, Molecular and Cellular Biology

Credit Hours: 5

The overall objectives of GMS 6200 are to provide students with a solid foundation of biochemical principles and a fundamental understanding of structures and processes of living systems at the molecular and cellular levels.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6201 Basic Medical Biochemistry

Credit Hours: 3

The course examines fundamental aspects of biochemistry critical to understanding the chemical and cellular mechanisms relevant to health and disease including intermediary metabolism, enzymology and storage and transfer of genetic information.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6240 Metabolic Approaches to Pediatrics

Credit Hours: 3

Provides participants with a detailed understanding of the important linkage between nutrition, metabolism and the clinical management of both mothers and pediatric patients.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6310 Toxic Metals & Functional Toxicology

Credit Hours: 3

Designed to give a broad understanding of the central role that various

heavy metals, such as As, Hg & Pb, and other toxins have in the progression of various pathological conditions.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6323 Pathology Case Studies 1

Credit Hours: 3

This course emphasizes principles of pathology, including cell injury, inflammation, immunopathology, neoplasia and congenital and environmental pathology, by focusing on the anatomical, pathophysiological and pathologies in the musculoskeletal system.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6324 Pathology Case Studies 2

Credit Hours: 2

This course emphasizes principles of pathology, including cell injury, inflammation, immunopathology, neoplasia and congenital and environmental pathology, by focusing on the anatomical, pathophysiological and pathologies in the gastrointestinal system.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6325 Pathology Case Studies 3

Credit Hours: 2

This course emphasizes the principles of pathology, including cell injury, inflammation, immunopathology, neoplasia and congenital and environmental pathology, by focusing on the anatomical, pathophysiological and pathologies in the neurological system.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6326 Pathology Case Studies 4

Credit Hours: 3

This course emphasizes the principles of pathology, including cell injury, inflammation, immunopathology, neoplasia and congenital and environmental pathology, by focusing on the anatomical, pathophysiological and pathologies in the reproductive system.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6331 Stem Cell Biology

Credit Hours: 3

Designed to give a broad understanding of the biology of stem cells and their potential role in the treatment of various pathological conditions.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6334 Pathobiology of Human Cancer

Credit Hours: 3

Using tissue-related oncology topics that complement molecular biology & experimental therapeutics, this graduate course will provide the morphologic and biologic basis of human cancer. This course is not restricted and is repeatable for 3 credits.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6340 Laboratory Fundamentals and Adjunct Cancer Therapies

Credit Hours: 3

This course presents an extensive review of clinical laboratory fundamentals as part of the disease diagnosis process together with discussions of the therapies designed to reverse adverse cellular functions and adjunct therapies for cancer management.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6352 Forensic Pathology

Credit Hours: 3

Forensic Pathology presents a concise introduction to forensic pathology. Forensic pathology is crucial to discriminating between natural and unnatural causes of death. It will focus on causes of death typically seen at autopsy.

Prerequisite(s): GMS 6630
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6380 Medicine and Gender

Credit Hours: 3

This course covers biological differences between men and women in the central nervous system, cardiovascular system, and the immune system. Women's health topics include gestational diabetes, obesity and breast feeding and men's reproductive health.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6400C Core Physiology

Credit Hours: 4-6

This course is designed to give the beginning graduate student an insight into the basic functions of the human body. This will be approached from molecular, cellular, organ system and total organism aspects.

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GMS 6403 Endocrine Mechanisms

Credit Hours: 4

An examination of current concepts of endocrine and neuroendocrine systems. Emphasis will be placed on control at the organismal and organ system levels.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6404 Systems Neurophysiology

Credit Hours: 4

Considers current topics in systems neurophysiology including sensory processing, motor control, and learning. Literature in both invertebrate and vertebrate animal models and neural network simulations is considered.

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GMS 6409 Integrated Cardiovascular Biology

Credit Hours: 3

Designed to give a broad understanding of the biology of the cardiovascular system and the various pathophysiolgical changes that cause chronic heart disease together with discussion of appropriate therapies.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6410 Cardiovascular Regulation

Credit Hours: 4

The course involves discussions/advanced readings of current trends in many aspects of the cardiovascular system including cardiac function, vascular biology, and signaling.

Prerequisite(s): GMS 6001, GMS 6440, GMS 6505
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6411 Metabolic Cardiology

Credit Hours: 3

Examines the interrelationship between metabolic dis-regulation and cardiovascular disease focusing on the interrelationship between diabetes and increased risk for cardiovascular events.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6418 Core Principles and the Musculoskeletal System

Credit Hours: 3-7

Emphasized in this course are those aspects of fundamental biochemistry, cell biology, and genetics, the anatomy of the musculoskeletal system, and the development of human behavior that have immediate relevance for clinical medicine.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6419 Excretory, Endocrine and Reproductive Systems

Credit Hours: 3-7

Emphasis on aspects of the gastrointestinal, endocrine, renal and reproductive systems that have immediate relevance for clinical medicine. Restricted to MSMS students in the IMS concentration.

Prerequisite(s): GMS 6411
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6431 Cell Physiology

Credit Hours: 4

Examine organelles and macromolecular complexes of eukaryotic cells with respect to structural and functional roles in major cellular activities. Emphasizes on experimental basis for factual knowledge in modern cell biology, discusses the validity of current concepts in relation to the regulation of cellular functions. Suitable for first and second year graduate students.

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GMS 6433 Membrane Physiology

Credit Hours: 4

Advanced readings and discussion of the molecular physiology of excitable membranes.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6440 Basic Medical Physiology

Credit Hours: 3

The course presents a concise introduction to the study of human physiology from a perspective of the function of various human organ systems with an emphasis on understanding important concepts and their correlation to the practice of clinical medicine.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6441 Clinical Approaches to Endocrinology

Credit Hours: 3

The course focuses on the function of the human endocrine system and examines factors influencing hormone function and physiological hormone balance. Clinical approaches to achieve hormone homeostasis are emphasized including hormone replacement therapy.

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GMS 6442 Nutrition, Obesity and Metabolism

Credit Hours: 3

Designed to give a broad understanding and discussion of the links between human nutrition and obesity and the role of intermediary metabolism in weight management.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6443 Promoting Organizational Wellness

Credit Hours: 3

Designed to provide an introduction to methods to establish integrative weight loss, obesity and wellness programs at various types of institutions as an integral and effective support component for long term patient compliance in weight management.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6444 Co-Active Coaching

Credit Hours: 3

This course explores current developments in the co-active coaching model of behavior modification and how to establish sustainable patient relationships.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6445 Integrative Lifestyle Medicine

Credit Hours: 3

This course explores the process of patient counseling in lifestyle medicine with topics that include nutritional depletions, the concept of foods as nutrients, vitamins, minerals and herbal therapies and their importance in patient treatments.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6446 Sports Medicine and Nutrition

Credit Hours: 3

Focuses on an introduction to the integration of nutritional principles into maintaining and enhancing the health and performance of athletes whether at the collegiate, high school, middle school, or professional level.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6447 Advanced Male Endocrinology

Credit Hours: 3

The course focuses on advanced endocrinology in the male patient including male sexuality, late-life hypogonadism, benign prostatic hyperplasia, lower urinary tract symptoms, prostate cancer and hormonal therapies and nutrition and the aging male.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6448 Advanced Endocrine Therapies

Credit Hours: 3

The course is designed to provide advanced discussion of female endocrinology and focuses on topics including estrogen metabolism, breast cancer and advanced therapies in dysmenorrhea, vulvodynia, cervical dysplasia, endometriosis, fibrocystic disease.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6449 Complementary and Alternative Medicine

Credit Hours: 3

This course is designed to explore, compare, and evaluate various alternative practices and philosophies to personal health management.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6451 Nutrition and Metabolism

Credit Hours: 3

The course provides a discussion of the experimental analysis of human nutrition and the methods used in detoxification of exogenous toxins together with a critical analysis of the roles of fatty acid and amino acid metabolism in organ homeostasis.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6452 Clinical Nutrition

Credit Hours: 3

A course that is designed to provide a thorough foundation in all aspects of human nutrition and which emphasizes the close relationship between nutrition and various chronic diseases and includes obesity, weight management and life-cycle nutrition.

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GMS 6453 Functional Approach to Diabetes and Coronary Heart

Credit Hours: 3

The course examines specific aspects of diabetes and coronary heart disease critical to understanding factors that result in degraded cardiovascular tone and the cellular mechanisms that control carbohydrate metabolism and their role in various diseases.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6454 Functional Medicine and Infectious Disease

Credit Hours: 3

This course covers advanced human nutrition together with the utilization of various botanical supplements that have been applied to metabolic and nutritional medicine. A functional approach to infectious diseases will also be explored.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6455 Clinical Intensives in Metabolic and Nutritional Medicine

Credit Hours: 3

The course focuses on the applied aspects of metabolic and nutritional medicine, including extensive patient contact and mentoring from qualified clinical experts, to provide practical experience to improve the clinical skills of the practitioner.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6456 Integrated Bariatrics

Credit Hours: 3

Integrated Bariatrics is designed to provide a detailed understanding of the interplay between the factors that influence weight gain weight loss and obesity.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6457 Integrative Weight Management

Credit Hours: 3

Detailed examination of the genetic, metabolic, nutritional and environmental factors associated with weight gain and obesity and appropriate therapies used to treat obesity.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6458 Metabolic Triads

Credit Hours: 3

Detailed understanding of the important aspects of the various organ and metabolic pathway interrelationships together with various disturbances that can result in a wide variety of pathophysiological diseases.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6461 Systems Physiology and Pharmacology

Credit Hours: 5

This course will serve as an introduction into human physiology and pharmacology, emphasizing systemic function. The course is not restricted to majors, and is not repeatable.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6480 Cardiovascular Disease

Credit Hours: 3

Provide a detailed understanding of the important physiological, nutritional and genetic aspects that influence the progression of cardiovascular disease coupled with an examination of novel therapeutic regimes.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6482 Cardiovascular Health

Credit Hours: 3

The course is designed to provide a detailed understanding of the important aspects of maintaining the integrity of cardiovascular function together with developing appropriate therapies to effectively treat various forms of cardiovascular disease.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6505 Basic Medical Pharmacology

Credit Hours: 3

The course presents a concise introduction to human pharmacology, emphasizing an understanding of the pharmacology principles that govern interaction between drugs, xenobiotics and humans and the relationship to modern medical diagnostics and therapy.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6511 Current Literature in Pharmacology

Credit Hours: 1

This course is designed to help students develop skills in the analysis of pharmacological data through discussions of scientific literature and written critiques of departmental seminars. In addition, students will gain knowledge of ongoing research in selected areas of pharmacological interest.

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GMS 6512 Ion Channel Pharmacology and Disease

Credit Hours: 3

This course is designed to familiarize students with the role of ion channels in the genesis of pathophysiological conditions and how these proteins may be targeted for therapeutic intervention.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6513 Principles of Pharmacology and Therapeutics

Credit Hours: 3

This course is designed to familiarize students with basic principles of pharmacology and therapeutics. Students will be exposed to classical concepts of pharmacology such as drug-receptor interactions as well as modern techniques such as gene therapy.

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GMS 6514 Instructional Skills in Pharmacology

Credit Hours: 1

Students are given practical experience in current teaching techniques including an understanding the purpose of lecture, small groups and evaluation. There is direct faculty supervision and critique following direct classroom experience.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6541 Pharmacology for Health Professionals

Credit Hours: 4

The basic principles of pharmacology (pharmacodynamics & pharmacokinetics) will be presented along with major drug classes (analgesics, antibiotics, cardiovascular drugs, central nervous system drugs.

Prerequisite(s): None.
Corequisite(s): Physiology.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6550 Introduction to IV Therapies

Credit Hours: 3

Provides students with a basic understanding of the clinical implications of the application of intravenous therapy to treat various physiological conditions and for advanced nutrition.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6601 Introduction to Laboratory Medicine and Diagnosis

Credit Hours: 2

This course deals with cellular, molecular and microscopic techniques currently employed in diagnostic medicine.

Prerequisite(s): GMS 6608
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6604 Human Structure and Function

Credit Hours: 3

This course focuses on an integrated approach to the analysis of human structural and functional development and integrity.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6605 Basic Medical Anatomy

Credit Hours: 3

The course focuses on a basic introduction to human anatomy and how anatomical concepts relate to the organization of the body at a macroscopic level for each organ and how each of the organs and organ systems function in their role in normal homeostasis.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6608 Pathology Case Studies 5

Credit Hours: 2

This course emphasizes the principles of pathology and histology by focusing on the cellular morphology anatomical and the histological organization in pathologies of the endocrine system.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6609C Advanced Human Gross Anatomy

Credit Hours: 3-6

This mainly laboratory course supplemented with supporting lectures will focus on a regional dissection approach to understanding how each organ system functions to serve their role in normal homeostasis of the living body.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6610 Advanced Neuroanatomy

Credit Hours: 3-6

This lecture and laboratory course deals with the structure and function of the human nervous system. The course is organized using both regional and systemic approaches.

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GMS 6611 Introduction to Anatomical Research

Credit Hours: 1-3

This course consists of scheduled rotations through the laboratory of at least three members of the anatomy department faculty.

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GMS 6612 Supervised Teaching in Human Anatomy

Credit Hours: 1-3

This course deals with the philosophy and mechanics of teaching. The course also involves supervised, practical experience in the various aspects of teaching in both the class-room and laboratory.

Prerequisite(s): GMS 6608, GMS 6609C or GMS 6610
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6630 Basic Medical Histology

Credit Hours: 3

The course introduces the principles of histology, how they govern the structure and function of cell types and the organization of the tissues involved in organ architecture and function and how staining techniques identify cells at the molecular level.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6671 A Brief History of Medical Sciences

Credit Hours: 2

This course is composed of five traditional didactic lectures, mini-presentations (10-15 min) by students on landmark advances in Anatomy and Pathology, and a submission of a brief paper based on these presentations.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6706 Basic Medical Neuroscience

Credit Hours: 3

The course focuses on the function of the human nervous system and examines nerve cell biology and how cells are organized into functional systems. Structure/function relationships are emphasized including examples of abnormal cell function in disease.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6707 Medical Neuroscience

Credit Hours: 3-7

Emphasized in this course are those aspects of the nervous systems that have immediate relevance for clinical medicine. This course is restricted to students enrolled in the Masters of Science with a concentration in interdisciplinary medical sciences.

Prerequisite(s): GMS 6418
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6708 Neuroimmunology

Credit Hours: 3

Designed to provide an in-depth review of topics related to immunology in the nervous system.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6710 Introduction to Behavioral Medicine

Credit Hours: 4

Behavioral Medicine is the study of factors influencing normal human behavior such as human development, family dynamics and reaction to illness. This course will examine how illness causes changes in behavior and a basic introduction to psychopathology.

Prerequisite(s): GMS 6066
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6714 Nutrition Counseling

Credit Hours: 3

Focuses on the important linkage between lifestyle modification and appropriate nutritional activities to support optimum health and explores various motivational approaches to effect nutritional change as part of lifestyle change.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6715 Lifestyle Coaching

Credit Hours: 3

Focuses on the important facets of behavior change and how to encourage patients to alter lifestyle habits for a progressive approach to "wellness" using motivational approaches to effect these lifestyle modifications.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6716 Neuropsychiatry

Credit Hours: 3

Focuses on an introduction to the field of neuropsychiatry and its role in the evaluation and treatment of various mental disorders associated with the mind and nervous system.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6735 Neuropharmacology

Credit Hours: 3

This course will familiarize students with information on the biochemical basis of neural regulatory systems in the brain and the application of the latest approaches to the study of neurotransmitters and drug action in the nervous system.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6751 Integrated Clinical Neurobiology

Credit Hours: 3

The course introduces the principles of neurology and the role of neurotransmitters in cellular function and communication between cell types and focuses on gastrointestinal health in relationship to the immune system and neurotransmitter function.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6752 Autoimmune Diseases and Cognitive Function

Credit Hours: 3

Basic and clinical aspects of memory enhancement and memory loss are described together with the physiological changes that result from various autoimmune diseases and the critical roles of mitochondria in energy metabolism and oxidative stress.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6753 The Basics of Brain Fitness and Memory Management

Credit Hours: 3

Provides an in-depth discussion of the central roles that brain fitness and memory management contribute to the function of cognition and the various therapies applicable to treat cognitive decline.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6754 Memory Loss

Credit Hours: 3

The course explores the evaluation of memory loss and the differential diagnoses of a variety of disorders with varying degrees of cognitive decline or dementia together with the examination of medications that can be applied as disease-modifying agents.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6755 How the Brain Learns

Credit Hours: 3

This course is designed to provide participants with a detailed understanding of the important aspects of brain development and metabolism.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6756 Brain Fitness Therapies

Credit Hours: 3

This course is designed to provide a detailed understanding of the neuroanatomical underpinnings of disease and important facets of long-term memory impairments and how to develop effective therapies to treat declining memory fidelity and dementia.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6770 A Metabolic Approach to Pain Management

Credit Hours: 3

Provides an in-depth discussion of the central role that pain management contributes to the treatment of the chronic pain patient which has been identified as one of the top two reasons patients seek medical care.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6771 Aging and Neuroscience

Credit Hours: 3

An overview of the aging central nervous system (CNS): normal structure and function, age-related changes, effects of traumatic brain injury and neurodegenerative diseases, and current and future CNS therapies.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6772 The Spinal Cord: Development, Pathology and Therapy

Credit Hours: 3

The course is a series of lectures/discussions by Department and College of Medicine faculty on spinal cord anatomy, normal development, physiology and pathology. Current and future treatments for spinal cord injuries and diseases will also be discussed.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6773 Stem Cells and Brain Repair

Credit Hours: 3

This course will provide students with knowledge of basic issues in stem cell research today, with a focus on the treatment of brain injuries and disease. The class format is lectures and discussion of seminal articles in the field.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6807 Epidemiology of Women's Health

Credit Hours: 3

The organization of this course reflects the concepts of life-course epidemiology in which health behaviors established at young ages have a significant impact on health status and quality of life in senior years.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6840 Cultural and Diversity Issues in Clinical Research

Credit Hours: 2

Promotes understanding of reasons for including the broadest populations possible in clinical research studies in terms of culture, race, ethnicity, gender, age, literacy, sexual orientation, socioeconomic status. Instructor permission, not repeatable.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6841 Fundamentals of Translational Research

Credit Hours: 1

Introduction to the interface between clinical and basic research. How to include basic research hypotheses in the design of clinical studies to advance knowledge in applying basic/clinical research to patient care. Instructor permission. Not repeatable.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6843 Scientific Communication

Credit Hours: 2

Course teaches principles to improve scientific communication. Provides practical experience on preparing abstracts, presenting research to professionals/the public and how to publish in peer-reviewed journals. Instructor permission. Not repeatable.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6844 Principles of Patient-Oriented Research

Credit Hours: 1

Introduction to the Scholars in Patient-Oriented Research (SPOR) Program. Assists in identifying important clinical and translational research questions, approaches, sources of support and regulatory issues. Instructor permission. Not repeatable.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6849 Approach Clinical and Behavioral Research Adolescent: Focus on HIV

Credit Hours: 3

The course will address quantitative and qualitative research methods to study adolescent HIV/AIDS. The course is not restricted to majors or nonmajors and is not repeatable for credit.

Prerequisite(s): General Biology (1 year), General Chemistry (1 year).
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6870 Medical Ethics and Humanities: Tools and Foundations

Credit Hours: 3

Terminology, historical perspectives, ethical principles and dilemmas, and case studies. Examination of aspects of the human journey and various voices or perspectives thorough fiction, essays, history, art, poetry, theater, and film.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6871 Health Sciences Ethics

Credit Hours: 2

The course examines fundamental ethical issues, such as informed consent, that are important components of the practice of the biomedical sciences and represent important considerations that must be addressed in both the "basic" and "clinical" sciences.

Prerequisite(s): 1 year Biology; 1 year Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6873 Biomedical Ethics

Credit Hours: 3

This course will focus on biomedical ethical issues in business, research, clinical care, and technology development in the life sciences and healthcare industries.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6875 Ethical and Regulatory Aspects of Clinical Research

Credit Hours: 2

This course addresses ethical and regulatory aspects of clinical research, specifically in relation to biomedical research that is patient-oriented. Instructor permission in required. The course is 2 credits and is not repeatable.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6890 Medicine and the Arts

Credit Hours: 3

Study opportunities in metropolitan cities in which students engage in one week of intensive study. (Medical Centers, Museums, Theatre)

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6891 Medicine and the Movies

Credit Hours: 3

In-depth explorations of the ways in which film presents and illuminates ethical dilemmas/other topics in modern medicine. Students evaluate film stories critically so that exaggerations, distortions, and accuracies can be considered and discussed.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6902 Bioethics and Medical Humanities Independent Study

Credit Hours: 3

Develop with faculty advisor an individual project with the goal of in-depth study in the focus area.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6905 Grantsmanship I

Credit Hours: 1

Introduction to basic skills for writing successful, peer-reviewed external grant proposals, especially to the NIH for patient-oriented research and mentored career development grants, for postdoctoral-level academic health research career development.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6906 Grantsmanship II

Credit Hours: 1

This course is the second in a three-course series to complete instruction in the skills and techniques necessary for writing successful NIH grant proposals whose primary focus is patient-oriented/translational career development or research grants.

Prerequisite(s): GMS 6905
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6908 Medical Sciences Independent Study

Credit Hours: 1-3

Develop, in conjunction with a faculty advisor, an individual project with the goal of completing an in-depth study of a topic directly relevant to the student's program of study in the medical sciences.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6921 Building a Patient-Oriented Research Center

Credit Hours: 1

Introduction to the important characteristics of academic patient-oriented faculty in a colloquium format to encourage interactions and sharing of information between faculty and students. 2 semesters, 1 credit each semester=2 cr. Instructor permission.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6933 Case Studies Intellectual Property in Biotechnology

Credit Hours: 2

Securing intellectual property IP for scientific discoveries is of ultimate importance in a highly competitive economy The course will discuss cases of intellectual property in biotechnology with respect to diagnostics therapeutics and medical devices.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6940 Supervised Teaching in Molecular Medicine

Credit Hours: 1-3

To instruct student in teaching methods that are employed in training of medical students; acquaint student with evaluation procedures used to measure academic progress of medical students.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6941 Bioethics and Medical Humanities Internship

Credit Hours: 3

Supervised Field experience in related activities/organizations relating to bioethics and/or medical humanities.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6942 Laboratory Rotations in Biomedical Sciences

Credit Hours: 1-3

This course is designed to introduce the early-career Ph.D. student to the types of questions and techniques involved in biomedical research.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6943 Biotechnology Internship

Credit Hours: 3

The course teaches, hands-on, in companies and institutions, how the results of biological, biomedical and bioengineering research are translated into the development of drugs, devices, diagnostics, therapies, services as well as patents and licenses.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 6950 Biomedical Science Communication and Instructional Skills

Credit Hours: 2

This course will train MS/Ph.D. students to teach & communicate biomedical sciences while pursuing academic careers in universities and in medical/allied health schools, where teaching basic biomedical sciences is required.

Tampa | Morsani College of Medicine | Medical Sciences

GMS 7910 Directed Research

Credit Hours: 1-19

Tampa | Morsani College of Medicine | Medical Sciences

GMS 7930 Selected Topics

Credit Hours: 1-3

Tampa | Morsani College of Medicine | Medical Sciences

GMS 7939 Graduate Seminar

Credit Hours: 1

Tampa | Morsani College of Medicine | Medical Sciences

GMS 7980 Dissertation: Doctoral

Credit Hours: 2-19

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Tampa | Morsani College of Medicine | Medical Sciences

GRW 5905 Directed Reading

Credit Hours: 1-4

Tampa | College of Arts and Sciences | World Languages

GRW 5934 Selected Topics

Credit Hours: 1-4

Study of an author, movement or theme.

Tampa | College of Arts and Sciences | World Languages

HIM 6017 Legal Aspects of Health Information Management

Credit Hours: 3

This course provides an in-depth discussion of selected law and regulatory issues that are applicable to the management of patient information in health informatics.

Prerequisite(s): HIM 6118
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6018 e-Healthcare Ethics

Credit Hours: 2

Examines selected ethical considerations that are significant components of health informatics and electronic medicine and often represent important considerations to be addressed during the delivery of healthcare using e-medicine models.

Prerequisite(s): HIM 6118
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6114 Integrated Electronic Medical Records

Credit Hours: 3

Integrated electronic medical records is designed to provide an overview of the functions, limitations, opportunities and challenges presented by this very rapidly developing branch of information technology in the healthcare environment.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6118 Introduction to Health Informatics

Credit Hours: 3

Introduction to Health Informatics is designed to provide a discussion of the various facets of heath informatics of interest to the healthcare professional.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6137 Pharmacy Informatics

Credit Hours: 3

Provides a discussion of the various facets of health informatics of interest to the pharmacy professional, including the collection, storage, retrieval, communication and optimal use of pharmaceutical-related data, information and knowledge.

Prerequisite(s): HIM 6118
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6141 Introduction to Health Informatics

Credit Hours: 3

Introduction to Health Informatics is designed to provide a discussion of the various facets of health informatics of interest to the healthcare professional.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6217 Health Data Management

Credit Hours: 3

This course is designed to provide a sound database system foundation, while highlighting healthcare applications.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6320 Managerial Communication

Credit Hours: 3

Managerial Communication focuses on the centrality of communication to the delivery and management of healthcare and explores challenges faced by the diverse community of healthcare professions and their interactions.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6350 e-Medicine Business Models

Credit Hours: 3

E-Medicine Business Models is designed to highlight the centrality of "business" processes to the practice of medicine and the provision of healthcare.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6477 Medical Terminology for Health Informatics Professionals

Credit Hours: 3

Medical Terminology for Healthcare Informatics Professionals is designed to provide fundamental understanding of medical terms (words) used in healthcare environments by Health Informaticians.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6482 Consumer Health Informatics

Credit Hours: 3

Th course is designed to introduce the fundamentals of consumer health informatics and explore principles used by the public to obtain quality healthcare information using the world wide web or internet.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6515 Leadership for Health Professionals

Credit Hours: 3

This course is designed to introduce the various principles of leadership that apply to the activities of health professionals in the conduct and progression of their professional activities.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6527 Healthcare Information Security and Privacy

Credit Hours: 3

This course is designed to provide a comprehensive introduction to policies, regulations and strategies to ensure healthcare information security and privacy

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6623 Statistics for Healthcare Analytics

Credit Hours: 3

The course provides an in depth discussion of statistical analysis topics applicable to healthcare data. It is designed to assist graduate students apply most of the topics covered in real life datasets.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6628 Health Data Visualization

Credit Hours: 3

The course is designed to enable students acquire both the technical and theoretical skills to practice data visualization techniques on healthcare data.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6629 Applied Healthcare Analytics

Credit Hours: 3

This course provides an in depth examination of advanced level regression models applied in healthcare data. Topics include mixed models, propensity scores, instrumental variables, and time-to-event analysis.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6655 Healthcare Data Mining and Predictive Analytics

Credit Hours: 3

The course is designed to introduce students to various data mining concepts and algorithms. It emphasizes on classifiers, clustering, and association analysis applicable to the distinct nature of healthcare data.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6664 Healthcare Project Management

Credit Hours: 3

Healthcare Project Management is designed to provide a discussion of the various facets of initiating, planning, executing, monitoring, closing, and controlling projects in healthcare environments.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6667 Foundation in Management Information Systems

Credit Hours: 3

This course is designed to provide a discussion of the various facets of MIS including acquiring, storing and interpreting information of interest to the informaticist and healthcare professional.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6671 Advanced Healthcare Analytics Applications

Credit Hours: 3

This is a project-oriented course in analytics. It emphasizes techniques necessary for prediction of health outcomes.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6686 Healthcare Decision Support

Credit Hours: 3

This course presents in detail all steps involved in medical decision making. It discusses both normative and descriptive theories and uncovers the link between medical decision making, healthcare analytics and improvement of health outcomes.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6840 Case Studies in Health Information Management

Credit Hours: 3

This course provides an in-depth discussion of selected case studies in health informatics management and is designed to assist integration of the study of the basic principles and applications of health informatics.

Prerequisite(s): HIM 6118
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6844 Health Outcomes Research

Credit Hours: 3

This course is designed to examine the fundamentals of health outcome and clinical trials research. It explores principles and methods to obtain

quantitative evidence on the effects of interventions on the diagnosis, etiology and prognosis of disease.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6908 Health Informatics Independent Study

Credit Hours: 1-3

Develop, in conjunction with a faculty advisor, an individual project with the goal of completing an in-depth study of a topic directly relevant to the student's program of study in health informatics.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6930 Selected Topics in Health Informatics

Credit Hours: 1-3

Topics for this course will be varied and based upon student and faculty interests and programmatic requirements.

Tampa | Morsani College of Medicine | Medical Sciences

HIM 6943 Health Informatics Internship

Credit Hours: 1-3

The course involves the successful completion of an internship experience in an institution that provides insight into one or more aspects of health informatics.

Prerequisite(s): HIM 6667
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

HIS 6112 Analysis of Historical Knowledge

Credit Hours: 3

A study of history as a form of knowledge with emphasis on explanatory models and the relationships of social science theory to the problems of historical analysis.

Tampa | College of Arts and Sciences | History

HIS 6163 Beyond the Book: Telling Local Histories through New Media

Credit Hours: 3

Students learn the skills needed to gather, select, and curate historical materials into a digital format that is meaningful and informative to non-specialist audiences.

Tampa | College of Arts and Sciences | History

HIS 6908 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Arts and Sciences | History

HIS 6914 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | History

HIS 6925 Colloquium in History

Credit Hours: 3

Readings and discussions organized around an in-depth examination of selected topics within the fields. Emphasis of the course is on the review of historiographical, methodological, and interpretative advances as they affect the topics under study.

Tampa | College of Arts and Sciences | History

HIS 6935 Graduate Reading Seminar in History

Credit Hours: 3

Introduce Graduate Students to a wide body of scholarship surrounding the topic of the course. Course topics and titles will vary.

Tampa | College of Arts and Sciences | History

HIS 6936 Graduate Writing Seminar in History

Credit Hours: 2-4

Designed for Master's level students in their final year who are planning to write a Thesis or preparing a writing sample for their Ph.D. applications, and will train students in historical research practices.

Tampa | College of Arts and Sciences | History

HIS 6939 Seminar in History

Credit Hours: 3

Research in selected topics within the fields selected by the instructor.

Tampa | College of Arts and Sciences | History

HIS 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | History

HIS 7289 Ph.D. Seminar in Comparative Studies

Credit Hours: 3

Organized around a varying theme or methodology (sustainability, globalization, identity, e.g.), this course examines how historians, sociologists and political scientists employed the methodology throughout various regions and periods.

Tampa | College of Arts and Sciences | History

HIS 7937 Interdisciplinary Ph.D. Pro-Seminar

Credit Hours: 3

Varying topics in an interdisciplinary manner to introduce incoming Ph.D. students from the joint programs of History, Political Science, and Sociology to the relationships of research between disciplines.

Tampa | College of Arts and Sciences | History

HIS 7938 Ph.D. Capstone Seminar

Credit Hours: 3

Synthesize the training that students have received as Historians and gain a better understanding of the research process as they compose a dissertation prospectus and prepare to write the dissertation.

Prerequisite(s): HIS 7289, HIS 7939
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | History

HIS 7939 Selected Topics for Doctoral Students

Credit Hours: 3

Research in selected topics within the fields selected by the instructor. Restricted to Ph.D. students, instructor's approval required.

Tampa | College of Arts and Sciences | History

HIS 7980 Ph.D. Dissertation

Credit Hours: 1-9

Dissertation writing hours for advanced Ph.D. students in the final year of the program.

Prerequisite(s): HIS 7937, HIS 7289
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | History

HSC 5036 Professional Foundations of Health Education

Credit Hours: 1

The study of the practice of health education in various settings, and selected historical, cultural, philosophical, professional, and ethical issues in the practice of education.

Tampa | College of Public Health | Community and Family Health

HSC 6055 Survival Analysis

Credit Hours: 3

A study of statistical methods for analyzing censored life time data with applications in health sciences.

Prerequisite(s): PHC 6051, PHC 6701
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

HSC 6056 Survey Sampling Methods in Health Sciences

Credit Hours: 3

An interdisciplinary overview of survey techniques with applications in health sciences. Discussions on questionnaire design, measurement error, data collection modes, data management, use of computer software and statistical analysis.

Prerequisite(s): PHC 6050, PHC 6701
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

HSC 6261 Teaching Essentials

Credit Hours: 2

Focuses on the fundamental concepts of teaching and learning within a Health Professions Education context. It seeks to provide students research-based models of teaching in an environment designed to allow practice, feedback, and achievement.

Tampa | College of Pharmacy | Pharmacy

HSC 6261L Teaching Essentials Lab

Credit Hours: 1

An exploratory lab that focuses on the execution of fundamental concepts of teaching and learning within a Health Professions Education context. Students will receive guidance and mentorship while they develop educational seminars.

Prerequisite(s): None.
Corequisite(s): None.
Co-Prerequisite(s): HSC 6261 with a minimum grade of C

Tampa | College of Pharmacy | Pharmacy

HSC 6552 Community-Based Prevention in Behavioral Health

Credit Hours: 3

This web-based course is a graduate course in Behavioral Health within the Department of Community and Family Health. It is designed to provide the graduate student with an overview and understanding of the significant issues and trends in community & family behavioral health with an emphasis on behavioral health promotion and disease prevention. Major areas are: 1) overview of promotion and prevention in the United States; 2) systems delivery; 3) programs and Policies; 4) and selected at-risk populations.

Tampa | College of Public Health | Community and Family Health

HSC 6556 Pathobiology of Human Disease I

Credit Hours: 3

A basic study of broad pathobiological areas of biological injury, genetic and inborn errors of metabolism, and host-parasite relationships. In addition, the pathobiology of human disease is closely related to general biology in order to provide a strong foundation for the public health student.

Tampa | College of Public Health | Environmental and Occupational Health

HSC 7268 Professional Foundations III: Joining the Academy

Credit Hours: 2

Prepares the public health doctoral candidate with tools for career building.

Tampa | College of Public Health | Community and Family Health

HUM 6453 Studies in American Arts and Letters I

Credit Hours: 3

Study of selected works dealing with the development of cultural patterns on the western frontiers and their effects on aesthetic judgment. From 1790 to 1890.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6456 Studies in Latin American Arts and Letters

Credit Hours: 3

Analysis of selected Latin American works of art in their cultural context.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6465 Studies in American Arts and Letters II

Credit Hours: 3

Examples from the arts and letters of the U.S.; analyses of their relationships to the concepts of progress and aesthetic judgment. From 1890 to present.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6475 Studies in Contemporary Arts and Letters

Credit Hours: 3

Concentration on major artists and recent trends.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6493 Studies in Classical Arts and Letters

Credit Hours: 3

Examples from the arts and letters of ancient Greece and their relationships to Aegean myths, religions, and philosophies. Classical Greek influences on later cultures.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6494 Studies in Medieval Arts and Letters

Credit Hours: 3

Studies in medieval philosophies, visual arts, music, literature, and architecture and their interrelationships.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6495 Studies in Renaissance Arts and Letters

Credit Hours: 3

Masterpieces and major artists of the Renaissance in Continental Europe and England.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6496 Studies in Enlightenment Arts and Letters

Credit Hours: 3

Studies in painting, sculpture, music, literature, and architecture in relation to philosophical determinism and political absolutism.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6497 Studies in Nineteenth Century Arts and Letters

Credit Hours: 3

Examples from the arts and letters of the nineteenth century, their relationship to philosophical, social, and historical developments, and to the arts and letters of the twentieth century.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6583 Global Cinema and New Media to 1960

Credit Hours: 3

Offers an advanced introduction to the first 65 years of international film history. This course explores aesthetic and narrative practices in various

film genres, movements, and national cinemas.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6584 Global Cinema and New Media since 1960

Credit Hours: 3

Offers an advanced introduction to international film history after 1960. This course explores aesthetic and narrative practices in various film genres, movements, and national cinemas.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6585 Film and New Media Auteurs

Credit Hours: 3

Films studied will be organized around a director or a movement. Cinema will be treated as a collaborative medium best approached from an interdisciplinary perspective, integrating visual, narrative, dramatic, and musical analysis. Course repeatable up to 6 times (total of 18 hours).

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6586 Film Theory

Credit Hours: 3

This course emphasizes methodological issues in the analysis of films as cultural texts. Theoretical approaches include formalism, structuralism, genre theory, feminist theory, psychoanalysis, Marxism, and queer theory.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6587 National Cinemas

Credit Hours: 3

Course will explore key films, filmmakers, and cinematic techniques and approaches of selected national cinema styles from around the globe.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6588 Themes and Genres in Film and New Media

Credit Hours: 3

Courses in "Themes and Genres" will focus on specific film styles, genres, and approaches such as horror, avant-garde cinema, and documentary. Students will explore the complex relationships between the formal properties of specific cinematic genres/style.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6801 Theories and Methods of Cultural Studies

Credit Hours: 3

This course examines the relationship between the arts and society by introducing various approaches to the study of literature, art, and culture that are of contemporary relevance to graduate students in the liberal arts and humanities.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6814 Introduction to Graduate Study

Credit Hours: 3

An introduction to graduate study in humanities and cultural studies. This course introduces incoming graduate students to the research interests of the departmental faculty and the program emphases, including textual analysis and analytical writing.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6815 Research Seminar

Credit Hours: 3

A course emphasizing the practical aspects of research in the liberal arts including analyzing primary sources, assembling a bibliography, synthesizing secondary sources, and defining an argument. Topic varies.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6870 Teaching Practicum in Humanities

Credit Hours: 1-3

Required for Teaching Assistants of Humanities courses. Workshops, meetings, and individual conferences treat topics related to teaching interdisciplinary courses focusing on the critical study of literature,

music, and the arts. Credits do not count toward the MLA degree.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6909 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6915 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6939 Selected Topics in Humanities

Credit Hours: 1-3

Each topic is a course of study in a subject not covered by a regular course.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6940 Internship in Humanities

Credit Hours: 1-3

A structured, out-of-class learning experience providing firs-hand, practical training in Humanities-related professional careers in the community.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUM 6971 Thesis: Masters

Credit Hours: 2-19

In consultation with an advisor, the student plans, organizes, and writes a thesis on a topic in interdisciplinary arts and ideas.

Tampa | College of Arts and Sciences | Humanities and Cultural Studies

HUN 5265 Methods of Nutritional Assessment

Credit Hours: 1

Methodology, skills and tools in measurement of the nutritional status of healthy individuals in community and patients in hospitals. The objectives of nutritional assessment is to prevent malnutrition and promote nutritional health.

Tampa | College of Public Health | Community and Family Health

HUN 6804 Nutrition and Dietetics Research

Credit Hours: 3

This course teaches the investigative and analytical methods used in nutrition and dietetics related research. The course reviews research design, sampling techniques, data collection and processing, and interpretation of the results and ethics.

Tampa | College of Public Health | Community and Family Health

IDH 5956 Honors Project

Credit Hours: 3

Advanced Honors Project. Repeatable up to 12 hours.

Tampa | Honors College | Honors College

IDH 5975 Honors Thesis

Credit Hours: 3

Advanced Honors Thesis. Repeatable up to 12 hours.

Tampa | Honors College | Honors College

IDS 5177 The Atelier, Its Management and History

Credit Hours: 3

This class will consider the history of printmaking and other forms of collaborative art production through the prism of the atelier and its management.

Tampa | College of The Arts | Art and Art History

IDS 5178 Problems in Museum Studies

Credit Hours: 3

This class is designed as both an academic and theoretical course to introduce students to the museum profession and develop critical thinking skills required to solve problems in the rapidly changing typography of museums. Students will develop managerial and administrative skills as they meet with and discuss the job descriptions of curators, educators, collection managers, marketing professionals, exhibit designers, registrars, and fundraisers.

Tampa | College of The Arts | Art and Art History

IDS 5921 Teaching Assistant Training

Credit Hours: 0

Instruction in course design, including delivery, methodology, policies, and teaching strategies and methods.

Tampa | College of Graduate Studies | Graduate Studies

IDS 5922 Preparing for College Teaching

Credit Hours: 0

The focus is on teaching college classes, and doing it well. Best practices in a number of topics related to course design and delivery will be examined. The goal is to prepare you for college teaching.

Tampa | College of Graduate Studies | Graduate Studies

IDS 6207 Renewable Transportation Fuels

Credit Hours: 3

The course will analyze the market status and prospects, the production technologies, the economics and finance, and the regulatory and environmental aspects of renewable transportation fuels with a focus on sustainable fuels from biomass and algae.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6208 Renewable Power Portfolio

Credit Hours: 3

The course will analyze the market status and growth potential of the portfolio of renewable power sources, the production technologies, the economics/financing, infrastructure integration and smart grid issues, and regulatory and environmental aspects.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6210 Bioresources for a Sustainable Future

Credit Hours: 3

Agricultural and biological resources (bioresources) for producing food, bio-based products, and renewable energy are presented and discussed along with their environmental and climate change impact using an integrated food-energy-water nexus approach.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6215 Seminar in Global Sustainability

Credit Hours: 3

The purpose of this interdisciplinary seminar in sustainability is to broaden student's knowledge and understanding of global determinants and potentional solutions to sustainability issues.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6216 Implementing the United Nations Sustainable Development Goals

Credit Hours: 3

This course provides an understanding of the challenges and pathways to sustainable development. From the framework of the science of planetary boundaries, we will addresses challenges and solutions to achieve sustainable development in the 21st century.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6233 Concepts and Principles of Sustainability

Credit Hours: 3

This course discusses basic concepts and principles of sustainable development. It discusses systems thinking and different sustainability perspectives such as local/global and historical/future. Best practices will be analyzed through case studies.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6234 Systems Thinking: The Key to Sustainability

Credit Hours: 3

The course develops the critical system thinking skills to solve sustainability challenges. It covers quantitative system analysis techniques including environmental impact assessment, life-cycle assessment, cost-benefit analysis and decision analysis.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6235 Economics and Finance for Sustainability

Credit Hours: 3

The course provides sustainability practitioners an overview of how economics and finance enhance sustainability. The emphasis is on environmental economics and innovative finance; students learn how scarce natural resources can be optimally allocated.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6236 Sustainable Tourism Development: Principles & Practices

Credit Hours: 3

Focuses on environmentally and socially responsible tourism strategies and innovations. Emphasizes establishing policies and management plans to identify and reduce the environmental impact created by tourism facilities and services.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6237 Ecotourism and Sustainable Tourism Management for Coastal Habitat and Marine Protection

Credit Hours: 3

Introduction to environmental management from technical and non-technical perspectives. The major topics covered will be water and air quality, environmental sustainability, collaboration, and building consensus.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6238 Communicating the Value of Sustainability

Credit Hours: 3

Provides 1) an understanding of the challenges of communicating about sustainability; 2) a theoretical framework for analyzing these challenges; and 3) practice at applying that knowledge to their writing.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6245 Sustainable Water Resource Management: Doing More with Less

Credit Hours: 3

This course provides an overview of the challenges and strategies for sustainable water resource management for coordinated planning, development and management of water resources. It will discuss technical, legal and institutional frameworks.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6246 Water Sensitive Urban Design for Sustainable Communities

Credit Hours: 3

Comprehensive introduction to Water Sensitive Urban Design an interdisciplinary approach that encompasses urban water management, management of ecosystem services and urban/landscape design.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6247 Water Resources Planning

Credit Hours: 3

Provides overview of water resources planning and introduces water resources planning and management tools. It will also teach students water quality, water and wastewater treatment technologies. Students will apply tools to develop water resources plans.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6270 Sustainable Food Production

Credit Hours: 3

Overview of global food production systems including both traditional and sustainable agriculture, animal husbandry, and aquatic farming practices, their impact on ecosystems and the environment, and solutions for feeding a rapidly growing population.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6271 The Future of Food: Environment, Health and Policy

Credit Hours: 3

This interdisciplinary course will introduce students to food as an operational component of the environment, human health, and public policy throughout the world and discuss historical perspectives, current issues, and future outlooks of food security.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6272 Research Methods for Sustainability

Credit Hours: 3

Course teaches the process and procedures for a hands-on, in-depth experience with the tools, methodologies and the underlying rationale for inquiry so students can responsibly design and conduct original research in their field of study or concentration.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6368 Strategic Communication

Credit Hours: 1

The course is a two-day dynamic and interactive 1-credit executive education course that provides practical policy-oriented practitioner's experience to participants who desire to enhance their skills to communicate effectively in a globalized world.

Tampa | College of Arts and Sciences | Government and International Affairs

IDS 6369 Strategic Global Negotiations

Credit Hours: 1

The course provides a practical policy-oriented practitioner's experience to participants who desire to enhance their skills to negotiate effectively in a globalized world dealing with real issues of conflict resolution and peace-building.

Tampa | College of Arts and Sciences | Government and International Affairs

IDS 6908 Directed Reading/Directed Independent Study

Credit Hours: 1-3

Individual study by students under the direction of a faculty member. Topics vary and are usually selected on an individual basis.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6918 Directed Independent Research

Credit Hours: 1-3

Research projects or certain aspects of research carried out by student(s) under the supervision of an instructor intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and research.

Tampa | College of Arts and Sciences | Interdisciplinary Social Sciences

IDS 6935 Capstone Research Project

Credit Hours: 3-6

Students will identify the sustainability subject of their capstone project or pick from an existing selection of projects, discuss the scope and methodology with their faculty supervisor, and obtain their consent on a form supplied by the College.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6938 Special Topics/Seminars

Credit Hours: 1-6

Special topics related to sustanability.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6946 Sustainability Internship

Credit Hours: 3-6

The Sustainability Internship allows students to develop and practice skills related to global sustainability in developed and/or developing countries.

Tampa | Patel College of Global Sustainability | Global Sustainability

IDS 6947 Service Learning

Credit Hours: 0-3

Students will learn about civic engagement, and gain knowledge about the relevant content area and its application through the context of their field experience, while making a valuable community contribution.

Tampa | College of Graduate Studies | Graduate Studies

IDS 6948 Gallery and Museum Internship

Credit Hours: 2-6

This internship program, conducted in various area museums, is a professional program designed to give students the opportunity to engage in a comprehensive study of the contemporary museum.

Tampa | College of The Arts | Art and Art History

IDS 6951 Sustainability Project

Credit Hours: 3

This is the final project for the Master of Arts in Global Sustainability students.

Tampa | College of Arts and Sciences | Interdisciplinary Arts and Sciences

INP 6057 Industrial Psychology

Credit Hours: 3

An introduction to the major areas of Industrial-Organization Psychology, including topics on selection and placement, training, criterion development and performance appraisal, job satisfaction and motivation, and organizational theory and structure.

Tampa | College of Arts and Sciences | Psychology

INP 6935 Topics in Industrial-Organizational Psychology

Credit Hours: 3

Courses on topics such as industrial psychology, evaluation of performance in industry, and human factors.

Tampa | College of Arts and Sciences | Psychology

INP 7937 Graduate Seminar in Industrial-Organizational Psychology

Credit Hours: 1-3

Seminars on topics, such as industrial psychology, evaluation of performance in industry, and human factors.

Tampa | College of Arts and Sciences | Psychology

INR 5012 Globalization

Credit Hours: 3

Examination of globalization's impact on international relations, including literature from political science, anthropology, geography, sociology, and economics that impacts the study of the nation-state system and power. Open to majors and non-majors.

Tampa | College of Arts and Sciences | Government and International Affairs

INR 5086 Issues in International Relations

Credit Hours: 3

Explores specific topics and provides the student with an opportunity for in-depth study of historical and contemporary problems in international politics.

Tampa | College of Arts and Sciences | Government and International Affairs

INR 6007 Seminar in International Relations

Credit Hours: 3

Advanced study of international relations, including survey of basic literature, analysis of numerous theoretical and methodological approaches, and analysis of major issues.

Tampa | College of Arts and Sciences | Government and International Affairs

INR 6036 Seminar in International Political Economy

Credit Hours: 3

Advanced study of the development and politics of the international economic system focusing on theoretical and empirical analysis of cooperation and conflict in trade, aid, and investment relationships.

Tampa | College of Arts and Sciences | Government and International Affairs

INR 6107 American Foreign Policy

Credit Hours: 3

Objectives, formulation, and execution of foreign policy; critical issues and problems confronting the United States. Study of various conceptual, methodological, and theoretical approaches.

Tampa | College of Arts and Sciences | Government and International Affairs

INR 6690 Research Seminar in Globalization

Credit Hours: 3

Examination and presentation of research from multiple disciplines that address a wide-range of issues related to globalization, including those that concern governance and human development. Seminar format. Open to majors and non-majors.

Prerequisite(s): INR 5012
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Government and International Affairs

ISM 6021 Management Information Systems

Credit Hours: 2

An introduction to the fundamentals of information systems including an examination of information technology terminology and concepts, alternative methodologies for developing information systems, and the application and impact of information technology in contemporary organizations.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6056 Web Application Development

Credit Hours: 3

The course introduces students to developing web-based computer applications. The class also reinforces object-oriented concepts in computer programming.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6123 Systems Analysis and Design

Credit Hours: 3

This course includes the foundations and methodologies for analysis of existing systems; the design, development, and implementation of new systems.

Prerequisite(s): ISM 6021
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6124 Advanced Systems Analysis and Design

Credit Hours: 3

This course covers advanced topics of information systems development. Students learn to manage and perform activities throughout the information systems development life cycle. State-of-the-art system development processes, methods, and tools are presented.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6136 Data Mining

Credit Hours: 3

This course is designed for the MS in Information Systems graduate student and interested MBA students. The course covers the rapidly evolving data mining techniques that are becoming critical for customer relationship management and other applications

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6137 Statistical Data Mining

Credit Hours: 3

Development of statistical concepts and methods for mining large business databases.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6145 Seminar on Software Testing

Credit Hours: 3

This course will survey and analyze the best practices in industrial testing groups and explore new ideas for improving the testing process. Students gain practical experience with both functional (black box) and structural (clear box) testing methods.

Prerequisite(s): ISM 6124
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6155 Enterprise Information Systems Management

Credit Hours: 3

Development of enterprise transaction processing applications using procedural or object oriented programming languages, relational database management, database sharing, CASE methodology and project management techniques. Students will work in groups on semester projects.

Prerequisite(s): ISM 6124, ISM 6218
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6156 Enterprise Resource Planning & Business Process Management

Credit Hours: 3

This course introduces students to business processes management and enterprise resource planning systems, and their use and implementation in key functional areas of today's global businesses.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6208 Data Warehousing

Credit Hours: 3

This course is designed for the MS graduate student and interested MBA students. The course covers the rapidly emerging data warehousing and data mining technologies that are likely to play a strategic role in business organizations.

Prerequisite(s): ISM 6218, or two relational database courses
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6217 Database Administration

Credit Hours: 3

Advanced principles of Database Administration. Database Organization Models. Disaster Planning for Database Files.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6218 Advanced Database Management

Credit Hours: 3

This course covers core business database technologies. Topics include database design, transaction processing, parallelism, and distributed databases. Emerging business intelligence technologies are covered. A database system is used for projects.

Prerequisite(s): ISM 6217 or ISM 4212
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6225 Distributed Information Systems

Credit Hours: 3

This course will focus on telecommunications, networks, and distributed applications. All forms of communication will be covered. Students will gain exposure to network management systems, local area networks (LANs), and global networks, such as Internet.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6251 Data Science Programming

Credit Hours: 3

This course will provide students an in-depth overview of machine learning techniques for analytics using Python as the programming language. Topics will include decision trees, gradient descent methods, SVM, and dimensionality reduction.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6266 Software Architecture

Credit Hours: 3

Software architecture has emerged as an explicit field of study for software engineering practitioners and researchers. In this course, we will investigate the growing literature on software architecture and understand the application of software concepts to the development of information systems.

Prerequisite(s): ISM 6124
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6305 Managing the Information System Function

Credit Hours: 3

An advanced study of the management of IT resources including managerial decision making and the impact of IT on business processes and society. Society issues include those such as intellectual property rights, privacy, and ethics.

Prerequisite(s): ISM 6021
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6316 Project Management

Credit Hours: 3

The objective of this course is to become familiar with fundamental issues for managing project management and to develop an understanding of the overall processes of dealing with competing demands in information technology environments.

Prerequisite(s): ISM 6021
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6328 Information Security & Risk Management

Credit Hours: 3

Introduction of frameworks to assess IT risk and implement IT general controls; development of technical skills to secure computer networks.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6404 Business Analytics and Big Data

Credit Hours: 3

This course provides an overview of the tools and techniques used for business analytics and big data. It covers descriptive, predictive and prescriptive analytics and essential technologies for managing and processing big data, such as Hadoop, R, NoSQL.

Prerequisite(s): QMB 6358 with a minimum grade of B, ISM 6305 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Sarasota-Manatee | College of Business | Information Systems and Decision Sciences

ISM 6405 Informatics and Business Intelligence

Credit Hours: 3

Organizations use information systems to support the collection and analysis of information in order to strengthen their competitive positions. This course focuses on the technologies, methods and information used to promote IT-enabled decision making.

Sarasota-Manatee | College of Business | Information Systems and Decision Sciences

ISM 6419 Data Visualization for Storytelling

Credit Hours: 3

This course provides an overview of the data/information visualization discipline. Using a hands-on approach, readings and lectures will cover various visualization principles and tools.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6436 Operations & Supply Chain Processes

Credit Hours: 3

Operations Processes is an overview of several aspects of Operations management, a discipline in business concerned with managing the transformation of inputs into outputs.

Prerequisite(s): Basic Statistics.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6442 International Aspects of Information Science

Credit Hours: 3

Role of managers and information technology professionals in global business organizations and in deploying information systems to enable global operations.

Prerequisite(s): ISM 6021
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6485 Electronic Commerce

Credit Hours: 3

This course is geared to a broad audience and will introduce information technology enablers that facilitate electronic commerce. The lectures, discussions and class presentations will also serve to understand the business landscape and business models.

Prerequisite(s): ISM 6021
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6562 Big Data for Business Applications

Credit Hours: 3

The course will cover web application development for Business using various big data technologies such as No-SQL database, distributed file system, Map-Reduce, distributed caching, message handlers and big data search system.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6577 Decision Processes for Business Continuity and Disaster Recovery

Credit Hours: 3

Introduction to decision making and risk assessment skills to plan for and respond effectively to disasters affecting our information systems and critical infrastructures with the goal of maintaining business continuity.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6642 Statistical Programming for Business Analytics

Credit Hours: 3

Business analytics encompasses the collection, analysis, presentation, and use of data to assist in the decision-making process. This course introduces using SAS for statistical programming for data collection, analysis, and decision making.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6905 Independent Study

Credit Hours: 1-6

Independent Study as directed by designated faculty.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6930 Selected Topics in MIS

Credit Hours: 1-6

Selected topics in MIS.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 6971 Thesis: Master's

Credit Hours: 2-6

Students may select the thesis option in order to complete the Master of Science in the Management Information Systems (MS/MIS) program. Faculty permission is required to register for MS Thesis credit. Six credits are the maximum number of credits allowed for MS Thesis credit.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7406 Business Analytics

Credit Hours: 3

A research course for executives that presents an overview of data analytics techniques as well as examples of analytics research in business. A variety of analytics technique including structured data, unstructured data and big data will be discussed.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7537 Empirical Research Methods

Credit Hours: 3

The course focuses on application of empirical methods in research and discusses challenges in estimation and inference and empirical strategies to meet those challenges.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7905 Independent Study

Credit Hours: 1-6

Independent study in which student must have a contract with an instructor.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7910 MIS Research Seminar I

Credit Hours: 3

Introduction to the MIS literature as it has developed over the past 30 years. Primary focus on the research literature. Other important writings will also be covered.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7911 MIS Research Seminar II

Credit Hours: 3

An examination of recently published empirical research in MIS and related disciplines, focusing on the development of a sound theoretical foundation for hypotheses, selection of appropriate design and statistical techniques, and evaluation of the results.

Prerequisite(s): ISM 7910
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7912 Seminar on Behavioral IS Research

Credit Hours: 3

This course is team taught by IS/DS faculty with research interests in behavioral and organizational fields. The seminar structure of the course allows flexibility of current research topics and opportunities for significant student faculty interaction. Students will achieve a broad understanding of the research areas and methods associated with behavioral and organizational IS research.

Prerequisite(s): ISM 7910
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7930 Selected Topics in MIS

Credit Hours: 1-3

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7931 Directed Research

Credit Hours: 1-12

Directed research under faculty supervision.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7939 Executive Issues in MIS

Credit Hours: 2-4

A research seminar for executives that explores contemporary issues in Management Information Systems. The specific theme of the seminar will be determined through consultations between the instructor and the students prior to the first class meeting.

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISM 7980 Dissertation

Credit Hours: 2-21

Tampa | Muma College of Business | Information Systems and Decision Sciences

ISS 6184 Development Ethics: Principles and Practice

Credit Hours: 3

Overviews the ethical problems of development, as well as presents the ways in which the problems of development may be investigated. Students are taught qualitative methodological techniques and apply these techniques in fieldwork projects. Open to all graduate students.

Tampa | College of Arts and Sciences | Interdisciplinary Social Sciences

ISS 6900 Directed Reading

Credit Hours: 1-3

A supervised program of intensive reading of interdisciplinary materials of specific interest.

Tampa | College of Arts and Sciences | Interdisciplinary Social Sciences

ISS 6910 Directed Research

Credit Hours: 1-19

A supervised program of intensive reading of interdisciplinary materials of specific interest.

Tampa | College of Arts and Sciences | Interdisciplinary Social Sciences

ITW 6910 Directed Research

Credit Hours: 1-19

Selected topics in Italian literature.

Tampa | College of Arts and Sciences | World Languages

JOU 5105 Newswriting and Editing

Credit Hours: 3

Introduction to the basics of gathering, writing, and editing the news, with an emphasis on practical assignments done under professional conditions and standards. Discussions, readings emphasize the larger context and implications of news.

Tampa | College of Arts and Sciences | Mass Communications

JOU 5344 Multimedia Journalism

Credit Hours: 3

The course is designed to bring components of print, web and broadcast writing together to develop skills for and understanding of the multimedia environment. It is restricted to majors and not repeatable for credit.

Tampa | College of Arts and Sciences | Mass Communications

JOU 6107 News Coverage of Public Life

Credit Hours: 3

Problems and methods of reporting urban affairs, including municipal government, and politics: city, county, and state. Research/analyses of current issues.

Tampa | College of Arts and Sciences | Mass Communications

JOU 6122 Reporting: Methods and Perspectives

Credit Hours: 3

Instruction and practice in computer-assisted reporting, social science research, interviewing, data-document research, observational techniques, and other methods of news gathering.

Tampa | College of Arts and Sciences | Mass Communications

JOU 6191 Seminar: Contemporary Issues in Journalism

Credit Hours: 3

A study of the role of the free press in a democratic society and its efforts to fulfill its social and ethical responsibilities by analyses and discussions of the problems which face the reporter, the editor, and the publisher.

Tampa | College of Arts and Sciences | Mass Communications

JOU 6349 Advanced Multimedia Journalism

Credit Hours: 3

Students learn what it means to work in a multimedia environment and will create a journalism project across multiple media platforms, including broadcast, print and the web. They will also explore the theoretical assumptions of the field.

Prerequisite(s): JOU 5344
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mass Communications

JOU 6501 Media Management

Credit Hours: 3

The course provides students with a foundation in understanding the financial and economic environment of the mass media and the process of managing mass media enterprises in the new multimedia environment. It is not restricted nor repeatable for credit.

Tampa | College of Arts and Sciences | Mass Communications

LAE 5462 Young Adult and World Literature for New Teachers

Credit Hours: 3

A study of the types of literature read by adolescents, including literature representative of other cultures, with emphasis upon the criteria for the choice of good books and knowledge of available books and teaching materials.

Tampa | College of Education | Teaching and Learning

LAE 5862 Classroom Communication in English Education

Credit Hours: 3

Identifies characteristics of classroom communication environment; offers insights, info, instructional strategies designed to help you become effective classroom communication managers. Emphasis on role of media & non-print texts in students' lives.

Tampa | College of Education | Teaching and Learning

LAE 5932 Selected Topics in the Teaching of English

Credit Hours: 3

Investigation of topics which are of special interest to the student and are related to the teaching of English in the secondary school. Topics will be selected by the student in accordance with his particular goals and will be approved by the student's graduate advisor.

Tampa | College of Education | Teaching and Learning

LAE 6315 Composing Texts: Disciplinary Practices for Writers & Writing

Credit Hours: 3

Examine writing as a multimodal, communicative practice embedded in social, cultural, and disciplinary contexts. Demonstrate strategies to facilitate K-12 students' writing development as well as develop leadership skills to support writing teachers.

Tampa | College of Education | Teaching and Learning

LAE 6317 Teaching Composition in Elem Classroom: Research into Practice

Credit Hours: 3

Identify traits of children's written, visual, and media-based products, assess & support children's developmental progression of writing processes or strategies, & demonstrate instructional strategies for teaching multimodal composing.

Prerequisite(s): LAE 6427
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

LAE 6325 Methods of Teaching Middle School Language Arts

Credit Hours: 4

Balanced literacy methods for integrating reading, writing, speaking, listening, viewing, and critical thinking activities into a literature based program for middle school students. Note: This course has a field component of 36 hours.

Tampa | College of Education | Teaching and Learning

LAE 6339 Methods of Teaching Secondary English Language Arts

Credit Hours: 4

Balanced literacy methods for integrating reading, writing, speaking, listening, viewing, and critical thinking activities into a literature-based program for secondary school students. Note: This course has a field component of 36 hours.

Tampa | College of Education | Teaching and Learning

LAE 6345 Teaching Written Composition

Credit Hours: 3

Techniques for motivating, guiding, correcting, and evaluating student writing.

Tampa | College of Education | Teaching and Learning

LAE 6366 New Perspectives on the Teaching of Young Adult Literature in Middle & Secondary Schools

Credit Hours: 3

The primary purpose of this course is to improve the quality of language arts instruction at the middle and secondary levels. To achieve this basic purpose, we will focus chiefly on adolescents' perception of and responses to literature and the implications for organization and presentation of literature curricula.

Tampa | College of Education | Teaching and Learning

LAE 6374 Practice in Teaching Grammar

Credit Hours: 3

Demonstrates techniques incorporating instruction of essential elements of English grammar/mechanics into composition courses. Pedagogy is essential for teachers in secondary schools, community colleges, or advanced composition at the university level.

Tampa | College of Arts and Sciences | English

LAE 6375 Contemporary Composition Studies

Credit Hours: 3

Examines the important research and theory in contemporary position pedagogy.

Tampa | College of Arts and Sciences | English

LAE 6389 Practice in Teaching Literature

Credit Hours: 1-3

A course that allows the prospective college English teacher to experiment with teaching techniques that will determine the most effective ways to teach literature and teach college English teachers the variety and importance of literary techniques and their relevance to various subject matters.

Tampa | College of Arts and Sciences | English

LAE 6415 Literature and the Learner

Credit Hours: 3

Nature, scope, and uses of literature for instructional, information, and recreational purposes and implications of current theory, significant research, and issues in literature study as they relate to the learner.

Tampa | College of Education | Teaching and Learning

LAE 6427 Children's Literature: Teaching Literature Appreciation

Credit Hours: 3

Building on an appreciation for children's literature students learn how to select quality literature for children and demonstrate instructional strategies for developing children's engagement with literary texts, etc.

Tampa | College of Education | Teaching and Learning

LAE 6467 World Literature for Teachers

Credit Hours: 3

World literature encompasses more than Western European literature. This course is designed to emphasize, but is not limited to, the study of Eastern literature. The course is for English Education majors only.

Tampa | College of Education | Teaching and Learning

LAE 6616 Trends in Language Arts Instruction

Credit Hours: 3

Significant concepts, emerging trends, research, and instructional techniques for implementation and utilization of language arts in all areas of the curriculum.

Prerequisite(s): LAE 4314
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

LAE 6637 Current Trends in Secondary English Education

Credit Hours: 3

Curricular patterns and instructional practices in secondary English.

Prerequisite(s): LAE 4335 or LAE 4642
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

LAE 6644 Current Teaching of the English Language and the Study of Traditional Grammar

Credit Hours: 3

Applications of recent techniques of language study to classroom teaching of English, especially in relation to the teaching of grammar. Presents an interactive approach to grammar instruction in which students learn the basic elements of English grammar and engaging classroom activities for teaching grammar in the schools. Fulfills the grammar course requirement for teacher certification in English.

Tampa | College of Education | Teaching and Learning

LAE 6738 Teaching Reading in English Curriculum

Credit Hours: 3

Course is to improve the quality of reading instruction in mid & sec English classes through the study of the reading process, research,& evaluation related to sec reading, understand how research impacts instruction, process of educational reform.

Tampa | College of Education | Teaching and Learning

LAE 6749 Composition and the Arts in Literacy Education

Credit Hours: 3

Students will critically examine research on composition and the arts. Students will evaluate instructional practices and design integrated language arts programs. Open to non-majors. Not repeatable for credit.

Tampa | College of Education | Teaching and Learning

LAE 6793 Professional Leadership and Research in the Teaching of Writing

Credit Hours: 3

Develop professional leadership of teachers of writing, demonstrate research-based, classroom-based, writing strategies to their peers by linking research directly to instruction. Form support network for Teacher Consultants of the National Writing Proj.

Prerequisite(s): None.
Corequisite(s): LAE 6923
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

LAE 6861 American and British Literature with Technology

Credit Hours: 3

A study of five sections of literature: 1) British Literature before Shakespeare, 2) British Literature after Shakespeare to 1740, 3) British Literature 1740-1900, 4) American Literature before 1900, and 5) Twentieth Century British and American Literature (1890 to the Present) while developing an individual's skill with technology.

Tampa | College of Education | Teaching and Learning

LAE 6906 Independent Study in English Education

Credit Hours: 1-6

This course permits a student to explore a topic of interest in depth under the direction and supervision of a faculty member.

Tampa | College of Education | Teaching and Learning

LAE 6923 Teachers Writing: A Writing Workshop Approach to the Teaching of Writing

Credit Hours: 3

Engage teachers as writers, knowing the best teachers of writing must write. Teachers write together, critically examine new writing strategies, establish a professional support network to serve as foundation for enhancement of their teaching of writing.

Prerequisite(s): None.
Corequisite(s): LAE 6793
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

LAE 6947 Internship in Secondary Education for English

Credit Hours: 6

Students will work with a cooperating teacher and university supervisor to complete their internship requirements in a classroom setting assigned by the university.

Tampa | College of Education | Teaching and Learning

LAE 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

None.

Tampa | College of Education | Teaching and Learning

LAE 7376 Problems in Advanced English Instruction of Composition

Credit Hours: 3

Apprenticed, closely supervised study of and practice in teaching of college and university advanced composition. Student may elect to work with nonfiction, fiction, or poetry.

Tampa | College of Arts and Sciences | English

LAE 7390 Problems in Advanced English Instruction and Scholarly Research

Credit Hours: 3

This course provides closely supervised training in upper-level college English instruction and experience with professional research. Experience in lecture, seminar discussion, examinations, evaluation, conferences, directing undergraduate research, course development, use of secondary materials, publication procedure, and collation.

Tampa | College of Arts and Sciences | English

LAE 7717 Theories and Patterns of Advanced Language Arts Instruction

Credit Hours: 3

New research findings and theories relating to language patterns and contemporary programs for teaching language arts.

Prerequisite(s): LAE 6616
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

LAE 7718 Linguistic Foundations in Literacy

Credit Hours: 3

Examines the historical, theoretical, and applied aspects of the relationships between linguistics and literacy.

Tampa | College of Education | Teaching and Learning

LAE 7735 Advanced Seminar in English Education

Credit Hours: 3-15

Doctoral seminar explores theories, perspectives and research related to the study of the English Language Arts. Topics vary by semester. Doctoral standing only.

Tampa | College of Education | Teaching and Learning

LAE 7739 The Education of English Teachers

Credit Hours: 3

Introduces & informs adv grad students about the conceptions of curriculum development related to the preparation of Eng teachers. Intended for those interested in careers in teacher educ or expect to influence the policies & practices of teacher educ.

Tampa | College of Education | Teaching and Learning

LAE 7745 Literary Theory and Research in Children's Literature

Credit Hours: 3

Critical examination of literary theories that inform the interpretation, criticism, and reading of literature written for school-aged readers and to survey current research in the field of literature in education.

Tampa | College of Education | Teaching and Learning

LAE 7747 Literature Program Design

Credit Hours: 3

Investigation and analysis of the research in literature instruction and the application of the findings to the development of literature programs.

Tampa | College of Education | Teaching and Learning

LAE 7794 Survey of Research on Writing Development and Instruction

Credit Hours: 3

The purpose of this course is to survey, discuss, analyze, and critique seminal and current research on writing development and instruction in the context of school. Students will also engage in research on writing development or instruction.

Tampa | College of Education | Teaching and Learning

LAE 7795 Research and Theory in the teaching of Writing

Credit Hours: 3

An in-depth study of the research and theory in the teaching of writing. Emphasis is on the historical perspectives, current theory, and specific research in the process writing movement.

Tampa | College of Education | Teaching and Learning

LAE 7868 Symbolic Processes of Multimedia Literacies

Credit Hours: 3

Students will critically examine research in multimedia, multi-modal literacies and investigate the interplay among symbolic processes used to produce and consume media-based literacies. Open to non-majors. Not repeatable for credit.

Tampa | College of Education | Teaching and Learning

LAE 7910 Directed Research in English Education

Credit Hours: 1-19

This course permits a doctoral student to conduct advanced research and

to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.

Tampa | College of Education | Teaching and Learning

LAE 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Teaching and Learning

LAS 6220 Issues and Perspectives in Latin American Studies

Credit Hours: 3

Overview of the economic and political history of Latin America, the history of thought about Latin American development problems, and US - Latin American relations during the 19th and 20th centuries.

Tampa | College of Arts and Sciences | Government and International Affairs

LAS 6913 Independent Study and Research in Latin American

Credit Hours: 1-9

This course will provide graduate students with an opportunity to engage in research and/or study abroad in Latin America & the Caribbean, to earn credits towards their degree. Open to LAC majors and non majors. Repeatable up to 9 credits.

Tampa | College of Arts and Sciences | Government and International Affairs

LAS 6936 Seminar in Latin American Studies I

Credit Hours: 3

This seminar introduces students to the general study of the region and peoples of Latin America and their emigrant populations in the United States. Repeatable as topic varies.

Tampa | College of Arts and Sciences | Government and International Affairs

LAS 6971 Thesis in Latin America and Caribbean

Credit Hours: 1-12

This course will allow graduate students to earn credits while working on a thesis that is focused in Latin America & the Caribbean. Open to all graduate majors. Repeatable.

Tampa | College of Arts and Sciences | Government and International Affairs

LIN 5700 Applied Linguistics

Credit Hours: 3

Analysis of the phonological, morphonological, and syntactic features of English as a basis for linguistic application to problems of English language acquisition by non-native speakers.

Tampa | College of Arts and Sciences | World Languages

LIN 6081 Introduction to Graduate Study in Linguistics

Credit Hours: 3

An introduction to the aims and methodologies of linguistics as a graduate discipline: The field of linguistics, its subdisciplines, and its relationship to adjacent arts and sciences; bibliographical resources; methods of research and research writing; and a brief survey of the historical development of linguistics and current issues in the field.

Tampa | College of Arts and Sciences | World Languages

LIN 6601 Sociolinguistics

Credit Hours: 3

Detailed analysis of the phenomenon of language variation with emphasis upon the research methodology of sociolinguistics and the implications of its findings for current linguistic theory.

Tampa | College of Arts and Sciences | World Languages

LIN 6675 The Grammatical Structure of American English

Credit Hours: 3

Analysis and description of major morphological and syntactic structures of American English, with emphasis upon applied linguistics.

Prerequisite(s): LIN 5700
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

LIN 6688 Corpus Linguistics

Credit Hours: 3

This course provides an introduction to the different kinds of questions about authentic language use that are investigated using electronic collections of texts (i.e., corpora) analyzed via specialized computer programs.

Prerequisite(s): LIN 5700
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

LIN 6720 Second Language Acquisition

Credit Hours: 3

Neurolinguistic, psycholinguistic, and sociolinguistic bases of second language acquisition by both children and adults.

Tampa | College of Arts and Sciences | World Languages

LIN 6722 Writing Processes in Second Languages Acquisition

Credit Hours: 3

A survey of current theory and research in second language writing development and instruction, with emphasis upon second language writing in academic settings. May be taken as an elective by students in the Ph.D. program in Second Language Acquisition and Instructional Technology or the M.A. program in Applied Linguistics.

Prerequisite(s): LIN 6081, TSL 5371
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

LIN 6726 Individual Differences in Second Language Acquisition

Credit Hours: 3

This course covers a variety of topics about individual differences in SLA including, but not limited to, motivation, anxiety, tolerance of ambiguity, and language aptitude.

Tampa | College of Arts and Sciences | World Languages

LIN 6748 Contrastive Analysis

Credit Hours: 3

Comparison and contrast of the structures of American English with corresponding structures in selected foreign languages. EA and IA added for contrast with CA.

Tampa | College of Arts and Sciences | World Languages

LIN 6908 Independent Study

Credit Hours: 1-19

Independent study in which the student must have a contract with an instructor.

Tampa | College of Arts and Sciences | World Languages

LIN 6910 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | World Languages

LIN 6932 Selected Topics

Credit Hours: 1-4

Content will depend upon instructor's interests and students' needs. Such topics and neurolinguistics, bilingualism, and discourse analysis may be taught.

Tampa | College of Arts and Sciences | World Languages

LIN 7635 Professional Development

Credit Hours: 3

This course provides professional development opportunities in applied linguistics. Students will be mentored by a faculty member in an area of professional development determined by the student and faculty member.

Tampa | College of Arts and Sciences | World Languages

LIN 7637 Research and Writing in Applied Linguistics

Credit Hours: 3

This advanced graduate-level course examines research methods and conventions of research-based writing in Applied Linguistics. Students develop an understanding of academic writing process and practice scholarly writing in a supportive environment.

Tampa | College of Arts and Sciences | World Languages

LIN 7638 Qualitative Research Methods in Applied Linguistics

Credit Hours: 3

A comprehensive overview of four common approaches to conducting qualitative research in applied linguistics. Course focuses on both theoretical foundations and methodology.

Tampa | College of Arts and Sciences | World Languages

LIN 7639 Quantitative Methods in Applied Linguistics

Credit Hours: 3

This course is intended to help you develop as applied linguistics scholars with regards to quantitative analyses using SPSS.

Tampa | College of Arts and Sciences | World Languages

LIN 7885 Discourse Analysis

Credit Hours: 3

A comprehensive overview of four major approaches to conducting discourse analysis applied linguistics. Course focuses on both theoretical foundations and methodology.

Tampa | College of Arts and Sciences | World Languages

LIN 7911 Directed Research - Linguistics and Applied Language Studies

Credit Hours: 1-19

This course is for directed research at the doctoral level.

Tampa | College of Arts and Sciences | World Languages

LIN 7931 Advanced Seminar in Applied Linguistics

Credit Hours: 3

This is an applied linguistics seminar course. By the end of the semester, you will have at your disposal the foundation of applied linguistics theory as well as in-depth knowledge of several applied linguistics topics.

Tampa | College of Arts and Sciences | World Languages

LIN 7980 Dissertation - Linguistics and Applied Language Studies

Credit Hours: 2-19

Students will enroll in dissertation credits when working on the dissertation.

Tampa | College of Arts and Sciences | World Languages

LIS 5020 Foundations of Library and Information Science

Credit Hours: 3

Introduction to the study of library and information science, history; organization; specialized literature; outstanding leaders; current trends, issues, and problems; the place of the information agency in society with its contributions to that society.

Tampa | College of Arts and Sciences | School of Information

LIS 5268 Microcomputer Applications Library and Information Centers

Credit Hours: 3

Microcomputer hardware and software for libraries and their application in library/information settings. Projects using major applications for budgets, databases, and telecommunications are undertaken.

Tampa | College of Arts and Sciences | School of Information

LIS 5315 Instructional Graphics

Credit Hours: 3

Theoretical aspects, planning and production of instructional graphic material. The theory of graphic communications. Interpreting needs for instructional materials appropriate for given behavioral objectives.

Tampa | College of Arts and Sciences | School of Information

LIS 5333 TV in Schools and Libraries

Credit Hours: 3

Small format video tape recordings and the utilization of open and closed broadcasts in schools and libraries.

Tampa | College of Arts and Sciences | School of Information

LIS 5418 Health Informatics for Medical Librarians

Credit Hours: 3

Introduction to the interdisciplinary field of medical informatics highlighting the underlying theories, and methods related to health information technology in support of decision-making, problem-solving, and other health information problems.

Prerequisite(s): LIS 5020 or LIS 6620
Corequisite(s): LIS 6475
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 5566 Multicultural Literature for Children and Young Adults

Credit Hours: 3

Students will select and evaluate multicultural and special population materials for effective use in youth services and programs in public and school libraries.

Tampa | College of Arts and Sciences | School of Information

LIS 5631 Health Information Sources

Credit Hours: 3

Introduction to printed and electronic sources of health information. Course material is intended for those interested in medical, public, or academic libraries where clients need health-related information.

Prerequisite(s): LIS 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 5802 Information Analytics

Credit Hours: 3

This course teaches the basics of data science, visualization, and the use of R, a programming language and software environment for statistical computing and graphics.

Prerequisite(s): STA 2023 or STA 2122 or QMB 2100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 5937 Selected Topics in Library Studies

Credit Hours: 1-4

Covers a variety of topics in such areas as collection development, reference services, technical services, and administration.

Tampa | College of Arts and Sciences | School of Information

LIS 6008C Advanced Information Retrieval

Credit Hours: 3

Principles of online searching and characteristics of machine-readable bibliographic data bases. Includes two credit hours of laboratory providing hands-on research experience.

Prerequisite(s): LIS 5020 or LIS 6260, and LIS 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6026 Introduction to Archives and Records Management

Credit Hours: 3

This introductory course teaches students the basic theories and methodologies of archives and records management. It serves as a foundation for other more advanced archival management courses, such as Web Archiving and Digital Curation.

Prerequisite(s): LIS 6711
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6107 Advanced Professional & Technical Communication for Analysts

Credit Hours: 3

Advanced Professional and Technical Communication for Analysts teaches students to enhance critical thinking, to write and brief effectively, and to present complex information to inform decision making.

Tampa | College of Arts and Sciences | School of Information

LIS 6110 History of Libraries

Credit Hours: 3

Development of libraries as found from the earliest records to the great libraries of modern times, and the library as a social institution.

Tampa | College of Arts and Sciences | School of Information

LIS 6111 History of Children's Literature

Credit Hours: 3

Historical bibliographical survey of imaginative and information literature for children.

Tampa | College of Arts and Sciences | School of Information

LIS 6260 Foundations of Information Science and Technology

Credit Hours: 3

Overview of the interdisciplinary field of information science. The fundamental concepts of information retrieval systems and subsystems, related information technologies, and other core functions in the organization, access, and use of information.

Tampa | College of Arts and Sciences | School of Information

LIS 6266 Search Engine Society and Digital Natives

Credit Hours: 3

This course introduces the nature of search engines, their role in our information society, and their impacts on society as well as the ways that people communicate, think, and socialize in their daily life.

Tampa | College of Arts and Sciences | School of Information

LIS 6271 Research Methods in Library and Information Science

Credit Hours: 3

Overview of present status of research in library and information science; introduction to research methods and their application to librarianship; designed to prepare students to evaluate and plan research studies relating to library and information science.

Prerequisite(s): LIS 5020, LIS 6603, and LIS 6711 or LIS 6735
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6303 Preparing Instructional Media

Credit Hours: 3

Fundamentals of preparing and using audiovisuals as they relate to the communication process.

Tampa | College of Arts and Sciences | School of Information

LIS 6316 Visualization of Knowledge

Credit Hours: 3

This course covers the perceptual basis of information visualization, major visualization methods, information retrieval system utilizing information visualization, and future trends and issues of information visualization in digital libraries.

Prerequisite(s): LIS 6260
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6402 Advanced Library Administration

Credit Hours: 3

Applications of staff management principles to library situations. Includes staff roles in current and future operations, application of library performance measures to determine staff effectiveness; preparation of staff manuals; problems of special classes of library workers, such as volunteers and students.

Tampa | College of Arts and Sciences | School of Information

LIS 6409 Introduction to Library Administration

Credit Hours: 3

Behavioral approach to libraries as organizations; administrative principles, theories, and problems of all types of libraries; methods of administration; use of case studies, role plays, and in-basket exercises.

Tampa | College of Arts and Sciences | School of Information

LIS 6432 Seminar in Academic Libraries

Credit Hours: 3

Identification of problems and critical examination of methods in administrative areas of technical, student and teaching staff services, fiscal and legal responsibilities, staff organization and supervision in academic libraries.

Prerequisite(s): LIS 6409
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6445 Seminar in Public Libraries

Credit Hours: 3

Critical examination of public and institutional library administration, services, resources, and facilities at the municipal, county, and regional levels. Role of state and federal governments in library development.

Prerequisite(s): LIS 6409
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6455 Organization and Administration of the School Media Center

Credit Hours: 3

Media quarters, facilities, collections, equipment, and services. Principles of organization and administration of media programs in elementary and secondary schools. Field trips to area media centers required.

Prerequisite(s): LIS 6409
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6463 Library Networks and Systems

Credit Hours: 3

Development of library networks at the local, state, regional, and national levels with consideration of organization, administration, services, funding, and legislation.

Tampa | College of Arts and Sciences | School of Information

LIS 6472 Seminar in Special Libraries

Credit Hours: 3

Identification of problems and critical examination of methods in administrative areas of technical and special service clientele; fiscal and legal responsibilities, staff organization, and services in special libraries.

Prerequisite(s): LIS 6409
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6473 Law Librarianship

Credit Hours: 3

All aspects of law librarianship, including administration, acquisition, organization, and use of information resources for persons in the law fields. Field trip may be required.

Prerequisite(s): LIS 6260, LIS 6409, LIS 6603, LIS 6735
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6475 Health Sciences Librarianship

Credit Hours: 3

All aspects of health science librarianship, including administration, acquisition, organization, and use of information resources for persons in the health fields such as physicians, medical students, nursing students, allied health personnel and students, and researchers.

Prerequisite(s): LIS 6260, LIS 6409, LIS 6603, LIS 6735
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6511 Collection Development and Maintenance

Credit Hours: 3

Developmental approach to building library collections of both print and non-print materials. Emphasis upon evaluation, selection, and acquisition of library materials as they uphold the objectives of the institutions for which they are selected and acquired.

Co-Prerequisite(s): LIS 6271

Tampa | College of Arts and Sciences | School of Information

LIS 6514 Digital Libraries

Credit Hours: 3

Survey of the field of digital libraries with an emphasis on the interplay of people, organizations, and technology. Experience in either planning or developing a digital library site.

Prerequisite(s): LIS 6260, LIS 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6515 Web Archiving

Credit Hours: 3

Introduces the background knowledge about the Web and web archiving related technical standards, and cover the whole process of web

archiving, including selection, acquisition, organization and description, storage, access and preservation.

Prerequisite(s): LIS 6711
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6523 Adult Services in Libraries

Credit Hours: 3

Traditional and innovative services for adults in public and other types of libraries, including those for special groups, such as the aging, handicapped and institutionalized.

Tampa | College of Arts and Sciences | School of Information

LIS 6528 Storytelling

Credit Hours: 3

Building storytelling programs for school and public libraries or other educational institutions. Analysis of historical aspects, materials suitable for use and audience reaction.

Prerequisite(s): LIS 6564
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6542 The Curriculum and Instructional Technology

Credit Hours: 3

Effective utilization of instructional materials as they relate to specific areas of curriculum in elementary and high school programs.

Tampa | College of Arts and Sciences | School of Information

LIS 6564 Materials for Children

Credit Hours: 3

Examination of materials for all institutions in which children are served: school media centers, public libraries, kindergartens, etc. Stress on selection aids, reviewing techniques, utilizations.

Tampa | College of Arts and Sciences | School of Information

LIS 6565 Books and Related Materials for Young Adults

Credit Hours: 3

Young adult materials for use in secondary school libraries, young adult sections of public libraries, and other institutions serving youth. Equal emphasis upon (1) selection principles and bibliographical sources, as well as upon (2) utilization in terms of service to the young adult.

Tampa | College of Arts and Sciences | School of Information

LIS 6603 Basic Information Sources and Services

Credit Hours: 3

An examination of the basic sources of information in the general library; of bibliographical control of all communication media, with emphasis on those tools of most value to general reference services.

Tampa | College of Arts and Sciences | School of Information

LIS 6610 Information Sources and Services in the Humanities

Credit Hours: 3

Consideration of the bibliographical and reference materials in the humanities with training and practice in their use for solving problems in the reference service.

Prerequisite(s): LIS 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6620 Information Sources and Services in the Social Sciences

Credit Hours: 3

Consideration of the bibliographical and reference materials in the social sciences with training and practice in their use for solving problems in reference service.

Prerequisite(s): LIS 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6624 Information Sources and Services in Business and Law

Credit Hours: 3

Consideration of representative reference sources in business and law with training and practice in their use for solving information problems in academic, public, and special libraries.

Prerequisite(s): LIS 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6630 Information Sources and Services in Science and Technology

Credit Hours: 3

Study of representative reference sources in pure and applied sciences with equal attention given to typical problems encountered in scientific and technological reference service.

Prerequisite(s): LIS 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6661 Government Documents

Credit Hours: 3

The nature of state, federal, United Nations, and international documents, their reference and research value; the techniques of acquisition, organization, and reference use.

Tampa | College of Arts and Sciences | School of Information

LIS 6670 Advanced Cyber Intelligence

Credit Hours: 3

This course builds on the foundations of LIS 6703 Core Concepts in Intelligence and focuses on applying intelligence analytic methods to plan, collect, process, analyze, produce and disseminate cyber intelligence products.

Prerequisite(s): LIS 6709
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6700 Information Strategy and Decision-Making

Credit Hours: 3

This course builds on the idea that understanding strategy is a foundation for making information meaningful. Student will learn strategic concepts, tools, and tradecraft and how to apply them to improve decision making.

Tampa | College of Arts and Sciences | School of Information

LIS 6702 Advanced Intelligence Analytic Methods

Credit Hours: 3

This course is designed to help the student select and apply complex, structured techniques and methods used to support intelligence analysis.

Tampa | College of Arts and Sciences | School of Information

LIS 6703 Core Concepts in Intelligence

Credit Hours: 3

Introduces intelligence theory, explores the organization and functions of the U.S. Intelligence Community, its interaction with national security policymakers, key issues about its workings, and the challenges it faces in defining its future role.

Tampa | College of Arts and Sciences | School of Information

LIS 6709 Cyber Intelligence

Credit Hours: 3

This course reviews the main actors, targets, threats, and other troublesome activities in cyberspace. It builds a foundation for understanding how cyber intelligence and counterintelligence can support enterprise and national cybersecurity.

Tampa | College of Arts and Sciences | School of Information

LIS 6711 Organization of Knowledge I

Credit Hours: 3

Principles of the organization of knowledge emphasizing descriptive cataloging, including the MARC format, the use of LSCSH and the Library of Congress classification, and searching the OCLC Online Union Catalog.

Tampa | College of Arts and Sciences | School of Information

LIS 6712 Organization of Knowledge II

Credit Hours: 3

Introduction to the practice in using selected schedules of Library of Congress Classification System and the Library of Congress Subject Heading List; changing policies and procedures in cataloging and an introduction to the use of the MARC format for inputting cataloging data into machine readable files.

Prerequisite(s): LIS 6711
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6724 Cataloging and Classification

Credit Hours: 3

Introduction to principles and practices of cataloging and classification according to current national standards, covering descriptive cataloging, subject analysis, and classification.

Prerequisite(s): LIS 6711 with a minimum grade of B- or LIS 6735 with a minimum grade of B-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6726C Metadata

Credit Hours: 3

This course introduces concepts, principles, practices, and current issues of metadata, with the emphasis on the metadata implementations in the library, archive, and museum communities.

Prerequisite(s): LIS 6711 with a minimum grade of B- or LIS 6735 with a minimum grade of B-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6735 Technical Services in Small Libraries

Credit Hours: 3

Covers aspects of technical services including acquisitions, cataloging, and circulation systems as they relate to school media centers, small public libraries, and information centers. Automation is emphasized in all aspects of the course.

Tampa | College of Arts and Sciences | School of Information

LIS 6773 Digital Curation

Credit Hours: 3

Covers the management of current and archival electronic records, including the creation and implementation of electronic record-keeping systems, the appraisal, processing and preservation of electronic records.

Prerequisite(s): LIS 6711, LIS 5937
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIS 6906 Independent Study

Credit Hours: 1-4

Tampa | College of Arts and Sciences | School of Information

LIS 6946 Supervised Field Work

Credit Hours: 3

Supervised experience in an approved cooperating library. Includes practice work, seminar sessions and individual conferences, a progress report, and a final report on the field experience.

Tampa | College of Arts and Sciences | School of Information

LIS 6949 Practicum in Archives and Special Collections

Credit Hours: 2-6

Students gain hands-on practice in processing, cataloging and digitizing archives, rare books and other kinds of special collections. Students will be supervised by an archivist/ special collections librarian and a faculty member. Permission required.

Prerequisite(s): LIS 5937, LIS 6711, LIS 6724
Corequisite(s): LIS 6603, LIS 6409, LIS 6271, LIS 6511
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Information

LIT 6096 Studies in Contemporary Literature

Credit Hours: 3

Drama, poetry, fiction, and literary criticism; authors to be studied include Ionesco, Thomas, Miller, T. Williams, Beckett, Camus, Burgess, Morrison, and Walker.

Tampa | College of Arts and Sciences | English

LIT 6105 Studies in Continental Literature

Credit Hours: 3

General areas include the Renaissance, the Enlightenment, the Novel in Europe, the Romantic Movement on the Continent, and Classical Comedy.

Tampa | College of Arts and Sciences | English

LIT 6236 Studies in Postcolonial Literatures

Credit Hours: 3

Study of literature from colonies of Europe. Major concerns include identity, struggles against colonialism and neo-colonialism, modernization, education, the changing status of women, and issues of language and literary genre.

Tampa | College of Arts and Sciences | English

LIT 6934 Selected Topics in English Studies

Credit Hours: 1-6

Current topics offered on a rotating basis include The Nature of Tragedy; The Nature of Comedy and Satire; and the Nature of Myth, Allegory, and Symbolism; the Epic; Utopian Literature. Other topics will be added in accordance with student demand and instructor interest.

Tampa | College of Arts and Sciences | English

LNW 5900 Directed Reading

Credit Hours: 1-4

Tampa | College of Arts and Sciences | World Languages

LNW 5934 Selected Topics

Credit Hours: 4

Study of an author, movement, or theme.

Tampa | College of Arts and Sciences | World Languages

MAA 5306 Introduction to Real Analysis

Credit Hours: 3

A course in Real Analysis. Topics include differentiation, Riemann-Stieltjes integrals, uniform convergence, Fourier series, and special functions.

Prerequisite(s): MAA 4211
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAA 5307 Real Analysis I

Credit Hours: 3

A graduate course in real analysis. Topics include Lebesgue measure and integration, Lebesgue differentiation, convergence theorems, absolute continuity, the Fundamental Theorem of Calculus, and the basics of Lp spaces.

Prerequisite(s): MAA 5306
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAA 5405 Applied Complex Analysis

Credit Hours: 3

Complex numbers, analytic and harmonic functions. Series. Contour integrals, residue theory. Conformal mappings. (A survey course emphasizing techniques and applications.)

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAA 6406 Complex Analysis I

Credit Hours: 3

Linear transformations, analytic functions, conformal mapping, Cauchy's theorem and applications, power series, partial fractions and factorization, elementary Riemann surfaces, Riemann mapping theorem.

Prerequisite(s): MAA 5405
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAA 6407 Complex Analysis II

Credit Hours: 3

Topics in: conformal mappings, normal families, Picard's theorem, univalent functions, extremal properties, elliptic functions, approximation theory, Riemann surfaces.

Prerequisite(s): MAA 6406
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAA 6506 Functional Analysis I

Credit Hours: 3

Normed linear spaces and topological vector spaces; open mapping, closed graph, and Hahn-Banach Theorem, UB principle, compact operators, dual spaces.

Prerequisite(s): MAA 5307, MAS 5145
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAA 6507 Functional Analysis II

Credit Hours: 3

Hilbert spaces, spectral theory, and other topics.

Prerequisite(s): MAA 6506
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAA 6616 Real Analysis II

Credit Hours: 3

A continuation of the study of real analysis. Topics include Banach

spaces, measure and integration, Riesz Representation Theorem, and the Radon-Nikodym Theorem.

Prerequisite(s): MAA 5307
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAD 5101 LISP: Programming with Algebraic Applications

Credit Hours: 3

Programming in LISP, functional languages, foundations of Lambda Calculus and algebraic applications (theorem proving and game playing).

Prerequisite(s): MHF 5306 or MAD 6510 or MAS 5311
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAD 5305 Graph Theory

Credit Hours: 3

Brief introduction to classical graph theory (4-color theorem, etc.), directed graphs, connected digraphs, condensations, incidence matrices, Polya's Theorem, networks.

Prerequisite(s): MAS 3105
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAD 6206 Combinatorics I

Credit Hours: 3

Elementary counting principles, distributions, sets, multisets, partitions of sets and integers, generating functions and recurrences, graphical methods, probabilistic methods.

Prerequisite(s): MAS 3105, MAS 4301
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAD 6207 Combinatorics II

Credit Hours: 3

Combinatorics of finite sets: posets, hypergraphs and external problems, matriods, block designs, Mobius inversion for partially ordered sets, Polya's enumeration theory.

Prerequisite(s): MAS 5311, MAD 6206
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAD 6510 Analysis of Algorithms

Credit Hours: 4

Mathematical theory of algorithms for information processing, including time and space requirements of algorithms, construction of optimal algorithms.

Prerequisite(s): MAS 4301
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAD 6616 Algebraic Automata Theory

Credit Hours: 3

Deterministic and non-deterministic finite automata, Mealy and Moore machines, push-down automata, Turing machines, regular languages, context free languages, halting problem, and universal Turing machines.

Prerequisite(s): MAS 4301
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAD 6617 Algebraic Coding Theory

Credit Hours: 3

Linear block codes over an arbitrary finite field: Hamming, Golay, BCH, quadratic residue, Reed-Muller, and MDS codes, the MacWilliams identity, bounds on minimum distance, and relationship to design theory.

Prerequisite(s): MAS 5311
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAE 5177 Teaching College Mathematics

Credit Hours: 3

In this course, students will acquire pedagogical skills necessary to become effective teachers of undergraduate math. It will also introduce students how to implement research-supported teaching practices and student-centered pedagogies in a classroom.

Prerequisite(s): MGF 3301 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAE 6115 Current Trends in Elementary Mathematics Education

Credit Hours: 3

Philosophy, content, and process of mathematics instruction in elementary school programs.

Prerequisite(s): MAE 4310
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

MAE 6117 Teaching Elementary Math

Credit Hours: 3

This course provides for the development of knowledge and skills necessary to prepare students as teachers of mathematics in elementary classes as recommended by the National Council of Teachers of Mathematics in its guidelines for teachers.

Tampa | College of Education | Teaching and Learning

MAE 6126 Current Trends in Middle Grades Mathematics

Credit Hours: 3

This course examines current trends and issues in middle grades mathematics. It familiarizes teachers with new developments in this field with a focus on curriculum issues and issues arising from state, national, and international assessments.

Prerequisite(s): MAE 6356
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

MAE 6127 Probability and Statistics for Middle Grades Teachers

Credit Hours: 3

This course examines probability and statistics topics for middle grades mathematics teachers. Topics include data collection and display, measures of central tendency and variability, probabilities, and sampling procedures.

Tampa | College of Education | Teaching and Learning

MAE 6136 Current Trends in Secondary Mathematics Education

Credit Hours: 3

Curricular patterns and instructional practices in secondary mathematics.

Prerequisite(s): MAE 4330
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

MAE 6137 Topics in Teaching Probability and Statistics

Credit Hours: 3

This course examines issues related to teaching probability and statistics in secondary schools.

Tampa | College of Education | Teaching and Learning

MAE 6315 Algebraic Thinking for Elementary Teachers

Credit Hours: 3

This course is designed to enhance the algebra content knowledge of elementary teachers and to consider hpw algebraic experiences and informal algebraic concepts can be introduced into the elementary curriculum.

Tampa | College of Education | Teaching and Learning

MAE 6316 Geometry and Measurement for Elementary Teachers

Credit Hours: 3

This course is designed to enhance the geometric content knowledge of elementary teachers and to consider how geometric experiences and concepts can be introduced into the elementary curriculum.

Tampa | College of Education | Teaching and Learning

MAE 6324 Advanced Math Topics - Middle Grades Teachers

Credit Hours: 3

This course examines advanced functions topics, basic concepts of trigonometry, and the foundations of calculus. Teachers experience instructional approaches appropriate for use in middle grades classrooms.

Prerequisite(s): MAE 6127, MAE 6328, MAE 6329, MAE 6325
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

MAE 6325 Number Theory for Middle Grades Teachers

Credit Hours: 3

This course examines in number theory concepts appropriate for middle grades mathematics teachers, including historical connections. Teachers experience instructional approaches appropriate for use in middle grades classrooms.

Tampa | College of Education | Teaching and Learning

MAE 6328 Algebra for Middle Grades Teachers

Credit Hours: 3

This course examines in algebra content appropriate for middle grades mathematics teachers, including the use of technology to study algebra. Teachers experience instructional approaches appropriate for use in middle grades algebra classrooms.

Prerequisite(s): MAE 6127, MAE 6328, MAE 6329, MAE 6325
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

MAE 6329 Geometry and Measurement for Middle Grades Teachers

Credit Hours: 3

This course examines in geometry content appropriate for middle grades mathematics teachers, including the use of technology to study geometry. Teachers experience instructional approaches appropriate for use in middle grades classrooms.

Tampa | College of Education | Teaching and Learning

MAE 6334 Problem Solving for Elementary Teachers

Credit Hours: 3

This course analyzes problem-solving strategies of elementary teachers and their students.

Tampa | College of Education | Teaching and Learning

MAE 6336 Topics in Teaching Calculus

Credit Hours: 3

This course examines issues related to teaching calculus in secondary schools.

Tampa | College of Education | Teaching and Learning

MAE 6337 Topics in Teaching Algebra

Credit Hours: 1-4

Topics in algebra, philosophy, new trends, and methods of teaching secondary school algebra.

Tampa | College of Education | Teaching and Learning

MAE 6338 Topics in Teaching Geometry

Credit Hours: 1-4

Topics in geometry, philosophy, new trends, and methods of teaching secondary school geometry.

Tampa | College of Education | Teaching and Learning

MAE 6356 Teaching of Pre-Secondary School Mathematics

Credit Hours: 3

Development of strategies and materials for teaching mathematical concepts and skills appropriate to pre-secondary school years.

Prerequisite(s): 12 hours of mathematics
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

MAE 6362 Senior High Mathematics Methods

Credit Hours: 3

This course is designed to prepare teachers for a successful induction to teaching mathematics in the high schools of today. It is designed to bridge the perceived gap between theory and practice.

Tampa | College of Education | Teaching and Learning

MAE 6370 Mathematics for High School Teachers

Credit Hours: 3

This course examines high school mathematics from an advanced perspective and makes connections between college level mathematics and the mathematics of the secondary school.

Tampa | College of Education | Teaching and Learning

MAE 6643 Communication Skills in Mathematics

Credit Hours: 3

This course examines issues related to communicating in mathematics, including reading, writing, speaking, and listening. It satisfies the reading in the content area mandate for certification.

Tampa | College of Education | Teaching and Learning

MAE 6899 Internship Seminar in Mathematics Education

Credit Hours: 1-3

This seminar accompanies the graduate internship in mathematics education and provides teacher candidates an opportunity to interact with peers and university faculty regarding classroom experiences.

Prerequisite(s): None.
Corequisite(s): MAE 6947
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

MAE 6906 Independent Study in Mathematics Education

Credit Hours: 1-6

This course permits a student to explore a topic of interest in depth under the direction and supervision of a faculty member.

Tampa | College of Education | Teaching and Learning

MAE 6945 Practicum in Mathematics Education

Credit Hours: 3

This practicum provides individuals in the MAT program in mathematics education with early field experiences in mathematics classrooms at the middle or high school levels, depending on the program of study.

Tampa | College of Education | Teaching and Learning

MAE 6947 Internship in Secondary Education for Mathematics

Credit Hours: 6

Students will work with a cooperating teacher and university supervisor to complete their internship requirements in a classroom setting assigned by the university.

Tampa | College of Education | Teaching and Learning

MAE 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of Education | Teaching and Learning

MAE 7138 Assessment in Mathematics Education

Credit Hours: 3

This course discusses issues related to assessment in mathematics education at all levels, including state, national, and international assessments. It also discusses issues related to rubrics and alternative assessments in mathematics.

Tampa | College of Education | Teaching and Learning

MAE 7146 Curriculum History/Research Mathematics Education

Credit Hours: 3

This course surveys curriculum history in mathematics education, discusses current research on mathematics education curricula, and explores issues related to conducting research on curriculum in this field.

Tampa | College of Education | Teaching and Learning

MAE 7655 Technology Issues in Mathematics Education

Credit Hours: 3

This course focuses on issues surrounding the use of technology in mathematics education. It examines perspectives and research about technology in mathematics education and their implications for technology instruction in school mathematics programs.

Tampa | College of Education | Teaching and Learning

MAE 7794 Preparing Teachers of Mathematics, K-12

Credit Hours: 3

This course focuses on analyzing and examining the research in mathematics teaching and teacher education as it relates to the initial preparation of teachers of mathematics and to the professional development of practicing teachers of mathematics.

Tampa | College of Education | Teaching and Learning

MAE 7796 Research Issues in Mathematics Education

Credit Hours: 3

This course focuses on current research in mathematics education and its implications for instruction in school mathematics programs, particularly its impact on mathematics curricula, learning, and instruction.

Tampa | College of Education | Teaching and Learning

MAE 7910 Directed Research in Mathematics Education

Credit Hours: 1-19

This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.

Tampa | College of Education | Teaching and Learning

MAE 7945 Practicum in Mathematics Education

Credit Hours: 3

This practicum provides doctoral students in mathematics education an opportunity to engage in professional experiences in teaching or research that are individualized to meet future academic needs and goals.

Tampa | College of Education | Teaching and Learning

MAE 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Teaching and Learning

MAN 6055 Organizational Behavior and Leadership

Credit Hours: 2-3

An examination of the theory and practice of management, including the study of goals and means, the functions of management, and the administrative process in general.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6107 Leading Sustainable Enterprise: Goals and Processes

Credit Hours: 2-3

Examines the perspective required of the manager/leader/facilitator in light of personal, organizational, and societal needs judged by standards of effectiveness and ethicalness.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6116 Diversity and Organizational Justice

Credit Hours: 3

Course deals with questions, dimensions of style and structure, problems and paradigms of solutions that have come out of management experience of a changing workforce during the past twenty years. Emerging styles of leadership among people of diverse cultural backgrounds will be explored as solutions, not as problems.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6140 Decision Making & Problem Solving

Credit Hours: 3

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6145 Managing Creative Projects

Credit Hours: 3

Interdisciplinary overview of how organizations can harness innovation through creative projects. It covers foundations of creativity and innovation, techniques to support creativity in teams, and establish a culture of innovation.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6147 Leadership/Management Concepts

Credit Hours: 2

Provides a foundation for the study of processes of leadership in organization and society. Presents an overview of various concepts of leadership, such as the personal values of leaders and leadership organization.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6149 Leadership and Teams

Credit Hours: 3

Exploration, analysis and applications of Leadership theory, research concepts and skills in teams and organizations. Course provides insights into opportunities and challenges faced by leaders as they seek to adapt themselves and their organizations to the global business environment.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6165 Principles of Collaboration

Credit Hours: 3

This course approaches collaboration from multiple perspectives. Students will learn underlying theories of teams and collaboration, as well as techniques for leadership, interpersonal communications, virtual collaboration, and collaboration engineering.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6204 Organization Design and Structure

Credit Hours: 3

Systematic study of architecture, design and management approaches that influence the effectiveness of public and private organizations, including theory, environment, technology, culture, behavior control and work design.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6256 Politics and Control in Organizations

Credit Hours: 3

Course explores politics and control at the individual, small group, and organizational levels. Students will also explore the power relationships between organizations and the larger political/economic systems of which they are a part and with which they interact.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6289 Organizational Change and Development

Credit Hours: 3

A combination laboratory-field course requiring the integration of behavioral science theories, tools, concepts, and techniques learned in the lab to an OB application in a "real" organization.

Prerequisite(s): MAN 6055
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6305 Human Resource Management

Credit Hours: 3

Course focuses on the complex decision-making processes involved in the management of human resources within an organizational system geared to meeting both individual needs and organizational objectives.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6347 People Analytics

Credit Hours: 3

People drive organization and it is now possible to track performance in great detail. This course provides an overview of people analytics opportunities in today's organizations as well as methods to address in a data-driven manner.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6406 Employment Law

Credit Hours: 3

This course provides students with a working knowledge and understanding of how employment law originates, evolves, and impacts the work place.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6435 Contract Management

Credit Hours: 3

This course strengthens the student's ability to participate in goods and services acquisition and contract administration. Students will be introduced to the different contracting models including Private, Federal, and state, local and education (SLED).

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6448 Negotiating Agreement and Resolving Conflict

Credit Hours: 3

Provide the student with an overview of conflict resolution within/between organizations. Includes negotiation, mediation, arbitration, peer review, and other alternatives to litigation; internal dispute resolution, dispute system design/implementation.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6518 Sustainable Production Systems

Credit Hours: 3

Examines production processes dedicated to sustainable organizational performance through elimination of waste and reduction in resources consumed.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6599 Logistics Systems and Analytics

Credit Hours: 3

Introduction to software tools and decision support models which are frequently used in the design and operation of integrated supply chains.

Prerequisite(s): QMB 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAN 6601 International Management

Credit Hours: 3

A study of the characteristics of the international and multinational company, environmental constraints, personnel and labor relations factors, and strategic planning and policies.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6607 Managing International Cultural Differences

Credit Hours: 3

Examines the effects of culture and nationality on business practices in selected regions and countries and suggests ways to build synergistic solutions from multicultural differences.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6726 Strategic Business Analysis

Credit Hours: 2

Examines techniques to creatively vision and analyze the future to prepare individuals and organizations for future opportunities and threats. Designed to familiarize students with techniques for analyzing the future, critical issues, how the future will impact them as individuals.

Tampa | Muma College of Business | Marketing

MAN 6746 Designing Sustainable Enterprise

Credit Hours: 3

Examines an analytical framework for organizations to build more sustainable economies, societies, and natural environments.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6748 Assessing Sustainable Performance of Organizations

Credit Hours: 3

The course helps students to conceptualize a sustainable organization and use that as a benchmark to analyze the performance of organizations aspiring for long-term survival and growth.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6774 Executive Leadership

Credit Hours: 3

This course is designed for graduate students who are or aspire to be top executives in triple bottom line organizations. The underlying assumption of this course is the mission of executive leaders is to achieve high commitment and high performance.

Tampa | Muma College of Business | Marketing

MAN 6905 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6911 Directed Research

Credit Hours: 1-19

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6930 Selected Topics

Credit Hours: 1-4

Designed to be taken either under general guidance of faculty member on some facet of management not offered in a regular course or with regularly scheduled graduate courses for more in-depth study.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 6950 Capstone Experience in Leading Organizations

Credit Hours: 3

Student team assessment exercise of real organization leading to evaluate report and pesentation demonstrating skills required in program.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 7298 Creativity and Innovation

Credit Hours: 2-4

This course addresses the theory, research, and practice of innovation stimulation and management. Critically reviews research on creativity stimulation, product/service design, commercialization, etc. Participants conduct and report a major project.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 7939 Executive Issues in Management

Credit Hours: 2-4

A research seminar for executives that explores contemporary issues in management. The specific theme of the seminar will be determined through consultations between the instructor and the students prior to the first class meeting.

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAN 7980 Dissertation

Credit Hours: 2-21

Tampa | Muma College of Business | Information Systems and Decision Sciences

MAP 5316 Ordinary Differential Equations I

Credit Hours: 3

Existence and uniqueness theory, properties of solutions, linear systems, stability theory. Sturm-Liouville theory.

Prerequisite(s): MAP 2302, MAA 4211
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 5317 Ordinary Differential Equations II

Credit Hours: 3

Topics selected from fixed point theory, comparison theory, oscillation theory, Poincare-Bendixson Theory, Lyapunov functions, eigenfunction expansions.

Prerequisite(s): MAP 5316, MAA 5307
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 5345 Applied Partial Differential Equations

Credit Hours: 3

Separation of variables, the heat equation, wave equation, Laplace's equation, classification, Green's functions with emphasis on applications.

Prerequisite(s): MAP 5407
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 5407 Methods of Applied Mathematics

Credit Hours: 3

Sturm-Liouville theory, Fourier series, Green's functions, matrix methods for linear systems of ordinary differential equations, and topics from calculus of variations, control theory, numerical solutions of differential equations.

Prerequisite(s): MAP 2302
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 6205 Control Theory and Optimization

Credit Hours: 3

Projection theorems and minimum norm problems, convex analysis, duality principle, constrained optimization, finite dimensional linear systems, controllability, optimal control and pontryagin maximum principle

Prerequisite(s): MAA 5307, MAP 5316
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 6312 Dynamical Systems I

Credit Hours: 3

Topics include finite-dimensional dynamics: solution flow, nonlinear second-order equations, steady states, low-dimensional dynamics, bifurcation, chaos; asymptotic dynamics: abstract evolutional equation, stable and unstable manifolds, global attractors.

Prerequisite(s): MAP 5316 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 6319 Dynamical Systems II

Credit Hours: 3

Topics include solutions of reaction-diffusion equations, nonlinear wave equations, Navier-Stokes equations, global and exponential attractors,

inertial manifolds, pullback attractors, approximation of asymptotic dynamics, and applications.

Prerequisite(s): MAP 6312 with a minimum grade of C, MAP 5345 with a minimum grade of C or MAP 6356 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 6356 Partial Differential Equations

Credit Hours: 3

Advanced topics from: elliptic boundary value problems, semigroup theory, Sobolev spaces, degree theory, regularity, evolution equations

Prerequisite(s): MAP 5345, MAA 5307
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 6418 Harmonic Analysis

Credit Hours: 3

Covers applications of harmonic analysis to differential equations, mathematical physics, and probability. Topics include: Fourier series, Gibbs phenomenon, Fourier integrals, Paley-Wiener theory, Wiener's Tauberian theorems, and spectral synthesis.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAP 6426 Special Functions

Credit Hours: 3

A study of special functions at the graduate level. Topics include series and integral representations; generating functions; recurrence relations and orthogonality properties of the special functions; and Bessel, Legendre, and hypergeometric functions.

Prerequisite(s): MAA 5307 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAR 6158 International Marketing Management

Credit Hours: 3

A study of marketing management activities from the perspective of firms doing business across national boundaries. Emphasis is upon aspects of marketing which are unique to international business and problem-solving within an international context.

Prerequisite(s): MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAR 6216 Logistics and Physical Distribution Management

Credit Hours: 3

A study of managerial methods focusing on the establishment and control of optimum customer service levels in the areas of inventory, transportation, fixed facility location, material handling, and information. Component parts of each system are analyzed quantitatively. Reading, lecture, and case analysis.

Prerequisite(s): MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAR 6336 Promotional Management

Credit Hours: 3

Management of the promotional function as part of the total marketing program. Includes a study of relevant buyer behavior concepts, resources and budgets, media, creative aspects, and effectiveness measurements as they relate to the management tasks of developing, implementing, and evaluating promotional strategy.

Prerequisite(s): MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAR 6406 Sales Management

Credit Hours: 3

A study of the sales function of the firm approached from the perspective of the sales manager. Emphasis is placed upon the development of the student's problem-solving, decision-making, and analytical skills.

Prerequisite(s): MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAR 6466 Supply Chain Management

Credit Hours: 3

Overview of key supply chain processes and functions, including logistics, marketing, finance, operations, and procurement, and the implications of supply chain management for creating value for customers and other supply chain members.

Tampa | Muma College of Business | Marketing

MAR 6646 Research for Marketing Managers

Credit Hours: 3

A study of marketing research methods and information systems and their relationship to marketing decision-making. Topics include value and cost of information, sample design, questionnaire design, statistical analysis, and report presentation. Lecture, reading, case analysis, and project.

Prerequisite(s): MAR 6815, QMB 6305, ISM 6021
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAR 6735 Digital Marketing

Credit Hours: 3

This course focuses on applied digital marketing concepts and strategies. The course will have a broad framework that includes digital marketing, social marketing and includes innovation and analytics

Prerequisite(s): MAR 6815 with a minimum grade of B-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAR 6815 Marketing Management

Credit Hours: 2-3

Analysis of operational and strategic planning problems confronting marketing managers. Topics include buyer behavior, market segmentation, information systems, product selection and development, pricing, distribution, promotion, and sales force management.

Tampa | Muma College of Business | Marketing

MAR 6816 Marketing Strategy

Credit Hours: 3

A study of strategic marketing planning and problem-solving processes as practiced by the modern market-oriented firm. The course is designed to develop marketing problem-solving, decision-making, and planning skills through the extensive use of case analysis.

Prerequisite(s): MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAR 6907 Independent Study

Credit Hours: 1-19

Must have a contract with an instructor.

Tampa | Muma College of Business | Marketing

MAR 6916 Directed Research

Credit Hours: 1-19

Tampa | Muma College of Business | Marketing

MAR 6936 Selected Topics in Marketing

Credit Hours: 1-4

The content and organization of this course will vary according to the interests of the faculty and students involved in any given term.

Tampa | Muma College of Business | Marketing

MAR 7555 Consumer Behavior Theory

Credit Hours: 3

This course investigates the interrelationships and applications of behavioral science theories, concepts and methodologies to problems of understanding group as well as individual behavior in the market place.

Tampa | Muma College of Business | Marketing

MAR 7635 Advanced Marketing Research: Design and Technique

Credit Hours: 3

An intensive study of the theoretical, conceptual, and methodological issues in survey and experimental marketing research. A review and expansion of advanced marketing data analysis methods.

Prerequisite(s): QMB 7565, QMB 7566
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

MAR 7667 Marketing Models and Strategy Applications

Credit Hours: 3

A model-building approach to the management of marketing. Includes models developed to aid in the design, implementation, and evaluation of corporate marketing strategies; information systems and marketing audits; and the interrelationships of economic, quantitative, and behavioral disciplines that provide the structure and tools necessary to develop and implement marketing decision support systems.

Tampa | Muma College of Business | Marketing

MAR 7787 Marketing Theory and Thought

Credit Hours: 3

An intensive study of marketing concepts and theories from 1900 to present. Emphasis is placed on the development of theory, as well as predictions of future theoretical developments.

Tampa | Muma College of Business | Marketing

MAR 7910 Independent Study in Marketing

Credit Hours: 1-12

This course permits a doctoral student to pursue research in a specific area under the direct supervision of a faculty member.

Tampa | Muma College of Business | Marketing

MAR 7931 Seminar on Selected Marketing Topics

Credit Hours: 1-3

Intensive study of the theoretical, conceptual, and methodological issues and problems which impact managerial applications in selected topic areas, such as marketing channels, distribution/logistics, environmental or (social) nonprofit marketing, consumer behavior, advertising/media research, or international marketing.

Tampa | Muma College of Business | Marketing

MAR 7939 Executive Issues in Marketing

Credit Hours: 2-4

A research seminar for executives that explores contemporary issues in marketing. The specific theme of the seminar will be determined through consultations between the instructor and the students prior to the first class meeting.

Tampa | Muma College of Business | Marketing

MAR 7980 Dissertation

Credit Hours: 2-21

Directed research.

Tampa | Muma College of Business | Marketing

MAS 5145 Advanced Linear Algebra

Credit Hours: 3

Finite-dimensional vector spaces over arbitrary fields, dual spaces, canonical forms for linear transformations, inner product spaces, orthogonal, unitary, and self-ad joint operators and quadratic forms.

Prerequisite(s): MAS 3105, MAS 4301
Corequisite(s): None.
Co-Prerequisite(s): MAS 5311

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAS 5215 Number Theory

Credit Hours: 3

Fundamental theorem of arithmetic, modular arithmetic, Chinese remainder theorem, Mersenne primes, perfect numbers, Euler-Fermat theorem, pseudo primes, primitive roots, law of quadratic reciprocity, factorization and primality testing algorithms.

Prerequisite(s): MAS 3105, MAS 4301
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAS 5311 Algebra I

Credit Hours: 3

Group theory: Sylow theorems; classification of groups of small order. Ring theory: ideals, quotient rings, polynomial rings, Euclidean domains, principal ideal domains and unique factorization.

Prerequisite(s): MAS 3105, MAS 4301
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAS 6312 Algebra II

Credit Hours: 3

A continuation of the study of graduate algebra. Topics include principal ideal domains, basic field theory, finite fields, and Galois theory

Prerequisite(s): MAS 5311
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAT 5932 Selected Topics

Credit Hours: 1-4

Each course covers a single topic outside the usual curriculum.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAT 6908 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAT 6911 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAT 6932 Selected Topics

Credit Hours: 1-4

Each course covers a single topic outside the usual curriculum.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAT 6939 Graduate Seminar

Credit Hours: 1-4

Direction of this seminar is by a faculty member. Students are required to present research papers from the literature.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAT 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAT 7912 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Mathematics and Statistics

MAT 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Mathematics and Statistics

MCB 5206 Public Health and Pathogenic Microbiology

Credit Hours: 3

A comprehensive survey of pathogenic microbes responsible for disease in man and other animals and the impact of these infectious agents on the public health. These pathogens will be studied with respect to their morphology, cultivation, mechanisms of pathogenicity, laboratory diagnosis, and epidemiology.

Prerequisite(s): MCB 3020
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

MCB 5208 Cellular Microbiology

Credit Hours: 3

Cellular Microbiology is a lecture-based and literature-based course on the interactions between mammalian cells and microbial pathogens and/or their toxins, with a special emphasis on bacteria.

Prerequisite(s): PCB 3023, MCB 3033
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

MCB 5655 Applied and Environmental Microbiology

Credit Hours: 3

A Study of the applications of microbiology to the food/beverage industry, agriculture, public health and bioremediation. This course is a microbiology elective and has a mandatory field trip.

Prerequisite(s): MCB 3020
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Integrative

MCB 5815 Medical Mycology

Credit Hours: 3

A modern biological survey of the medically important fungi (yeasts and molds) important to microbiologists and environmental scientists.

Prerequisite(s): MCB 3020
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

MCB 6433 Clinical Correlations in Molecular Medicine

Credit Hours: 3

The course concentrates on molecular medicine and focuses on several

disease conditions that provide an "in-depth" understanding of how changes in cellular structure/function and metabolic pathway regulation can result in diseases and their therapy.

Prerequisite(s): GMS 6001 or GMS 6201
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Medical Sciences

MCB 6919 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

MCB 6930 Graduate Microbiology Seminar

Credit Hours: 1

A critical examination and discussion of current literature of microbiology.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

MCB 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

MHF 5306 Mathematical Logic and Foundations I

Credit Hours: 3

Two-course sequence covering: predicate calculus and classical model theory; transfinite set theory and the system ZFC; recursion theory and decidability.

Prerequisite(s): MAS 4301
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MHF 5402 The Early History of Mathematics

Credit Hours: 3

A study of the history and development of mathematics and its cultural impact from the formation of number systems to the Renaissance.

Prerequisite(s): MAC 2312
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MHF 5405 History of Modern Mathematics

Credit Hours: 3

Traces the development of mathematical ideas in Western culture. Special emphasis is placed on those concepts which led to the Calculus. This course is open to majors and non-majors alike.

Prerequisite(s): MAC 2313
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MHF 6307 Mathematical Logic and Foundations II

Credit Hours: 3

Continuation of MHF 5306.

Prerequisite(s): MHF 5306
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MHS 5020 Foundations of Mental Health Counseling

Credit Hours: 3

A skill-building course on the utilization of one's self in mental health counseling relationships. Includes study of the origin, history, professional functions and current issues in the discipline of mental health counseling.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

MHS 5480 Human Growth and Development

Credit Hours: 3

Human development theory as applied in psychotherapy and case management rehabilitation, mental health, and addiction settings.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

MHS 5721 BRIDGE Proseminar I

Credit Hours: 2

This course is designed to provide students with the necessary skills for successfully applying for and transitioning into a graduate training program in the social and behavioral sciences.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 5722 BRIDGE Pro Seminar II

Credit Hours: 2

Provide students with the skills for successfully transitioning to a graduate program in behavioral and social sciences It will also provide knowledge that can be applied to the mentored research project being conducted as part of the BRIDGE certificate.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 5745 Applied Qualitative Research Methods

Credit Hours: 3

This course is designed to provide students with an understanding of applied qualitative research methods and to assist them where appropriate in applying these methods to their mentored research projects being conducted as part of the BRIDGE certification.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 5746 Applied Quantitative Research Methods

Credit Hours: 3

Reviews quantitative research methods while focusing on the application of such concepts in real research contexts preparing students to understand the nature assumptions processes and ethical application of quantitative methodology.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 5889 BRIDGE Community Field Experience

Credit Hours: 2

Provide students with the skills for successfully transitioning to a graduate program in behavioral and social sciences It will also provide knowledge that can be applied to the mentored research project being conducted as part of the BRIDGE certificate.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 5905 Directed Studies

Credit Hours: 1-4

Independent studies on a selected topic.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6006 Trends and Principles of the Counseling Profession

Credit Hours: 3

A study of trends in the counseling profession, its philosophical framework, its scope and functions, its organizations and administration.

Introduction to basic skills needed in the counseling relationship.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6027 Creating Cultural Competence in Behavioral Health Organizations

Credit Hours: 3

The course will explore the need of cultural competence in the provision of behavioral health services for diverse populations. The course will examine culture and ethnicity, multiculturalism, and intercultural communication. The course will define cultural competence from the perspective of current and various approaches of the concept, and examine cultural competence in behavioral health organizations. Case studies of how cultural competence is implemented by different behavioral health organizations will be examined.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6065 Issues and Trends in Developmental Disabilities

Credit Hours: 3

This interdisciplinary Disability Studies course provides students with a background in the history of disabilities and an overview of the impact of and latest trends in disabilities across the life span.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6066 Systems, Services, and Supports for Children and Adolescents with Developmental Disabilities

Credit Hours: 3

This course provides students with the tools and understanding needed to evaluate service systems for children and adolescents with developmental disabilities. Lessons address services, systems of care, and policies affecting services.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6067 Evidence-based Practices in Behavioral Health for Children and Adolescents with Developmental Disabilities

Credit Hours: 3

This course introduces students to a variety of evidence- based behavioral health practices for children and adolescents with developmental disabilities. Lessons address identification and evaluation of evidence-based practices, research, and ethics.

Prerequisite(s): MHS 6065
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6068 Community-Based Behavioral Health Interventions for Culturally Diverse Youth

Credit Hours: 3

This course focuses on behavioral health issues and interventions for culturally diverse youth. Topics include youth and family strengths and needs, research and intervention approaches, and relevant policies at global, national, and local levels.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6069 Child and Adolescent Behavioral Health

Credit Hours: 3

Provides an introduction to a variety of topics relevant to child and adolescent behavioral health, including its history, settings for service provision, and various factors that shape best practice approaches to meet the needs of youth and families.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6070 Study of Mental Disorders for Counselors

Credit Hours: 4

The purposes of this course are to familiarize the students with the study of mental disorders, learn the most current system of classification of mental disorders, and discuss evidence-based biological and sociocultural treatments for mental disorders.

Prerequisite(s): MHS 6006
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6072 Epidemiology and Prevention in Children's Mental Health

Credit Hours: 3

Provides introduction to epidemiological research methods in children's mental health; prepares professionals to critically evaluate research literature and to design studies to better affect children's mental health.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6073 Child and Adolescent Psychopathology and Resilience

Credit Hours: 3

Students will gain basic knowledge about psychological disorders necessary to assess/treat/serve children, adolescents, and their families. Factors that promote resilience and build competencies will be explored.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6095 Family-Centered Interdisciplinary Practice: SOC

Credit Hours: 3

Provides an overview of a SOC approach to children's mental health; prepares professionals to work in respectful partnership with families/youth and to participate in interdisciplinary teams serving children and their families.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6096 Program Development and Implementation in Children's Mental Health

Credit Hours: 3

Course introduces students to the science of implementation and key frameworks, theories, strategies; includes critical elements, influences, stages applied to carry out successful implementation of initiatives.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6097 Financing of Children's Mental Health Services

Credit Hours: 3

Addresses theoretical, evaluative, political issues regarding financing of children's mental health services; will further students' critical thinking about financing strategies/structures that support effective systems of care.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6098 Leadership within Systems of Care

Credit Hours: 3

Introduces students to various theories of leadership and empirical evidence linking leadership competencies to organizational and community success in children's mental health, emphasizing real-world challenges and solutions.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6200 Assessment and Appraisal Procedures

Credit Hours: 3

The study of statistical concepts, assessment instruments and procedures relevant to school and community counseling with an emphasis on standardized test data and the use of an individual case study approach.

Prerequisite(s): MHS 6006
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6201 Applied Behavior Analysis in Complex Community Environments

Credit Hours: 3

Prepares students to recognize factors that may affect the application of behavior analysis principles within and across community settings and to design intervention plans that fit given characteristics of the social and physical context of these home, school and other community settings.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6311 Online Services in Counseling and Helping Professions

Credit Hours: 3

To provide students in helping professions with basic and advanced knowledge and skills associated with the provision of online services in counseling and related helping professions. Also to provide training on how to evaluate and design such services.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6340 Career Development

Credit Hours: 3

Study of the information service in guidance as it relates to life style and career development. Theories dealing with career planning. Application of educational, vocational, and personal-social information resources to lifelong human development.

Prerequisite(s): MHS 6006
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6341 Career Program Design and Evaluation

Credit Hours: 3

Study of the various components of designing, implementing, managing and evaluating effective career programs.

Prerequisite(s): MHS 6006
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6400 Counseling Theories and Practices

Credit Hours: 3

This course is the study of the nature of the counseling process with emphasis on major theoretical approaches and related personality theories, development of basic counseling skills and supervised practice.

Prerequisite(s): EDF 6354, MHS 6006
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6409 Evidence Based Practices in Behavioral & Community Sciences

Credit Hours: 3

Explores and applies strategies used to judge and identify evidence-based practices in assessment, intervention, and therapeutic practices in behavioral health and related areas.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 6410 Intensive Individualize Positive Behavior Support

Credit Hours: 3

Provides class participants with knowledge and skills necessary to

develop, implement, and evaluate the impact of positive behavior support at an individual level including functional behavior assessment and behavior support in various settings.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6418 School Counselor Accountability and Curriculum

Credit Hours: 3

This course prepares school counselors to assume their role and responsibilities in meeting the demands of school reform. Students compile instructional guidance units, using evidence-based content and strategies, to facilitate K-12 student development.

Prerequisite(s): MHS 6006
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6420 Multicultural Counseling with Diverse Populations

Credit Hours: 3

Counseling strategies applied to diverse populations including the use of school and community resources. Each student will select a specific population group for supervised research.

Prerequisite(s): MHS 6400
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6421 Counseling Children

Credit Hours: 4

Nature of the counseling process with an emphasis on major theoretical approaches, supervised practice, and application. Focus on work with elementary age children and consultations with parents, teachers and other professionals.

Prerequisite(s): EDF 6354, MHS 6006
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6431 Family Therapy and Techniques

Credit Hours: 4

This course concentrates on the theory and application of intervention techniques to family systems. Structured experiences include interviewing, assessing, making therapeutic interventions, observing family interaction, and developing basic aspects in treating families.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6437 Family Perspectives on Behavioral Health Disparities

Credit Hours: 3

Examines behavioral health disparities from a family systems perspective, with consideration of how they are influenced by historical context, generations, immigration, social and physical environmental factors, discrimination, and group heterogeneity.

Prerequisite(s): MHS 6420 or RCS 6440
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6450 Counseling Substance Abuse in School and Community

Credit Hours: 3

This course prepares school-based helping professionals to work with substance abuse issues, through building knowledge of the etiology of substance abuse and counseling interventions and prevention methods amenable to schools and community settings.

Prerequisite(s): MHS 6400

Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6456 Co-occurring Mental and Substance Use Disorders in Child and Adolescent Behavioral Health

Credit Hours: 3

This course will investigate factors that affect development of co-occurring disorders in children, as well as those associated with services delivery, at the individual, family, agency, community, and systems levels.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6470 Human Sexuality Issues for Counselors

Credit Hours: 3

Emphases include exploration of various dimensions of human sexuality; dynamics of major individual and societal sexuality issues; theoretical approaches to counseling related to sexuality issues.

Prerequisite(s): MHS 6400
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6494 Women's Mental Health

Credit Hours: 3

This course focuses on women's mental health and substance use disorders through a detailed examination of the interaction of trauma, mental health, and substance use disorders that affect the lives of women across the life span.

Tampa | College of Behavioral and Community Sciences | Aging Studies

MHS 6508 Wraparound Interventions and the System of Care

Credit Hours: 3

Explores the wraparound philosophy and focuses on developing supportive community structures for the delivery of wraparound services. Research, evaluation, and methodology in wraparound interventions are addressed.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6509 Group Counseling Theories and Practices

Credit Hours: 3

An experiential study of group structure, group dynamics, methodology, and leadership models applicable to counseling clients in school and community settings. Includes skill building through supervised practice.

Prerequisite(s): MHS 6400, EDF 6354 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6601 Consultation for the Counseling Profession

Credit Hours: 3

A study of consultation theory and practice as used by counselors working in schools and mental health facilities, particularly with educators, other professionals, and parents, individually and in groups.

Prerequisite(s): MHS 6400, MHS 6006
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6605 Addressing Behavior Challenges in Young Children

Credit Hours: 3

Focuses on the application of promotion, prevention, and intervention framework to promote the social development of young children and address behavioral issues through the Pyramid Model within early childhood and intervention programs/systems.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6607 Behavior Consultation and Collaborative Systems Change

Credit Hours: 3

This course provides participants with the knowledge and skills necessary to develop, implement, and evaluate the impact of behavior consultation across a multi-tiered system of support.

Prerequisite(s): MHS 6608 or MHS 6605 or MHS 6410
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6608 Schoolwide Positive Behavior Support

Credit Hours: 3

Provides class participants with the knowledge and skills necessary to develop, implement, and evaluate the systemic impact of positive behavior support on the behavioral needs of all students from Pre-K to 12, including those with disabilities.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6615 Observational Methods and Functional Assessment

Credit Hours: 3

The course focuses on identifying and using appropriate observational methods based on individual cases, assessing individuals using functional behavior assessment procedures, displaying and interpreting behavioral data, and designing interventions.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6620 Counseling in Community Setting

Credit Hours: 3

Study of community counseling within the context of health and human service systems including treatment modalities, administration, and fiscal considerations.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6626 Applied Leadership in Child and Adolescent Behavioral Health

Credit Hours: 3

This course will develop student understanding of organizational leadership concepts, theory, and practice. It will focus on opportunities, challenges, and tools for leaders in public and private child and adolescent behavioral health organizations.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6627 Contemporary Leadership Issues in Child and Adolescent Behavioral Health

Credit Hours: 3

This course examines contemporary issues of leadership in child and adolescent behavioral health and emphasizes development of leadership skills and analytic approaches in public and private child and adolescent behavioral health organizations.

Prerequisite(s): MHS 6626 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6645 Mental Health Informatics

Credit Hours: 3

This course examines how information technologies and knowledge management affect access to mental health and impact policy. Current applications include the management of mental health databases and the development of behavioral telehealth programs.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6700 Legal and Ethical Issues in the Counseling Profession

Credit Hours: 3

Study of legal, ethical and related issues affecting the role and responsibilities of counselors in schools and mental health facilities.

Prerequisite(s): MHS 6006
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6701 Applied Behavior Analysis Basic Principles

Credit Hours: 3

This course provides the student with an introduction to the concepts and principles of Behavior Analysis. It covers basic behavioral principles and then discusses behavioral procedures with an emphasis on the principles underlying each procedure.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6706 Child and Adolescent Behavioral Health Policy

Credit Hours: 3

This course focuses on critical policy issues affecting child and adolescent behavioral health services in the U.S. Historical, legislative and policy making issues will be discussed, and U.S. policies will be examined within an inclusive global context.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6708 Experimental Analysis of Behavior 1

Credit Hours: 3

This seminar provides students with a survey of core concepts in the experimental analysis of behavior often with special emphasis on methodological and conceptual issues and their translation to the study of socially important problems.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6709 Experimental Analysis of Behavior 2

Credit Hours: 3

This course is part II in a 2-part sequence on major concepts from the experimental analysis of behavior. This course is intended to provide students with systematic opportunities to delve more deeply into specific topics.

Prerequisite(s): MHS 6708 with a minimum grade of B-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6732 Research and Evaluation in Child and Adolescent Behavioral Health

Credit Hours: 3

This course covers foundational concepts in research methods and program evaluation that are necessary to understand and critically evaluate the research of others and to plan and conduct research and evaluation in child and adolescent behavioral health.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6742 Community Based Research & Evaluation in Behavioral Sciences

Credit Hours: 3

The study of community-based participatory research & evaluation (CBPRE) in behavioral sciences; critical issues in research design, ethics, & use of CBPRE to promote social change & public policy within a behavioral health context.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 6743 Qualitative Research Foundations

Credit Hours: 3

This course provides students with an understanding of the foundations of qualitative research and how to conduct qualitative research. The course also assists them, where appropriate, in applying qualitative methods to their doctoral dissertation.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6744 Single Case Experimental Design

Credit Hours: 3

The purpose of this course is to introduce the fundamentals of behavior-analytic research methods. The course will review single-case time series methodologies to assess various dimensions of behavior and evaluate the effects of interventions on behavior.

Co-Prerequisite(s): MHS 7796 with a minimum grade of B-

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6780 Ethics in Applied Behavior Analysis

Credit Hours: 3

The purpose of this course is to provide students with preparation for ethical and professional issues in applied behavior analysis. It is designed to help the students prepare for Board Certified Behavior Analyst exam.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6800 Practicum in Counseling Adolescents and Adults

Credit Hours: 4

Supervised counseling for integration and application of knowledge and skills gained in didactic study.

Prerequisite(s): MHS 6400
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6885 Internship in Community Agency Counseling

Credit Hours: 3-6

Field experience involving one semester of full-time participation in the counseling and related activities of a public or private agency providing mental health services to the community.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6887 Internship in Career and College Counseling

Credit Hours: 3-6

Field experience (1 semester full-time or 2 semesters of part time participation) in career and/or college counseling and related activities of a public or private career center or college center/site/agency. It is restricted to counseling students.

Prerequisite(s): MHS 6800, MHS 6006, MHS 6200, MHS 6340, MHS 6341, MHS 6400, MHS 6420, MHS 6700, EDF 6481
Corequisite(s): MHS 6601
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6900 Special Topics in Planning, Evaluation and Accountability

Credit Hours: 1-3

This course will address selected special topics. Prerequisite is at least three credits in research and evaluation courses at the graduate level.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 6901 Independent Studies in Mental Health Studies

Credit Hours: 1-4

Students conduct independent study in an area related to behavioral health under the guidance of a faculty member. Open to all majors/repeatable for a maximum of 4 credits.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 6905 Individual Study

Credit Hours: 1-4

Independent study, research, and experience relating to professional counseling under the supervision of a member of the Counselor Education faculty.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6906 Independent Study in Behavior Analysis Applications in Community Settings

Credit Hours: 1-6

Independent study in behavior analysis provides students opportunities to focus on special areas of study under a contractual agreement with a faculty member.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6915 Directed Research in Behavioral and Social Sciences

Credit Hours: 1-6

Students work directly with a faculty mentor in a one-on-one research experience in the area of behavioral and social sciences research and design, conduct, and disseminate an independently designed and conducted research project.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 6930 Seminar in Guidance

Credit Hours: 1-4

Significant issues in the field of guidance; will document student's effectiveness in providing effective programs that contribute to the academic missions of the school. Repeat up to 4 hours.

Co-Prerequisite(s): MHS 6006

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6937 Behavior Theory

Credit Hours: 3

This is a masters-level seminar that provides an in-depth examination of the science, philosophy, and scope of radical behaviorism as presented by BF Skinner through his seminal texts About Behaviorism, Science and Human Behavior, and Verbal Behavior.

Prerequisite(s): MHS 7796 with a minimum grade of B-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6938 Applied Behavior Analysis in Community Settings

Credit Hours: 1-4

Addresses selected topics in behavior analysis applications in complex community environments through lecture, class discussion, and supervised special projects.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6940 Practicum in Behavior Analysis in Community Settings

Credit Hours: 2-4

Supervised field work in the application of behavior analysis to children, adults and/or their families in complex community environments, including home, school, employment and neighborhood settings.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6941 Applied Field Experience Seminar

Credit Hours: 3-6

The Applied Field Experience Seminar provides students with an opportunity to integrate, synthesize, and apply knowledge gained through MS coursework through a field experience relevant to each student's area of specialization and interest.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6942 Practicum: EBP and Service Delivery for Children and Adolescents with Developmental Disabilities

Credit Hours: 3

This practicum allows students to apply, integrate, and synthesize knowledge about evidence-based practices being used in behavioral health settings that provide services to children and adolescents with developmental disabilities.

Prerequisite(s): MHS 6065, MHS 6066
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6945 Leadership Practicum in Agencies Serving Children and Adolescents with Developmental Disabilities

Credit Hours: 3

This practicum is designed to provide students with experience in policy, leadership, and administration in an agency that serves children and adolescents with a developmental disability.

Prerequisite(s): MHS 6066
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6970 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Thesis research hours under the supervision of Counselor Education faculty.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 6971 Thesis in Applied Behavior Analysis

Credit Hours: 2-6

The Thesis credits will provide students the opportunity to conduct independent applied behavior analysis single subject experimental design studies, or special research projects related to applications in community settings.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 6972 Thesis in Child and Adolescent Behavioral Health

Credit Hours: 2-6

The purpose of the thesis in child and adolescent behavioral health is to provide an opportunity for students to incorporate knowledge gained in the degree program to a culminating work.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 7205 Functional Analysis and Function-Based Intervention

Credit Hours: 3

The purpose of this course is to provide advanced, in-depth instruction in functional behavior assessment and intervention planning. This course will cover indirect and direct assessment methods, including both descriptive and functional analysis.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 7401 Advanced Counseling: Theories and Practicum

Credit Hours: 4

Advanced study of major counseling theories and their application in therapeutic work with individual clients and with groups in a variety of settings. Supervised practice in individual and group counseling with emphasis on integration of theory and practice.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 7610 Supervision: Theories and Practicum

Credit Hours: 4

Theory and methodology of consultation; the role of the counseling professional as consultant and as a supervisor of counselor trainees and counseling practitioners. Practice learning experiences in consulting and supervision under faculty direction.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 7707 Interdisciplinary Approaches to Policy and System Change in Behavioral Health

Credit Hours: 3

Introduce students to theory, methods, and philosophy of policy and systems change. Contemporary policy issues in behavioral health are analyzed as well as their impact on national, state, local, & community systems change and practice.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 7720 Proseminar in Behavioral & Community Sciences

Credit Hours: 1-3

Reading, discussion, and application of topics related to professional development of doctoral students: teaching at the college level, dissertation selection and literature review processes, developing research agenda, and building professional skills.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 7740 Survey Course in Planning, Evaluation and Accountability

Credit Hours: 3

This introductory course is designed to provide a comprehensive overview of planning, evaluation and accountability methods within a systems context. Emphasis is placed on a broad range of quantitative and qualitative methods.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 7747 Measurement Issues in Behavioral Health Services Research and Evaluation

Credit Hours: 3

This course will examine the development, selection, and use of individual, program, and systems-level process and outcome measures used in behavioral health services research. The course will examine both quantitative and qualitative measurement issues.

Tampa | College of Behavioral and Community Sciences | Mental Health Law and Policy

MHS 7748 Statistical Applications in Translational Research and Evaluation

Credit Hours: 3

The course covers the basic applications of statistical concepts and techniques essential to translational research and evaluation in child and adolescent behavioral health.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 7749 Applications in Dissemination and Implementation Science

Credit Hours: 3

This course covers competencies in the application of translational science necessary to understand, evaluate, and conduct your own dissemination and implementation research in child and adolescent behavioral health.

Prerequisite(s): MHS 7748, PHC 6728
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 7796 Conceptual Foundations of Behavior Analysis

Credit Hours: 3

The purpose of this course is to provide advanced instruction in the conceptual foundations of behavior analysis. Students can expect to learn about advanced concepts and develop their understanding of the theoretical foundations of behavior analysis.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 7926 College Teaching Seminar

Credit Hours: 3

This course is designed to teach the knowledge and skills needed to become effective college teachers. The course is designed to discuss all aspects of college teaching.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 7927 Grant Writing Seminar

Credit Hours: 3

The purpose of this course is to provide class participants with the knowledge and skills necessary to develop, submit, and evaluate grants and contracts related to their areas of research or professional interest.

Tampa | College of Behavioral and Community Sciences | Child and Family Studies

MHS 7930 Advanced Seminar in Counselor Education

Credit Hours: 2

Seminar for advanced graduate students in counselor education. Issues and trends in professional counseling will be addressed.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MHS 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

MMC 6206 Mass Communications Ethics

Credit Hours: 3

An introduction to fundamental ethical principles and an application of those principles to a variety of situations in journalism, broadcasting, advertising, and public relations.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6306 International Communications Seminar

Credit Hours: 3

Mass communications as national and international systems; flow of the news, international news communications networks; satellite communications; overseas activities of American media interest; international propaganda; communication and national development; international media organizations and their activities.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6400 Mass Communication Theory

Credit Hours: 3

The study of mass communication theories, structures, influences, and their relationships to institutions in American society.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6415 Strategic Communication Media

Credit Hours: 3

This concepts course emphasizes strategic thinking in media planning for communication campaigns. Students learn the process of critically evaluating media, purchasing media outlets, scheduling media weight and evaluating media impact. Nonrestricted.

Prerequisite(s): PUR 5505
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6418 Strategic Message Design

Credit Hours: 3

This seminar covers the development of strategic messages for particular audiences to accomplish communication objectives. Topics are research, planning, persuasion, message strategies, and message evaluation. Unrestricted and not repeatable for credit.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6421 Research Methods in Mass Communications

Credit Hours: 3

The theory and practice of quantitative, historical, and critical research methods, and their applications to the study of mass communications. Emphasis in quantitative methods on experimental and survey research, statistical analysis, and evaluation of data.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6447 Quantitative Research Methods in Mass Communications

Credit Hours: 3

Examination of the process and techniques involved in quantitative data collection and analysis for mass communication purposes.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6448 Qualitative Research Methods in Mass Communications

Credit Hours: 3

Examination of qualitative research methods in mass communications with emphasis on interviewing, observational methods, and data interpretation.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6449 Advertising Analytics

Credit Hours: 3

Using data analytics to develop, optimize, and assess outcomes of advertising strategies for brands; the scientific approach to marketing with hands-on use of technologies such as databases, analytics and computing systems to collect, analyze, and act.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6607 Public Opinion and the Mass Media

Credit Hours: 3

The influence of public opinion on private and public institutions in a democratic society and the role of the mass media in opinion formation. The nature of persuasion in establishing or modifying public opinion, and perspectives on the social responsibilities of communications.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6612 Seminar: Law and the Mass Media

Credit Hours: 3

Interrelationships of the media and government at the judicial, executive, and legislative levels. Focus is on legal limitations and privileges of the media; theory and philosophy of the First Amendment; research procedures in court and administrative agency documents.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6900 Directed Reading in Mass Communications

Credit Hours: 1-3

Readings in specialized areas of mass communications as agreed to by the instructor and the student by contract.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6910 Individual Research in Mass Communications

Credit Hours: 1-3

Independent study in which the student must have a contract with the instructor to study an area not covered by other courses in the graduate curriculum.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6920 Introductory Mass Communications Seminar

Credit Hours: 3

Introduction to the aims and methodologies of graduate study in mass communications, its development and relationship to the arts and sciences, and the relationship of the scholarly aspects of media studies to professional media practice; bibliographical resources, and overview of research methods and scholarly style.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6936 Selected Topics in Mass Communications

Credit Hours: 3

Courses designed to meet current, specific topics of interest to students and instructors.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6945 Professional Practicum

Credit Hours: 1-3

Practicum will consist of placement with a media-related organization selected by the student and approved and supervised by the graduate advisor.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6950 Applied Research Project

Credit Hours: 1-6

Completion of a major applied communication research project under supervision. Topic will be selected according to student's needs and interests.

Tampa | College of Arts and Sciences | Mass Communications

MMC 6971 Thesis: Master's

Credit Hours: 2-3

Tampa | College of Arts and Sciences | Mass Communications

MTG 5316 Topology I

Credit Hours: 3

Topological spaces, continuity, homeomorphisms, connectedness, compact spaces, separation axioms, product spaces.

Prerequisite(s): MAA 4211
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MTG 6256 Differential Geometry

Credit Hours: 3

Exterior calculus, differentiable manifolds, integration of differential forms, surfaces in 3-space, covariant derivative, curvature, matrix groups.

Prerequisite(s): MAA 4211, MAS 3105
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MTG 6257 Differential Geometry II

Credit Hours: 3

A continuation of the study of graduate differential geometry, covering additional topics such as Tensor Analysis, Riemannian Geometry, Lie Groups, and Lie Algebras.

Prerequisite(s): MTG 6256 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MTG 6317 Topology II

Credit Hours: 3

A continuation of the study of graduate topology. Topics include properties of the fundamental group; elements of homotopy theory and homology theory.

Prerequisite(s): MTG 5316
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

MUC 5625 Jazz Composition

Credit Hours: 2

Private instruction in original composition.

Tampa | College of The Arts | Music/Music Education

MUC 6251 Composition

Credit Hours: 4

Private instruction in original composition. Required of composition majors.

Tampa | College of The Arts | Music/Music Education

MUC 6444 Electronic Music/Analog/Digital Systems Research I

Credit Hours: 3

State-of-the-art compositional and performance applications; new concepts of electronic music synthesis; documentation and critical analysis of new repertory.

Tampa | College of The Arts | Music/Music Education

MUC 6445 Electronic Music/Analog/Digital Systems Research II

Credit Hours: 3

State-of-the-art compositional and performance applications; new concepts of electronic music synthesis; documentation and critical analysis of new repertory.

Tampa | College of The Arts | Music/Music Education

MUC 6448 Electronic Music: Computer Music Research

Credit Hours: 3

For advanced students already experienced in Electronic Music, this class focuses on creative and research techniques in Computer Music, with special emphasis in multimedia collaboration across disciplines.

Prerequisite(s): MUC 6445

Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUC 6626 Jazz Composition

Credit Hours: 4

Private instruction in original composition.

Tampa | College of The Arts | Music/Music Education

MUC 6930 Seminar in Jazz Compositional Styles

Credit Hours: 2

A seminar study of the major compositional figures in jazz. Oriented toward the continuing development of students' own writing ability.

Tampa | College of The Arts | Music/Music Education

MUE 6080 Foundations and Principles of Music Education

Credit Hours: 3

Investigation of historical, philosophical, and psychological foundations of music education.

Tampa | College of The Arts | Music/Music Education

MUE 6097 Music, Medicine, and Myths

Credit Hours: 2

The course focuses on integration of the body, mind, and emotion in music learning and performing; causes, prevention, and treatment of music-related injury; rehabilitation and effective management of performance anxiety.

Tampa | College of The Arts | Music/Music Education

MUE 6116 Advanced Techniques and Research in K-12 General Music

Credit Hours: 3

This course focuses on teaching and learning processes in general music education K-12. Students examine research and best practices in the field with the aim of improving their own skills in developing comprehensive musicianship in students.

Tampa | College of The Arts | Music/Music Education

MUE 6336 Advanced Techniques and Research in Vocal/Choral Music Education

Credit Hours: 3

Course provides for graduate students in music education the opportunity to examine current research related to the teaching of secondary school vocal music, evaluate curricula, music materials, and teaching methods that will enable them to develop a vocal music program that emphasizes musical sensitivity.

Tampa | College of The Arts | Music/Music Education

MUE 6347 Advanced Techniques and Research in Instrumental Music Education

Credit Hours: 3

This course focuses upon teaching and learning processes in instrumental music, and the stimulation of student thought regarding the variety of roles a music teacher may assume to assist students to become musically literate and aesthetically sensitive.

Tampa | College of The Arts | Music/Music Education

MUE 6428 Learner-Centered Approaches in Music Education I

Credit Hours: 6

This course is the introductory experience for the Master of Arts in Music Education degree program at the University of South Florida.

Tampa | College of The Arts | Music/Music Education

MUE 6429 Learner-Centered Approaches in Music Education II

Credit Hours: 3

This course serves as the culminating experience for the Master of Arts in Music Education degree program at the University of South Florida.

Prerequisite(s): MUE 6789
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUE 6648 Techniques and Research in Alternate Music Education Methods

Credit Hours: 3

An examination on new and innovative models of music instruction including (but not limited to): composition courses; high school general music formats; general arts structures; and, alternative performing ensembles.

Prerequisite(s): MUS 6525
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUE 6694 Multimedia Methods in Music Education

Credit Hours: 3

Examines recent improvements in multimedia and suggest methods by which these might form the basis for non-traditional music curriculums for k-12 schools.

Tampa | College of The Arts | Music/Music Education

MUE 6785 Research Design and Methods in Music Education

Credit Hours: 3

An overview of research traditions and the common research approaches used by music education researchers. Students learn about different types of research through various modules and reading and discussion.

Prerequisite(s): MUE 6428
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUE 6787 Literature Review in Music Education

Credit Hours: 3

This course is designed to assist the student in developing research skills focused upon the development of a literature review in music education.

Prerequisite(s): MUE 6785
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUE 6788 Research Data Collection in Music Education

Credit Hours: 3

This course is designed to assist the student in developing research skills focused upon data collection and analysis of data in music education.

Prerequisite(s): MUE 6785
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUE 6789 Research Report Writing in Music Education

Credit Hours: 3

This course is designed to guide students in writing up their research report after analyzing their data.

Prerequisite(s): MUE 6785
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUE 6906 Independent Study: Music Education

Credit Hours: 1-6

Independent study in which students must have a contract with an instructor.

Tampa | College of The Arts | Music/Music Education

MUE 6942 Graduate Internship in Music Education

Credit Hours: 6

This course is designed to provide the student teaching experience for music education graduate students pursuing an MA - Plan II, leading to certification.

Tampa | College of The Arts | Music/Music Education

MUE 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of The Arts | Music/Music Education

MUE 7746 Measurement and Evaluation in Music

Credit Hours: 3

This course is designed to provide students with a comprehensive overview of traditional and contemporary approaches to the measurement, evaluation, and assessment of musical abilities, activities, and experiences.

Tampa | College of The Arts | Music/Music Education

MUE 7786 Qualitative Methods of Music Education

Credit Hours: 3

This course is designed to acquaint students with foundations, methods, and applications of qualitative research in education and music education.

Tampa | College of The Arts | Music/Music Education

MUE 7815 Social Psychology of Music

Credit Hours: 3

A critical examination of current findings regarding the phenomena of the psychology of musical behaviors including the investigation of musical acoustics, the measurement of musical abilities, and a comparative study of theories of learning related to musical learning.

Prerequisite(s): graduate level educational psychology course
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUE 7816 Music Cognition

Credit Hours: 3

Interdisciplinary approach to music perception, performance, and cognition. Discussion of neuroanatomy, auditory physiology, cognitive psychology, music perception, and music understanding, and their applications to music teaching and learning.

Tampa | College of The Arts | Music/Music Education

MUE 7835 Philosophical and Historical Issues in Music Education

Credit Hours: 3

A course design to investigate the nature of philosophical issues as they pertain to music education theory and practice.

Tampa | College of The Arts | Music/Music Education

MUE 7855 International Perspectives in Music Education

Credit Hours: 2

A critical examination of music education in various nations from social, cultural, political, and philosophical perspectives.

Tampa | College of The Arts | Music/Music Education

MUE 7935 Seminar on Music in Higher Education

Credit Hours: 2

The course will examine issues germane to the ways and contexts (liberal arts college, land grant college, research university, conservatory) in which music functions as a discipline in American higher education. It will trace its roots from the medieval European university (in the quadrivium) to the present. It also will speak to a range of contemporary issues, including but not limited to rank, promotion, tenure, creative activities as a research endeavor, accreditation, curricular innovation, etc.

Tampa | College of The Arts | Music/Music Education

MUE 7937 Special Topics in Music Education

Credit Hours: 2-3

This course will provide an opportunity to examine selected topics in the research of choral, instrumental, general, and alternative music instruction models.

Tampa | College of The Arts | Music/Music Education

MUE 7939 Center for Music Education Research Seminar

Credit Hours: 1-2

Examination of theory and research in music education. Current research in music teaching and learning presented by faculty abd guests. Students develop their dissertation topics, preliminary review of literature, and present their research proposals. May be repeated 4 times for up to 6 credits. S/U Grading

Tampa | College of The Arts | Music/Music Education

MUE 7980 Dissertation

Credit Hours: 2-19

Tampa | College of The Arts | Music/Music Education

MUG 6205 Advanced Choral Conducting

Credit Hours: 2

Combination of private study and laboratory experiences designed to teach conducting technique and rehearsal skills while encouraging leadership qualities in the choral conductor.

Tampa | College of The Arts | Music/Music Education

MUG 6307 Advanced Wind Conducting I

Credit Hours: 2

Combination of lecture, seminar, laboratory and individual instruction experiences designed to provide development of advanced conducting skills.

Tampa | College of The Arts | Music/Music Education

MUG 6308 Advanced Wind Conducting II

Credit Hours: 2

Continued development of graduate-level conducting students in advanced wind conducting techniques, including score study and rehearsal techniques.

Prerequisite(s): MUG 6307
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUG 6309 Advanced Orchestral Conducting I

Credit Hours: 2

Introduction to graduate-level advanced orchestral conducting techniques, including score study and rehearsal techniques, with an emphasis on classroom applications.

Tampa | College of The Arts | Music/Music Education

MUG 6315 Advanced Orchestral Conducting II

Credit Hours: 2

Continued development of graduate-level conducting students in advanced orchestral conducting techniques, including score study and rehearsal techniques.

Prerequisite(s): MUG 6309
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUG 6930 Advanced Choral Techniques

Credit Hours: 3

Study designed to provide rehearsal techniques, methods, and resources for the choral conductor. When possible, the choral faculty will present this course in a team-teaching fashion.

Tampa | College of The Arts | Music/Music Education

MUH 6057 Intercultural Music in the 20th and 21st Centuries

Credit Hours: 3

An in-depth investigation of composers born after c. 1880, from all parts of the world, who have attempted to integrate elements from two or more cultures into their compositions.

Tampa | College of The Arts | Music/Music Education

MUH 6376 The History of Blues and Rock

Credit Hours: 3

A study of the history of rock music: the essence of its musical language, its roots, evolution, styles, influences, social/cultural context, etc.

Tampa | College of The Arts | Music/Music Education

MUL 6375 Twentieth Century Music Literature

Credit Hours: 3

A study of the literature, compositional techniques, and music philosophies of the major 20th century composers from Debussy to the present.

Tampa | College of The Arts | Music/Music Education

MUL 6410 Keyboard Repertory I

Credit Hours: 2

A study of style, history, and performance practice in keyboard repertory including masterworks of all periods.

Tampa | College of The Arts | Music/Music Education

MUL 6411 Keyboard Repertory II

Credit Hours: 2

A study of style, history, and performance practice in keyboard repertory including masterworks of all periods.

Tampa | College of The Arts | Music/Music Education

MUL 6505 Symphonic Literature

Credit Hours: 3

A chronological study of the development of orchestral music; analysis and study of major works from a stylistic and biographical perspective.

Tampa | College of The Arts | Music/Music Education

MUL 6555 Band/Wind Ensemble Literature

Credit Hours: 3

Combination of seminar and classroom experiences designed to provide depth in historical study of band and wind ensemble literature. Rpt. Up to 9 hrs.

Tampa | College of The Arts | Music/Music Education

MUL 6565 Chamber Music Literature

Credit Hours: 2

This course covers the standard chamber music repertoire for piano and strings and focuses on specific chamber works--from the baroque sonata until major 20th century pieces.

Tampa | College of The Arts | Music/Music Education

MUL 6624 Song Literature

Credit Hours: 2

Song Literature covers the standard repertoire for classical voice. Open to all M.M. voice majors; other students may petition to enroll with instructor approval. This course is not repeatable for credit.

Tampa | College of The Arts | Music/Music Education

MUL 6655 Choral Literature 1500-1800

Credit Hours: 3

A study and analysis of choral music from 1500-1800.

Tampa | College of The Arts | Music/Music Education

MUL 6656 Choral Literature 1800-present

Credit Hours: 3

A study and analysis of choral music from 1800-present.

Tampa | College of The Arts | Music/Music Education

MUL 6671 Opera Literature

Credit Hours: 2

A chronological study of the development of opera from 1600 to the present; emphasis on the technical, stylistic, and performance aspects of opera.

Tampa | College of The Arts | Music/Music Education

MUN 6135 Symphonic Band

Credit Hours: 1

The Symphonic Band fosters the highest performance standards of wind and percussion literature. Although made up primarily of music majors, the course is open to all university students by comprehensive auditions. It is repeatable for up to 8 credits.

Tampa | College of The Arts | Music/Music Education

MUN 6145 Wind Ensemble

Credit Hours: 1

Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.

Tampa | College of The Arts | Music/Music Education

MUN 6215 University Orchestra

Credit Hours: 1

Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.

Tampa | College of The Arts | Music/Music Education

MUN 6315 University Singers

Credit Hours: 1

Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.

Tampa | College of The Arts | Music/Music Education

MUN 6345 Chamber Singers

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUN 6385 University-Community Chorus

Credit Hours: 1

Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.

Tampa | College of The Arts | Music/Music Education

MUN 6416 String Quartet

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUN 6429 Woodwind Quintet

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUN 6435 Brass Choir

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUN 6436 Brass Quintet

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUN 6445 Percussion Ensemble

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUN 6446 Marimba Ensemble

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUN 6455 Piano Ensemble

Credit Hours: 1

Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.

Tampa | College of The Arts | Music/Music Education

MUN 6477 Collegium Musicum

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUN 6715 Jazz Ensemble

Credit Hours: 1

Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.

Tampa | College of The Arts | Music/Music Education

MUN 6716 Jazz Chamber Ensemble

Credit Hours: 1

Open to all university graduate students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass or percussion instruments, and piano.

Tampa | College of The Arts | Music/Music Education

MUO 6505 Opera Workshop

Credit Hours: 1

Open to all university students with the necessary proficiency in their performing media; study and performance of music for large combination of voices, string, woodwind, brass or percussion instruments.

Tampa | College of The Arts | Music/Music Education

MUS 5905 Directed Study

Credit Hours: 1-4

Independent studies in the various areas of music; course of study and credits must be assigned prior to registration.

Tampa | College of The Arts | Music/Music Education

MUS 6525 Computer Applications in Music Education

Credit Hours: 3

An examination of the teaching and learning processes in music as they are affected by music technology. Through the course, students will explore a variety of music software types and investigate the potential role of technology in music education.

Tampa | College of The Arts | Music/Music Education

MUS 6793 Techniques of Research in Music and Music Education

Credit Hours: 3

A study of the methods of research and professional bibliography and with an individual, formal project as a terminal requirement.

Tampa | College of The Arts | Music/Music Education

MUS 6806 Fit to Play: Mind-Body Integration for Musician

Credit Hours: 2

This course is open to graduate performance majors, designed to help develop healthy, injury-free and effective life and practice style primed for the rigorous physical and mental regimen required in music study.

Prerequisite(s): None.
Corequisite(s): MVB, MVK, MVP, MVJ, MVS, MVV, MVW, MVX 5000-6000
Co-Prerequisite(s): None.

Tampa | College of The Arts | Music/Music Education

MUS 6906 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of The Arts | Music/Music Education

MUS 6910 Directed Research

Credit Hours: 1-19

Directed research topics in various areas of Music. The student must have a contract with a faculty member that outlines the work to be completed, timeline and assessment to be used.

Tampa | College of The Arts | Music/Music Education

MUS 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of The Arts | Music/Music Education

MUS 6976 Graduate Recital

Credit Hours: 2

Tampa | College of The Arts | Music/Music Education

MUT 6545 Analysis of 18th and 19th Century Music

Credit Hours: 3

An in-depth examination of the music of the 18th and 19th centuries. Students provide detailed analyses of selected works and read appropriate scholarly writings. Additional activities may include in-class presentations and a research paper.

Tampa | College of The Arts | Music/Music Education

MUT 6575 Analysis of Twentieth Century Music

Credit Hours: 3

An in-depth examination of representative works. Students will learn analytical techniques such as set theory and 12-tons techniques, read scholarly articles, give in-class presentations, and write a research paper to gain an understanding of the theoretical and musical trends of the 20th-century.

Tampa | College of The Arts | Music/Music Education

MUT 6586 Critical Analysis-History

Credit Hours: 2

A study of historical developments of music in western civilization. Emphasis on a different historical period each semester, from the Middle Ages through the Romantic Period.

Tampa | College of The Arts | Music/Music Education

MUT 6629 Schenkerian Analysis

Credit Hours: 3

A study in theories and analytical methods developed by German theorist Heinrich Schenker. Students are expected to demonstrate their knowledge of these theoretical concepts by analyzing relevant literature, investigating scholarly articles, giving class presentations, and writing a research paper.

Tampa | College of The Arts | Music/Music Education

MUT 6665 Seminar Jazz Styles and Analysis

Credit Hours: 2

A studio course study of the improvised solos of the major innovators in jazz. Oriented toward the continuing development of students' soloing ability.

Tampa | College of The Arts | Music/Music Education

MUT 6751 Teaching of Music Theory

Credit Hours: 3

Comparative study of teaching, techniques, procedures, and materials used in teaching visual and aural theory.

Tampa | College of The Arts | Music/Music Education

MUT 6760 History of Music Theory

Credit Hours: 3

Evolutionary history of the materials of western music including tuning systems, scales, models, tonality, rhythm, counterpoint and harmony; also the exploration of treatises and theorists contributing to the evolution.

Tampa | College of The Arts | Music/Music Education

MVB 5251 Applied Trumpet

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 5252 Applied French Horn

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 5253 Applied Trombone

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 5254 Applied Euphonium

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 5255 Applied Tuba

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 6451 Applied Trumpet

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 6452 Applied French Horn

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 6453 Applied Trombone

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 6454 Applied Euphonium

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVB 6455 Applied Tuba

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 5250 Applied Jazz Piano Secondary

Credit Hours: 2

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 5253 Applied Jazz Guitar Secondary

Credit Hours: 2

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 5254 Applied Jazz Bass Secondary

Credit Hours: 2

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 5259 Applied Jazz Percussion Secondary

Credit Hours: 2

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 5951 Applied Jazz Performance

Credit Hours: 2

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 6460 Applied Jazz Piano Major

Credit Hours: 4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 6463 Applied Jazz Guitar

Credit Hours: 4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 6464 Applied Jazz Bass

Credit Hours: 4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 6469 Applied Jazz Percussion

Credit Hours: 4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVJ 6952 Applied Jazz Performance

Credit Hours: 4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVK 5251 Applied Piano

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVK 6451 Applied Piano

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVK 6650 Graduate Piano Pedagogy I

Credit Hours: 2

Emphasis on techniques used in teaching the individual student in performance.

Tampa | College of The Arts | Music/Music Education

MVK 6651 Graduate Piano Pedagogy II

Credit Hours: 2

Emphasis on techniques used in teaching the individual student in performance.

Tampa | College of The Arts | Music/Music Education

MVP 5251 Applied Percussion, Secondary

Credit Hours: 2-4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVP 6451 Applied Percussion

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVS 5251 Applied Violin

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVS 5252 Applied Viola

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVS 5253 Applied Cello

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVS 5254 Applied Double Bass

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVS 6451 Applied Violin

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVS 6452 Applied Viola

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVS 6453 Applied Violoncello

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVS 6454 Applied Double Bass

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVV 5251 Applied Voice

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVV 6451 Applied Voice

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVV 6652 Voice Pedagogy

Credit Hours: 2

Voice Pedagogy covers the fundamentals of the teaching of singing. Open to all M.M. voice majors; other students may petition to enroll with instructor approval. This course is not repeatable for credit.

Tampa | College of The Arts | Music/Music Education

MVW 5251 Applied Flute

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 5252 Applied Oboe

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 5253 Applied Clarinet

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 5254 Applied Bassoon

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 5255 Applied Saxophone

Credit Hours: 2-4

Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 6451 Applied Flute

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 6452 Applied Oboe

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 6453 Applied Clarinet

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 6454 Applied Bassoon

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

MVW 6455 Applied Saxophone

Credit Hours: 4

Required of all applied music majors. Private and class instruction.

Tampa | College of The Arts | Music/Music Education

NGR 5871 Informatics in Nursing and Healthcare

Credit Hours: 3

Foundations course with emphasis on essential content and applications in healthcare informatics and clinical systems. Provides understanding of the interdisciplinary issues in medical and nursing informatics and a foundation for those seeking expertise in healthcare informatics. Focus on technologies in healthcare, nomenclatures and classification systems, health care documentation, electronic medical records, and web-based technologies for healthcare.

Tampa | College of Nursing | Nursing

NGR 6002C Advanced Health Assessment Across the Lifespan

Credit Hours: 4

Development of advanced clinical skills in assessing and maintaining the health of individuals across the life span through history taking, physical examinations, and diagnostic/therapeutic procedures.

Prerequisite(s): NGR 6152, NGR 6172
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6055 Health Assessment for the Advanced Generalist Nurse

Credit Hours: 2

Health assessment with application to the advanced generalist nurse. Using a case study approach, techniques will be applied to the clinical setting with emphasis on education and management.

Tampa | College of Nursing | Nursing

NGR 6060 Medical Laboratory Interpretation for the Advanced Practice Nurse

Credit Hours: 1

Interpretation of common medical laboratory results for the Advanced Practice Nurse with focus on the differential diagnosis.

Tampa | College of Nursing | Nursing

NGR 6064C Advanced Diagnostics & Procedures

Credit Hours: 3

Introduces evaluation, selection, interpretation, and application of diagnostic testing, evaluation techniques and procedures. Fosters evidence-based critical thinking and decision-making skills. Simulation lab practice included for skills acquisition.

Prerequisite(s): NGR 6002C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6080 Family and Population-Based Health Promotion

Credit Hours: 3

Focuses on the assessment of family and population groups for the purpose of planning, implementing, and evaluating nursing interventions for health promotion, health maintenance, and disease and injury prevention.

Prerequisite(s): NGR 6121
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6121 Theoretical Foundations

Credit Hours: 3

Examination of knowledge development in nursing science, critique and evaluation of theories from nursing and related fields. Professional role development is emphasized to facilitate transition into advanced nursing practice roles.

Tampa | College of Nursing | Nursing

NGR 6140 Pathophysiology for Advanced Practice

Credit Hours: 4

Central concepts of pathophysiology: embryologic origins, cells, tissues, organs, and systems. Provides essential knowledge base in pathophysiology across the life span for advanced nurse practice nurses.

Tampa | College of Nursing | Nursing

NGR 6143 Pathophysiologic Concepts in Acute Care Nursing

Credit Hours: 3

This course will explore pathophysiologic mechanisms of the major body systems in critically ill patients across the lifespan.

Prerequisite(s): NGR 6140, NGR 6121
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6146 Pathophysiology/Pharmacology for the Advanced Generalist Nurse

Credit Hours: 4

Course will focus on what is currently known about the pathophysiology of commonly seen diseases with updates in pharmacology. A case study approach will be used.

Tampa | College of Nursing | Nursing

NGR 6152 Advanced Physiology and Pathophysiology

Credit Hours: 4

Review of normal anatomy and physiology. Emphasis will be placed on mechanisms important in disease pathogenesis, pathophysiology, and clinical manifestations in selected disease states throughout the lifespan.

Tampa | College of Nursing | Nursing

NGR 6157 Advanced Physiology and Pharmacology for Nurse Anesthetists

Credit Hours: 4

This course focuses on the advanced principles of pharmacology and human physiology with an emphasis on integrating these principles in

nurse anesthesia practice.

Prerequisite(s): NGR 6404C, NGR 6460
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6168 Alternative and Complementary Therapies

Credit Hours: 2

Critical assessment of behavioral, cognitive, and plant-based interventions being used in various cultures to treat disease. Emphasis will be upon remedies popular in the United States and their proposed mechanisms of action.

Tampa | College of Nursing | Nursing

NGR 6172 Pharmacotherapeutics for Advanced Practice Nursing

Credit Hours: 4

Provides knowledge and skills required for integration and application of pharmacotherapy across the lifespan. Principles of pharmacodynamics and pharmacokinetics for major drug classifications and rational drug selection are emphasized.

Prerequisite(s): NGR 6140
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6201 Primary Care of Adults I

Credit Hours: 3

The didactic basis for diagnosing and managing common and acute health conditions of the adult. Students will compile/analyze data and develop/implement a plan of care. Concepts of health promotion/health maintenance are integrated throughout the course.

Prerequisite(s): NGR 6140, NGR 6121, NGR 6737, NGR 6800, NGR 6080, NGR 6172, NGR 6002C.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6202C Primary Care of Adults II

Credit Hours: 6

Didactic basis and practical experience for diagnosing and managing chronic health problems of the adult; emphasis on compiling and analyzing data, developing and implementing a plan; integrating health promotion and maintenance throughout course.

Prerequisite(s): NGR 6002C, NGR 6121, NGR 6800, NGR 6140, NGR 6172, NGR 6737, NGR 6080, NGR 6207.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6207C Health Management of Adults and Older Adults I

Credit Hours: 6

This course focuses on the knowledge and skills required for assessment, diagnosis, and management of common acute health problems and initial management of selected common chronic health problems across the adult lifespan.

Prerequisite(s): NGR 6002C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6210C Clinical Management of the Acutely Ill Adult

Credit Hours: 7

Students will learn to manage commonly encountered chronic episodic health problems in adults and older adults. The course will review the spectrum of care from stabilizing the patient's condition to preventing complications and restoring maximum health.

Prerequisite(s): NGR 6002C, NGR 6143
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6211C Acute Care of Adults and Older Adults: Special Topics

Credit Hours: 7

This course focuses on both theoretical and clinical knowledge of topics of special interest to the Acute Care, Adult-Gerontologist Primary Care Nurse Practitioner. A variety of teaching strategies will be utilized.

Prerequisite(s): NGR 6210C, NGR 6244C, NGR 6232C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6215 Primary Care: Adult Health Management

Credit Hours: 3

Focus on high risk, vulnerable adult patients/clients across the life span with complex, multi-system health problems. The course covers the assessment, management and continuity of care for individuals with these complex, acute and chronic health problems.

Prerequisite(s): NGR 6205, NGR 6205L, NGR 6207, NGR 6207L.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6220 Pathobiology of Neoplasia

Credit Hours: 3

Emphasizes basic concepts of cellular differentiation and the abnormal cytological changes occurring in the pathogenesis of Neoplasia. Also emphasized is the role of the advanced practice nurse in relation to the role of the immune system and diet in oncogenesis, and the epidemiology and pathology of specific types of cancers.

Tampa | College of Nursing | Nursing

NGR 6221 Oncology Nursing Concepts

Credit Hours: 3

Provides advanced oncology nursing content with a focus on nursing management of physical problems resulting from cancer and its treatment. (CI)

Tampa | College of Nursing | Nursing

NGR 6222L Practicum I in Advanced Oncology Nursing Practice

Credit Hours: 3

Provides clinical experiences in advanced oncology nursing focused on the application of theoretical and conceptual knowledge relevant to adults with cancer or at risk. Clinical assessment is focused on developing assessment skills and documentation.

Prerequisite(s): NGR 6140, NGR 6172, NGR 6002C, NGR 6121, NGR 6737, NGR 6080, NGR 6800, NGR 6220, NGR 6221.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6223L Practicum II in Advanced Oncology Nursing

Credit Hours: 3

Clinical experiences in advanced oncology nursing focused on the application of theoretical and conceptual knowledge relevant to adults with cancer or at risk; development of diagnostic skills, clinical management and interdisciplinary collaboration.

Prerequisite(s): NGR 6140, NGR 6172, NGR 6002C, NGR 6121, NGR 6737, NGR 6800, NGR 6080, NGR 6220, NGR 6221, NGR 6222L and NGR 6240 (proposed)
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6224L Practicum III in Advanced Oncology Nursing Practice

Credit Hours: 1-9

Clinical experiences in advanced oncology nursing focused on the application of theoretical and conceptual knowledge relevant to adults with cancer or at risk; emphasizes evidence based practice, evaluating outcomes and professional role development.

Prerequisite(s): NGR 6140, NGR 6172, NGR 6002C, NGR 6121, NGR 6737, NGR 6800, NGR 6080, NGR 6220, NGR 6221, NGR 6222L, NGR 6223L, and NGR 6240.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6232C Selected Concepts in the Acutely Ill Adult

Credit Hours: 7

This course focuses on engaging family and surrogate decision-makers in realistic goal setting while supporting physiologic function in acutely and critically ill adults and older adults.

Prerequisite(s): NGR 6140
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6234 Reproductive Health for the Middle Aged to Older Adult

Credit Hours: 1

This course provides the knowledge and skill required to promote reproductive health. The emphasis is on evidence-based practice in the assessment, diagnosis, and management of reproductive health conditions in middle aged to older adults.

Prerequisite(s): NGR 6342
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6240 Adult Health for Specialty Care Nursing

Credit Hours: 3

Prepares specialty care nurse practitioners to recognize and assess complex, multi-system problems within their specialty, make appropriate referrals and collaborate with other specialty/primary care providers to meet the healthcare needs of the patient

Prerequisite(s): NGR 6140, NGR 6172, NGR 6002C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6244C Health Management of Adults and Older Adults II

Credit Hours: 6

Focuses on the knowledge and skills required for assessment, diagnosis, and management of common chronic health problems across the adult lifespan and the unique care needs of selected adult patient populations.

Prerequisite(s): NGR 6207C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6291C Health Management of Adults and Older Adults: Special Topics

Credit Hours: 6

Focuses on selected theoretical, clinical, business, and practical knowledge and skills relevant to the Adult-Gerontology Nurse Practitioner role. Management of patients with complex care needs and/or multi-system diseases are emphasized.

Prerequisite(s): NGR 6207C, NGR 6244C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6301C Primary Care of Children and Adolescents I

Credit Hours: 6

Primary care of children and adolescents focusing on assessment,

diagnosis, and management of common acute and behavioral problems. Emphasis is placed on wellness, clinical prevention, growth and development.

Prerequisite(s): NGR 6002C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6302C Primary Care of Children and Adolescents II

Credit Hours: 6

Focus will be on primary care of chronic disease management in children and adolescents. Emphasis will be placed on disease impact affecting patient and family health outcomes.

Prerequisite(s): NGR 6301C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6305L Primary Care Practicum: Children

Credit Hours: 2-3

Application of knowledge gained in the classroom in PC: Children to the patient/client population between birth and pre-adolescent years. Screening, health maintenance, and management of health problems will make-up the clinical experiences.

Prerequisite(s): NGR 6002C, NGR 6121, NGR 6140, NGR 6199
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6339C Primary Care of Children and Adolescents: Special Topics

Credit Hours: 6

Theoretical and clinical knowledge of topics of special interest to the Primary Care Pediatric Nurse Primary Care Practitioner.

Prerequisite(s): NGR 6302C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6342 Reproductive Health for the Young to Middle Aged Adult

Credit Hours: 1

This course provides the knowledge and skill required to promote reproductive health. The emphasis is on evidence-based practice in the assessment, diagnosis, and management of reproductive health conditions in young to middle-aged adults.

Prerequisite(s): NGR 6207C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6343C Primary Care of Women

Credit Hours: 5

Management of common episodic and chronic health problems in women with critical analysis to form the foundation for advanced practice intervention and health promotion. Clinical experience focuses on application of the knowledge gained in the didactic.

Prerequisite(s): NGR 6002C, NGR 6080, NGR 6140, NGR 6121, NGR 6135, NGR 6172, NGR 6800, NGR 6247 AND NGR 6248C OR NGR 6307 AND NGR 6308C.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6400 Chemistry, Biochemistry and Physics for Nurse Anesthesia

Credit Hours: 3

This course examines the laws and principles of inorganic chemistry, organic chemistry and physics as they apply to pharmacology and the clinical practice of nurse anesthesia. Restricted to majors.

Prerequisite(s): undergraduate Chemistry course with a grade of B or higher.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6404C Advanced Anatomy and Physiology for Nurse Anesthetists

Credit Hours: 4

A fundamental course that focuses on the principles of human anatomy and physiology as they relate to the practice of nurse anesthesia.

Tampa | College of Nursing | Nursing

NGR 6420 Foundations & Methods of Nurse Anesthesia Practice

Credit Hours: 4

Focuses on the fundamentals of nurse anesthesia practice and techniques. This course also focuses on the development of didactic knowledge for regional anesthesia and advanced nurse anesthesia practice.

Prerequisite(s): NGR 6404C, NGR 6400, NGR 6460, NGR 6422, GMS 6461, NGR 6002C, NGR 6800, PHC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6422 Principles of Nurse Anesthesia through the Lifespan

Credit Hours: 3

Emphasizes the considerations of nurse anesthesia practice, principles, and techniques for the obstetrical, pediatric and geriatric patient.

Prerequisite(s): NGR 6404C, NGR 6400, NGR 6460, NGR 6800, PHC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6423 Theoretical Foundations of Nurse Anesthesia: Advanced Principles I

Credit Hours: 3

This course explores neuraxial anesthetic approaches to include spinal, epidural, and caudal anesthesia and the performance of peripheral nerve blocks of the upper and lower extremities.

Prerequisite(s): NGR 6424, NGR 6420, NGR 6492, NGR 6420, NGR 6400, NGR 6404C, NGR 6460, NGR 6800, GMS 6461, NGR 6140, NGR 6422, NGR 6002C, PHC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6424 Theoretical Foundations: Anesthesia Advanced Practice II

Credit Hours: 3

Examines advanced physiology/pathophysiology and anesthetic management of the cardiac, respiratory, neurologic, vascular and neurologic systems with emphasis on anesthetic implications and anesthesia management of advanced surgical procedures. Majors Only. Permit Required.

Prerequisite(s): NGR 6423 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6431 Nurse Anesthesia Clinical Residency I

Credit Hours: 4

This course focuses on clinical application of didactic material from the nurse anesthesia curriculum through novice level practice in the role of a nurse anesthetist.

Prerequisite(s): GMS 6461, NGR 6002C, NGR 6140, NGR 6400, NGR 6404C, NGR 6420, NGR 6422, NGR 6423, NGR 6460, NGR 6492, NGR 6800, PHC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6432 Nurse Anesthesia Clinical Residency II

Credit Hours: 2

This course focuses on clinical application of didactic material from the nurse anesthesia curriculum through novice level of practice in the role of a nurse anesthetist.

Prerequisite(s): NGR 6431 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6433 Nurse Anesthesia Clinical Residency III

Credit Hours: 4

This course focuses on clinical application of didactic material from the nurse anesthesia curriculum through intermediate level practice in the role of a nurse anesthetist.

Prerequisite(s): NGR 6432
Corequisite(s): NGR 6929
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6434 Nurse Anesthesia Clinical Residency IV

Credit Hours: 4

This course focuses on clinical application of didactic material from the nurse anesthesia curriculum through an advanced level of practice in the role of a nurse anesthetist.

Prerequisite(s): NGR 6002C, NGR 6080, NGR 6121, NGR 6140, NGR 6172, NGR 6737, NGR 6800 and NGR 6201, NGR 6202C or NGR 6301C and NGR 6302C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6435 Nurse Anesthesia Clinical Residency V

Credit Hours: 3

This course focuses on clinical application of didactic material from the nurse anesthesia curriculum through a proficient student level of practice in the role of a nurse anesthetist.

Prerequisite(s): NGR 6434 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6436 Nurse Anesthesia Clinical Residency VI

Credit Hours: 4

Focuses on clinical application of didactic material from the nurse anesthesia curriculum through a novice practitioner level of practice in the role of a nurse anesthetist. Permit Required.

Prerequisite(s): NGR 6435 with minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6440L Nurse Anesthesia Simulation Lab I: Introduction to Clinical Practicum

Credit Hours: 2

This course will introduce basic anesthesia skills and procedures allowing hands-on practice and return demonstration of various techniques required for entry into clinical practice for the student nurse anesthetist.

Prerequisite(s): NGR 6420, NGR 6424
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6441L Nurse Anesthesia Simulation Lab II

Credit Hours: 2

Demonstration of theoretical and clinical knowledge needed to verify competency of the student registered nurse anesthetist and promote safe practice. Procedures and techniques performed in the obstetrical,

pediatric, and geriatric patient.

Prerequisite(s): NGR 6440L
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6442L Nurse Anesthesia Simulation Lab III

Credit Hours: 2

This course will allow for repetitive, hands-on practice of anesthetic procedures and techniques for the cardiac, thoracic, general, ophthalmic (ENT), endocrine, and hepatic systems with an emphasis on anesthesia management.

Prerequisite(s): NGR 6441L
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6460 Nurse Anesthesia Pharmacology

Credit Hours: 3

This course focuses on the pharmacokinetics, pharmacodynamics, and general pharmacological principles of anesthetic drugs and adjunctive agents.

Tampa | College of Nursing | Nursing

NGR 6470 Assessment, Radiology, and Psychology of Pain

Credit Hours: 3

Designed to examine the theoretical & clinical knowledge needed to make proper assmnts & diagnoses in regards to the chronic pain patient. It also examines the importance of the psychological aspect of pain for proper diagnosis & treatment.

Tampa | College of Nursing | Nursing

NGR 6471 Concepts of Pain Pathophysiology

Credit Hours: 3

This course is designed to introduce the basic anatomy, physiology, and mechanisms underlying the pain pathology. It will also introduce an overview of different pain theories and philosophies.

Tampa | College of Nursing | Nursing

NGR 6472 Pharmacology of Pain Management

Credit Hours: 3

This course is designed to review the commonly used analgesic medications in pain management clinical practice. It also reviews chemical dependency, addiction, and professional responsibilities associated with high risk medications.

Tampa | College of Nursing | Nursing

NGR 6473C Interventional Procedures/Simulations in Pain Management

Credit Hours: 3

This course focuses on an introduction of common procedures which utilize either radiology or ultrasound to perform interventional techniques commonly used for the treatment of acute and chronic pain.

Prerequisite(s): NGR 6470, NGR 6471
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6474C Pain Management Clinical Residency

Credit Hours: 3

This course focuses on clinical application of didactic material regarding pain management with an emphasis on assessment, diagnosis, and treatment.

Tampa | College of Nursing | Nursing

NGR 6491 Nurse Anesthesia Practice Comprehensive

Credit Hours: 2

This course is designed to measure the knowledge base and clinical competency of the nurse anesthesia student.

Prerequisite(s): NGR 6433, NGR 7892, NGR 6929
Corequisite(s): NGR 6434
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6492 Nurse Anesthesia Role: Practice Management, Quality Improvement, and Patient Safety

Credit Hours: 3

This course provides knowledge and skills required for professional role development as a CRNA, advanced nursing and health care practice management at organizational or systems level and in leading quality improvement and patient safety initiatives.

Tampa | College of Nursing | Nursing

NGR 6500 Theoretical Foundations for Advanced Psychiatric Nursing

Credit Hours: 3

Theoretical basis for advanced practice in psychiatric nursing. Focus on selected psychodynamic, neuropsychological, development, and systems models of behavior and their impact for nursing practice.

Prerequisite(s): NGR 6121
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6500L Psychiatric APN Practicum: Psychiatric Care Outpatient

Credit Hours: 1-6

Clinical experience in advanced psychiatric mental health nursing that focuses on comprehensive mental health assessment, crisis intervention and brief psychotherapy.

Prerequisite(s): None.
Corequisite(s): NGR 6500
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6501 Psychopathology for Advanced Psychiatric Nursing

Credit Hours: 3

In-depth study of psychosocial, factors contributing to psychosocial dysfunction, and diagnostic reasoning basis to advanced practice psychiatric health nursing, emphasis on etiology and differential diagnoses.

Tampa | College of Nursing | Nursing

NGR 6501L Psychiatric APN Practicum: Psychiatric Care in the Inpatient Setting

Credit Hours: 1-4

Clinical experience in in-patient settings with selected acute and chronic populations. Emphasis on the role of the psychiatric APN working with individuals, groups and families conducting comprehensive mental health in the inpatient setting.

Prerequisite(s): NGR 6500
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6502 Treatment Modalities for Advanced Psychiatric Nursing

Credit Hours: 3

Examination of treatment modalities for advanced practice psychiatric nursing. Focus on theoretical and conceptual foundation for specialty practice with individuals, families, and groups.

Tampa | College of Nursing | Nursing

NGR 6538 Psychopharmacology

Credit Hours: 3

Provide advanced knowledge of psychobiological information with the use of psychopharmacological interventions in patients. Focus will be on pharmacokinetics and clinical management including prescription of medications for psychiatric disorders.

Prerequisite(s): NGR 6140
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6613C Health Management of Families: Special Topics

Credit Hours: 5

Theoretical and clinical knowledge of topics of special interest to the Family Nurse Primary Care Practitioner. A variety of teaching strategies will be utilized.

Prerequisite(s): NGR 6244C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6638 Health Promotion, Clinical Prevention, and Population Health for Advanced Practice Nurses

Credit Hours: 3

Provides knowledge and skills required for planning, implementing, and evaluating evidence-based health promotion and clinical prevention services for individuals and families across the lifespan and for populations.

Tampa | College of Nursing | Nursing

NGR 6650 Occupational Health Nursing I

Credit Hours: 2

Primary care of the worker relative to health promotion/risk reduction/acute injuries/chronic conditions, assessment of the workplace and needs of worker aggregates, and planning for health services relative to worker lifestyles and risk factors.

Tampa | College of Nursing | Nursing

NGR 6650L Clinical Experiences in Occupational Health Nursing I

Credit Hours: 1

Clinical experiences at selected worksites to apply content from NGR 6650 Occupational Health Nursing I with an emphasis on analysis of the workplace and worker aggregates, occupational health nurse(s) roles/functions.

Tampa | College of Nursing | Nursing

NGR 6651 Occupational Health Nursing II

Credit Hours: 2

Focuses on the analysis of clinical strategies (e.g. triage, biological monitoring) relevant to advanced occupational health programs, medical surveillance programs, and worker's compensation managed care.

Tampa | College of Nursing | Nursing

NGR 6651L Clinical Experiences in Occupational Health II

Credit Hours: 1

Clinical experiences relative to the application of content in NGR 6650 Occupational Health Nursing II with a focus on workplace assessment utilizing a comprehensive instrument and evaluation of worker's compensation managed care programs.

Tampa | College of Nursing | Nursing

NGR 6652 Occupational Health Nursing III

Credit Hours: 3

Focuses on the prevention of occupational injuries and illnesses; direct care in the occupational setting; disability case management; and health promotion and adult education.

Tampa | College of Nursing | Nursing

NGR 6653 Occupational Health Nursing IV

Credit Hours: 3

Focuses on the management of psychosocial factors in the occupational setting; examples of occupational health and safety programs; environmental health; research; and professional issues related to occupational and environmental health nursing.

Tampa | College of Nursing | Nursing

NGR 6673 Epidemiology for Advanced Nursing

Credit Hours: 3

This course assists graduate level nurses to identify and describe patterns of disease occurrence and to evaluate potential determinants of disease and disease prevention.

Tampa | College of Nursing | Nursing

NGR 6691 Counseling for the Terminally Ill

Credit Hours: 3

Provides specialized psychological and psychosocial content with a focus on the principles and techniques for conducting psychosocial counseling with terminally ill patients.

Tampa | College of Nursing | Nursing

NGR 6700C Advanced Practice Nurse Transitions

Credit Hours: 5

This is a synthesis course for professional and clinical development. It completes the summative process for students to design and develop their roles as APNs. The clinical portion focuses on the cumulative knowledge gained from previous courses.

Prerequisite(s): NGR 6002C, NGR 6080, NGR 6121, NGR 6140, NGR 6172, NGR 6737, NGR 6800 and NGR 6201, NGR 6202C OR NGR 6301C, NGR 6302C and NGR 6343C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6700L APN Transitions Practicum

Credit Hours: 2-3

Clinical concentration in the intended area of practice for the graduating Advanced Practice Nurse (APN). Focus on applying integrated knowledge to provide collaborative comprehensive care. By Permit Only.

Prerequisite(s): None.
Corequisite(s): NGR 6700C
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6710 Teaching Strategies in Nursing Education

Credit Hours: 3

This course focuses on classroom and clinical teaching in nursing, including computer-based learning and distance learning. Evaluation of textbooks, assignment making and construction of learning plans are included.

Prerequisite(s): NGR 6713
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6713 Foundations of Nursing Education

Credit Hours: 3

This course focuses on the philosophical, theoretical and evidence-based approaches for nursing education programs. Emphasis is on role of the nurse educator and curriculum development.

Tampa | College of Nursing | Nursing

NGR 6718 Evaluation Strategies for Nursing Education

Credit Hours: 3

This course provides an overview of evaluation strategies used in the class, clinical setting and in web-based instruction. Program evaluation models are explored.

Prerequisite(s): NGR 6710, NGR 6713
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6719 Clinical Case Studies in Nursing Education

Credit Hours: 3

Serves as a vehicle for nursing education students to increase their clinical knowledge and skills in a selected area of specialty through analysis of common health problems. A case study format will be used.

Tampa | College of Nursing | Nursing

NGR 6723 Leadership and Applied Management in Nursing Healthcare

Credit Hours: 3

Leadership in management of resources to achieve quality and enhance healthcare outcomes in nursing. Focus on , evidence-based practice and patient-care outcomes within the context of an interdisciplinary team.

Tampa | College of Nursing | Nursing

NGR 6733 Organizational and Systems Leadership and Quality Improvement for Advanced Practice Nurses

Credit Hours: 3

Provides knowledge and skills required for organizational and systems leadership and interprofessional collaboration in the design and implementation of change to improve health care delivery and health outcomes.

Tampa | College of Nursing | Nursing

NGR 6737 Ethical, Legal, and Policy Issues in Advanced Nursing Practice

Credit Hours: 3

Emphases on contemporary ethical, legal, and policy issues related to advanced nursing practice and health care delivery; issues are analyzed at the global, national and local levels; nursing's role in agenda setting and strategies for health care reform.

Tampa | College of Nursing | Nursing

NGR 6770C Introduction to the Clinical Nurse Leader Role

Credit Hours: 1

Concepts essential for the students' development into a Clinical Nurse Leader, focusing on the CNL role, communication, leadership and assessing the practice environment. Clinical assignments are designed to assist them in developing the CNL role.

Tampa | College of Nursing | Nursing

NGR 6771L CNL Clinical Seminar

Credit Hours: 1

Exploration and application of the clinical concepts essential to the role of the Clinical Nurse Leader.

Tampa | College of Nursing | Nursing

NGR 6773L CNL Residency

Credit Hours: 5

Residency practice in the role of the Clinical Nurse Leader.

Prerequisite(s): NGR 6723, NGR 6770C, NGR 6872C, NGR 6898
Corequisite(s): NGR 6777C
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6777C Shaping the Practice Environment

Credit Hours: 1

Concepts essential to shape the clinical practice environment, including components of a patient centered, safe effective and equitable care environment.

Prerequisite(s): NGR 6872C, NGR 6723
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6800 Nursing Research

Credit Hours: 3

Research designs and methods for nursing with primary emphasis on these topics: critique of research studies, researchable problems, research designs, instruments and other data collection methods, approaches to data analyses using computer applications, and preparation of research proposals for thesis, directed research, or funded research.(CI)

Tampa | College of Nursing | Nursing

NGR 6803 Research and Evidence-Based Practice

Credit Hours: 3

Theoretical and clinical knowledge to prepare the advanced practice nurse to engage in evidence-based practice. Development of skills needed to critically evaluate new information available from professional consensus statements and research findings.

Tampa | College of Nursing | Nursing

NGR 6821 Applied Analysis for Outcomes Research Using Large Healthcare Databases

Credit Hours: 3

Focus on knowledge discovery in clinical domains by exploring large nursing and healthcare databases for the purposes of outcomes research or quality improvement. Emphasis on theoretical models and methods of analysis, providing experimental computer applications with large healthcare databases.

Tampa | College of Nursing | Nursing

NGR 6824 Data Analysis for Health Sciences

Credit Hours: 3

This course is designed to provide the graduate Student interested in health sciences research with practical experience using SPSS for Windows and Microsoft's Excel programs to manage, organize, analyze and present both primary and secondary data in biophysical sciences.

Tampa | College of Nursing | Nursing

NGR 6872C Concepts in Information Management

Credit Hours: 1

Emphasis on health information technologies that puts knowledge at the point of care to promote safe and high quality healthcare outcomes. Clinical component focuses on data that support decision making.

Prerequisite(s): NGR 6770C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6885 Bioethics in Contemporary Society

Credit Hours: 3

Ethical issues related to health and illness encountered during stages of the life cycle, focusing on the influences exerted by cultural diversities and psychosocial factors, including the bi-directional interaction between the individual and society.

Tampa | College of Nursing | Nursing

NGR 6893 Systems and Populations in Healthcare

Credit Hours: 3

Analysis of critical issues in health care delivery and population health; overview of design and structure of U.S. health care system; issues of cultural diversity, health disparities, and social justice; and healthcare systems outcomes management.

Tampa | College of Nursing | Nursing

NGR 6898 Microsystem Concepts of Health Care Finance

Credit Hours: 3

Concepts, language and data about financial and economic elements of patient care in a microsystem; skills to obtain, synthesize and utilize information from health economics and health finance using specialized language, concepts and operating rules.

Tampa | College of Nursing | Nursing

NGR 6905 Directed Independent Study

Credit Hours: 1-6

Specialized individualized study determined by students' needs and interests; requires an approved contract with a faculty member. (CI). Restricted to majors; repeatable for credit.

Tampa | College of Nursing | Nursing

NGR 6915 Directed Research

Credit Hours: 1-3

Builds on knowledge gained in NGR 6800 and specialty concentration by participating in a research project under the direction of selected faculty. (CI)

Prerequisite(s): NGR 6800
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6929 Clinical Correlational Conferences

Credit Hours: 1

This course is designed to complement each clinical residency; these conferences will discuss clinical experience, morbidity and mortality utilizing current research.

Prerequisite(s): NGR 6431 or NGR 6432 or NGR 6433 or NGR 6434
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6931 Selected Topics in Nursing

Credit Hours: 1-6

Seminars for the analysis and discussion of selected issues in nursing of topical concern to student and faculty.

Tampa | College of Nursing | Nursing

NGR 6940 Classroom/Online Teaching Practicum

Credit Hours: 2

Provides knowledge and experience in the application of teaching strategies in the classroom and online settings.

Prerequisite(s): NGR 6713
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6944 Practicum in Acute Care Nursing

Credit Hours: 1-9

Clinical experiences in critical care settings focusing on the role of the advanced practice nurse (1:4 ratio).

Prerequisite(s): NGR 6143, NGR 6232C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6947 Clinical Education/Clinical Practice Practicum in Nursing Education

Credit Hours: 2

This course provides knowledge and guided experiences for student development of the dual roles of advanced practice clinician and nurse educator in selected patient care/educational settings.

Prerequisite(s): NGR 6713 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6952 Writing for Nursing Publication

Credit Hours: 3

Focus is on scientific writing and dissemination of scientific knowledge in advanced nursing practice.

Prerequisite(s): NGR 6800
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 6971 Thesis: Master's

Credit Hours: 1-9

Restricted to majors; repeatable for credit.

Prerequisite(s): NGR 6800
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7003 Advanced Health Assessment II

Credit Hours: 3

Mastery of the comprehensive physical examination and health history for individuals across the life span. Focus on systematic review, analysis, and documentation within the context of the student's clinical expertise.

Prerequisite(s): A grade of B or higher must have been earned in master's level course in pathophysiology, pharmacology, and advanced health assessment.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7061 Radiology for the Advanced Practice Nurse

Credit Hours: 1

Basics of X-ray, MRI, CT Scan Interpretation and Nuclear Medicine Studies for the Advanced Practice Nurse.

Tampa | College of Nursing | Nursing

NGR 7062 ECG Interpretation for the Advanced Practice Nurse

Credit Hours: 1

Advanced ECG Interpretation, including 12 lead ECG for the Advanced Practice Nurse.

Tampa | College of Nursing | Nursing

NGR 7103 Evidence-Based Practice

Credit Hours: 3

Provides experience in the evaluation, selection and implementation of evidence based practice standards. Qualitative research methods are used to consider patient and provider values and preferences in patient care and practice/program evaluation.

Prerequisite(s): NGR 7774 or NGR 7766 with a B or higher
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7111 Disciplinary Perspectives in Nursing Science

Credit Hours: 3

Historic and philosophic issues in science and nursing science. Development of scientific knowledge base and scientific progress in nursing. Emphasis on emerging areas of nursing science.

Tampa | College of Nursing | Nursing

NGR 7123 Theory Development in Nursing

Credit Hours: 3

This course focuses on the process and foundations of theory development and theory construction in nursing science. Elements of scientific underpinnings of knowledge development in the discipline are incorporated. The relationship between theory construction and research

and methods to generate theories are explored.

Tampa | College of Nursing | Nursing

NGR 7124 Advances in Nursing Science

Credit Hours: 3

Focus on history and philosophy of science: history and development of nursing's scientific knowledge base and theoretical progress. Emphasis methods of theory building and theory testing through research. Explore progress in middle range theories and areas of high priority for additional research for the discipline.

Tampa | College of Nursing | Nursing

NGR 7125 Model Development for Nursing

Credit Hours: 3

This course focuses on the methods of model development that guides a program of research. Concept analysis as a method for development of a framework/diagram related to empirical referents is emphasized.

Tampa | College of Nursing | Nursing

NGR 7141 Pathophysiology for Advanced Practice II

Credit Hours: 3

Core elements of embryologic, genetic, and environmental factors in disease will be presented as well as aspects of immune phenomenon as related to genetic information and research impetus.

Prerequisite(s): A grade of B or higher must have been earned in master's level course in pathophysiology, pharmacology, and advanced health assessment.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7176 Pharmacotherapeutics for Advanced Nursing Practice

Credit Hours: 3

Progressive pharmacotherapeutics for advanced nursing practice. Focus diagnostic reasoning of scientific evidence relating to prescribing and monitoring drugs.

Prerequisite(s): A grade of B or higher must have been earned in master's level course in pathophysiology, pharmacology, and health assessment.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7209 Diagnostic Reasoning

Credit Hours: 3

This course provides practice in analyzing data and making effective clinical decisions. Students will practice diagnostic reasoning using the health history, physical examination, and diagnostic tests to create a prioritized differential diagnosis.

Tampa | College of Nursing | Nursing

NGR 7411 Basics for Surgical Assistants

Credit Hours: 1

Overview and basics for the Advanced Practice Nurse as the surgical assistant.

Tampa | College of Nursing | Nursing

NGR 7761 Breast Workshop for the Advanced Practice Nurse

Credit Hours: 1

Breast assessment techniques and interpretation for Advanced Practice Nurse.

Tampa | College of Nursing | Nursing

NGR 7762 Casting and Splinting for the Advanced Practice Nurse

Credit Hours: 1

Basics of casting and splinting for the Advanced Practice Nurse.

Tampa | College of Nursing | Nursing

NGR 7763 Minor Surgical Procedures for the Advanced Practice Nurse

Credit Hours: 1

Basics of minor surgical procedures for the Advanced Practice Nurse.

Tampa | College of Nursing | Nursing

NGR 7764 Neurological Techniques for the Advanced Practice Nurse

Credit Hours: 1

Basic neurological techniques for the Advanced Practice Nurse.

Tampa | College of Nursing | Nursing

NGR 7765 Invasive Medical Procedures for the Advanced Practice Nurse

Credit Hours: 1

Basics of invasive medical procedures for the Advanced Practice Nurse.

Tampa | College of Nursing | Nursing

NGR 7766 Health Systems Leadership and Interprofessional Practice

Credit Hours: 3

Knowledge and skills required for leading interprofessional teams to improve health care delivery and health outcomes with emphasis on systems thinking, communication, health system fluency, and management of ethical dilemmas.

Tampa | College of Nursing | Nursing

NGR 7767 Practice Management, Quality Improvement, and Patient Safety

Credit Hours: 3

This course provides knowledge and skills required for successful advanced nursing and health care practice management at the organizational or systems level and for leading quality improvement and patient safety initiatives.

Tampa | College of Nursing | Nursing

NGR 7810 Design, Measurement, and Analysis in Nursing Research I

Credit Hours: 3

This course focuses on design of studies in nursing research, including review of strengths and limitations of study designs relating to different types of research questions in nursing science and principles of hypothesis testing and empirical inference.

Tampa | College of Nursing | Nursing

NGR 7811 Concepts in Nursing Practice

Credit Hours: 3

Emphasis on analysis of phenomena (concepts) that impact on nursing practice. Phenomena are selected and analyzed from theoretical and research perspectives.

Tampa | College of Nursing | Nursing

NGR 7812 Design, Measurement, and Analysis in Nursing Research II

Credit Hours: 3

This course focuses on concepts to design & carry out research in nursing science; including methods to minimize bias & increase study precision, classification & interpretation of research data, & use of probability to estimate health-related quantities.

Prerequisite(s): NGR 7810
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7813 Design, Measurement, and Analysis in Nursing Research III

Credit Hours: 3

This course focuses on knowledge and mastery of a wide range of analytical principles and methods that are routinely used and critical for designing and conducting research studies, including disseminating research results in nursing science.

Prerequisite(s): NGR 7812
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7814 Design, Measurement, and Analysis in Nursing Research IV

Credit Hours: 3

This course focuses on obtaining working knowledge and proficiency in a range of advanced analytical principles and methods that may be used in the design and analysis of nursing science research.

Prerequisite(s): NGR 7813
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7815 Qualitative Research Methods in Nursing

Credit Hours: 3

An overview of qualitative research methods in nursing, identification of problems appropriate for qualitative research methods, and application of appropriate qualitative research methods to a researchable problem.

Prerequisite(s): NGR 6800
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7816 Research Designs and Methods in Nursing

Credit Hours: 3

Focus on designs used in nursing research to test or develop theoretical models, or concepts, including clinical or outcome variables, or hypotheses. Emphasis on quantitative designs.

Tampa | College of Nursing | Nursing

NGR 7823 Psychometrics and Measurement for Nursing Research

Credit Hours: 3

Explores issues in developing, testing, and applying measurement theory in research. Analysis of psychometric properties of instruments and methods appropriate to theoretical and conceptual demands of science.

Prerequisite(s): NGR 7841
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7837 Innovative Programs in Biobehavioral Research

Credit Hours: 3

This course provides foundations in theoretical models, critical analyses of research literature, and design and measurement issues in biobehavioral research.

Tampa | College of Nursing | Nursing

NGR 7838 Innovative Programs in Symptom Management Research

Credit Hours: 3

This course provides the foundation to the study of symptom science with a focus on theoretical models, critical analyses of research literature related to selected symptoms, and design and measurement issues.

Tampa | College of Nursing | Nursing

NGR 7841 Statistical Methods in Nursing Research I

Credit Hours: 3

Standard parametric and nonparametric statistical methods in nursing research; role of assumptions and theory in selecting the appropriate statistic for testing hypotheses/research questions. Emphasis on analysis of variance and simple linear regression. Statistical software applications are integrated into the course.

Prerequisite(s): NGR 6800 and statistics.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7842 Statistical Methods in Nursing Research II

Credit Hours: 3

Focus on advanced multivariate methods in nursing research: regression (linear, multiple, logistic) and multiple analysis of variance (MANOVA) and covariance software applications are integrated into the course.

Prerequisite(s): NGR 7841
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7843 Statistical Methods in Nursing Research III

Credit Hours: 3

Focus on advanced multivariate statistical methods in nursing research; emphasizing multiple regression and correlational analysis.

Prerequisite(s): NGR 7842
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7848 Fundamentals of Statistics for Clinicians

Credit Hours: 3

An overview of the statistical methods typically used in clinical research including the language and logic of these methods. Fundamental statistical theory and common nursing applications are covered.

Tampa | College of Nursing | Nursing

NGR 7874 Informatics and Patient Care Technology

Credit Hours: 3

Provides the knowledge and skills needed to prepare nurse leaders to use information systems and patient care technology to implement quality improvement initiatives and support practice and administrative decision making.

Tampa | College of Nursing | Nursing

NGR 7881 Responsible Conduct of Nursing Research

Credit Hours: 2

An analysis of contemporary core issues relating to responsible conduct of research designed to enable critical reasoning and encourage best practices in the conduct of nursing research.

Tampa | College of Nursing | Nursing

NGR 7892 Health Care Policy and Clinical Prevention for Improving Population Health

Credit Hours: 3

This course provides knowledge and skills required for engagement in the analysis, development, and implementation of health policy and for application of health promotion and disease prevention interventions to improve population health.

Prerequisite(s): NGR 7841, NGR 7842
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7905 Directed Readings

Credit Hours: 1-6

Tampa | College of Nursing | Nursing

NGR 7915 Advanced Directed Research in Nursing

Credit Hours: 1-6

Specialized individual participation in research activity, including but not limited to pilot studies and other investigative activities.

Tampa | College of Nursing | Nursing

NGR 7916 Grant Writing for Translational Science

Credit Hours: 3

Prepares individuals to develop a grant application in their area of research. The critical elements of the NIH grant application including the Specific Aims, and Research Strategy are presented along with additional required components.

Tampa | College of Nursing | Nursing

NGR 7930 Scientific Inquiry Forum

Credit Hours: 1

This seminar provides students with an opportunity to interact with a larger scientific community through presentations and discourse. Students will have the opportunity to create a career development plan.

Tampa | College of Nursing | Nursing

NGR 7932 Special Topics

Credit Hours: 1-4

Seminars for the analysis and discussion of selected issues in nursing of topical concern to student and faculty.

Tampa | College of Nursing | Nursing

NGR 7941 Nursing Research Pro Seminar

Credit Hours: 1-6

The Pro Seminar provides experiential opportunities for students to test innovative methods and technologies in a variety of educational or clinical settings. Seminars designed to critique current research in the area.

Prerequisite(s): Nursing Knowledge Systems and Issues in Knowledge Dissemination.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Nursing | Nursing

NGR 7942 Educational Leadership Residency

Credit Hours: 1-9

This residency provides the nurse educator with opportunities to acquire a distinct specialty of advanced nursing practice leadership. Experiences will be developed to assist in development of the dnp essentials and specialty competencies.

Tampa | College of Nursing | Nursing

NGR 7945 Doctor of Nursing Practice Practicum

Credit Hours: 1-7

The Doctor of Nursing Practice practicum experience provides students with advanced knowledge and expertise in a focused area of advanced nursing practice within the student's established population focus and/or an APRN specialty.

Tampa | College of Nursing | Nursing

NGR 7951 Scientific Writing - Writing for Publication

Credit Hours: 3

This course focuses on the development of a scholarly empirical manuscript or technical report of publishable quality.

Tampa | College of Nursing | Nursing

NGR 7954 Communicating Nursing Science

Credit Hours: 3

Prepares individuals to attain skills in communicating nursing science through written and other media. Weekly peer review exercises emphasize writing, editing, and revising scientific evidence into understandable publishable manuscripts.

Tampa | College of Nursing | Nursing

NGR 7974 Doctor of Nursing Practice Project

Credit Hours: 1-3

This course provides for synthesis and application of knowledge and skills acquired in previous courses through the development, implementation, and evaluation of a practice improvement project.

Tampa | College of Nursing | Nursing

NGR 7980 Dissertation: Doctoral

Credit Hours: 2-12

Directed research and writing of dissertation topic appropriate to the discipline. Restricted to majors; repeatable for credit

Tampa | College of Nursing | Nursing

NGR 7981 Dissertation Proposal Writing

Credit Hours: 2

Selected topics pertaining to the dissertation proposal writing process, dissertation research planning and funding, and proposal defense. PR: CI or Ph.D. GS; completion of majority of required course work.

Tampa | College of Nursing | Nursing

OCB 6050 Biological Oceanography

Credit Hours: 3

Study of life in the oceans, its rates and processes, and its interaction with the physical and chemical environment. Lec.

Tampa | College of Marine Science | Marine Science

OCB 6068 Fish Biology

Credit Hours: 3

This course introduces students to the taxonomy, evolution, anatomy, sensory ecology, physiology, behavior, habitat use, reproduction, larval dynamics and ecology of fishes. Evaluation is based on exams and practical exercises.

Tampa | College of Marine Science | Marine Science

OCB 6567 Phytoplankton Ecology

Credit Hours: 3

An introduction to the physiology and ecology of marine phytoplankton. Emphasis will be on those variables and interactions that regulate photosynthesis, production, nutrient kinetics and regeneration, growth, spatial distribution, losses, and succession.

Prerequisite(s): OCB 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCB 6626 Dynamics of Marine Ecosystems

Credit Hours: 3

The objective of this course is to examine a broad range of topics related to understanding how bottom-up (physical processes) and top-down (predation) processes influence marine ecosystem dynamics.

Tampa | College of Marine Science | Marine Science

OCB 6671L Methods in Biological Oceanography

Credit Hours: 1

To acquaint students with field and laboratory equipment and techniques currently used in biological oceanography. Emphasis will be on field problems, especially those requiring research at sea.

Tampa | College of Marine Science | Marine Science

OCB 6716 Population Dynamics

Credit Hours: 3

This course provides instruction in population modeling as applied to fishery resources. Population dynamics synthesizes information on life history, fishery monitoring and resource surveys using mathematical models.

Tampa | College of Marine Science | Marine Science

OCC 6050 Chemical Oceanography

Credit Hours: 3

The ocean as a chemical system, including composition, physical-chemical aspects, role of nutrients, trace metals, interaction between bottom and overlying water, organic matter, and stable and radioactive isotopes. Lec

Prerequisite(s): CHM 2046
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCC 6057 Marine Pollution

Credit Hours: 3

Marine pollutant sources, reservoirs, transport processes, and dynamics. Topics include heavy metals, chlorinated hydrocarbons, radioactivity, petroleum, pathogens, and thermal pollution including functional and physiological responses of marine organisms.

Prerequisite(s): OCC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCC 6057L Methods in Chemical Oceanography

Credit Hours: 1

An intensive study of the use and limitations of field and laboratory equipment that is a standard part of chemical oceanographic research into the behavior of dissolved and particulate constituents in seawater.

Prerequisite(s): OCC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCC 6111C Applications of Gas Chromatography and Mass Spectrometry in Marine Science

Credit Hours: 3

Analytical techniques of high resolution gas chromatography and combined gas chromatography-mass spectrometry are applied to problems in Marine Science. Theoretical aspects of the techniques are covered in lectures, while detailed experimental procedures are taught and practiced in the laboratory.

Prerequisite(s): OCC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCC 6216 Marine Organic Chemistry

Credit Hours: 3

Distribution and biogeochemical cycling of organic matter in the oceans. Topics include carbohydrates, proteins, lipids, humics, pheromones, interaction with trace metals, isotopic fractionation, microbial alterations, and biochemical tracers.

Prerequisite(s): OCC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCE 6048 Scientist in the Classroom

Credit Hours: 1-4

Provides students with a theoretical framework, practical knowledge, and skills required to successfully design, implement, and evaluate effective science teaching and learning.

Tampa | College of Marine Science | Marine Science

OCE 6085 Ocean Policy

Credit Hours: 2

Learn about the community of people involved in marine affairs; the use of the sea and coast; current technology and the major policy issues related to the technology trends, and identify multiple sources of information available to students.

Tampa | College of Marine Science | Marine Science

OCE 6565 Applied Multivariate Statistics

Credit Hours: 3

The focus of this course is hands-on analysis of large, high-dimensional marine ecological and environmental data sets using a suite of distribution-free methods.

Tampa | College of Marine Science | Marine Science

OCE 6609 Data Analysis Methods

Credit Hours: 3

This course introduces students to common statistical techniques like linear regression, Fourier series, low-pass filtering, optimal interpolation, and principal component analysis that are commonly used to analyze time-series and mapped data.

Tampa | College of Marine Science | Marine Science

OCE 6609L Data Analysis Programming

Credit Hours: 1

This optional lab to the Data Analysis Methods class is designed for students with no background in a programming language. The lab will introduce students to the basics of programming necessary for the main class.

Prerequisite(s): None.
Corequisite(s): OCE 6609
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCE 6908 Independent Study

Credit Hours: 1-10

Independent study in which students must have a contract with an instructor.

Tampa | College of Marine Science | Marine Science

OCE 6921 Professional Development I

Credit Hours: 2

This 2-credit course is intended for new graduate students (or students who have only completed one year in the program). This course will cover "grad school basics" - everything you need to know for having a successful graduate experience here at USF.

Tampa | College of Marine Science | Marine Science

OCE 6934 Selected Topics in Oceanography

Credit Hours: 1-3

Special topics in Biological, Chemical, Geological, and Physical Oceanography.

Tampa | College of Marine Science | Marine Science

OCE 6940C Experiential Learning in Marine Science

Credit Hours: 1-4

Demonstrates marine science teaching protocols via the examination of marine science concepts and inquiry-based learning strategies through team building, lab-based research experiences, and field explorations to local marine environments.

Tampa | College of Marine Science | Marine Science

OCE 6949C Developing and Teaching a STEM Course

Credit Hours: 1-4

Designed to to enhance participants' science teaching and science communication skills. The course will provide students with the opportunity to develop the modules necessary to teach their first formal STEM Course.

Tampa | College of Marine Science | Marine Science

OCE 6950 Teaching the Broader Impacts of Ocean Sciences

Credit Hours: 1-4

This experiential learning course is designed to teach graduate students how to prepare research grants, develop lab, field-based, and in classroom lesson modules to effectively translate science concepts to their students.

Tampa | College of Marine Science | Marine Science

OCE 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Marine Science | Marine Science

OCE 6972 Directed Research

Credit Hours: 1-19

Tampa | College of Marine Science | Marine Science

OCE 7910 Directed Research

Credit Hours: 1-19

Tampa | College of Marine Science | Marine Science

OCE 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Marine Science | Marine Science

OCG 6051 Geological Oceanography

Credit Hours: 3

Marine geology including plate tectonics; coastal, shelf and pelagic sedimentation; geochemical cycling; and sedimentary history of the ocean basins. Lec

Tampa | College of Marine Science | Marine Science

OCG 6080 Plate Tectonics

Credit Hours: 3

An overview of the Plate Tectonic theory, including such topics as: geometry of Plate Tectonics, tectonics on a sphere, past plate motions, seismology, oceanic gravity, geochronology, heat flow, oceanic lithosphere, ridges, transforms, trenches, oceanic islands, and continental lithosphere.

Tampa | College of Marine Science | Marine Science

OCG 6551C Scanning Electron Microscopy: Theory and Technique

Credit Hours: 4

Theory and practical application of the scanning electron microscope and the energy dispersive X-ray analyzer. Emphasis is on independent operation of the instruments, preparation techniques for specimens, and interpretation of results.

Prerequisite(s): One year Physics and Chemistry
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCG 6656C Marine Micropaleontology

Credit Hours: 3

Introduction to the microscopic marine fauna and flora found in the fossil sedimentary record. Emphasis is placed on the ecology, paleoecology, paleontology, and biostratigraphic record of calcareous and siliceous microfossils

Prerequisite(s): OCG 6051
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCG 6664 Paleoceanography

Credit Hours: 3

The study of the development of the ocean system through geologic history, including tectonic framework, sea level history, paleoclimatology, paleocirculation within the ocean basins, and the evolution of marine biota.

Prerequisite(s): OCB 6050, OCC 6050, OCG 6051, OCP 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCG 6668 Evolution and Ecology of Reefs

Credit Hours: 3

Advanced course in ecology and evolution of reef communities. Topics include environmental controls on reef development, basic components of modern reef communities, and how those components have changed through geologic time.

Prerequisite(s): OCB 6050, OCG 6051
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

OCP 6050 Physical Oceanography

Credit Hours: 3

The world ocean including its morphology, physical properties, currents, waves, tides, heat and water budgets, and related topics. Lec.

Prerequisite(s): Diff/int. calculus, General Physics
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Marine Science | Marine Science

ORI 5930 Topics in Performance Genres

Credit Hours: 3

Variable topics course.

Tampa | College of Arts and Sciences | Communication

ORI 6018 Performance Art

Credit Hours: 3

Explores historical, theoretical, and critical perspectives on performance art in the US.

Tampa | College of Arts and Sciences | Communication

ORI 6020 Performing Social Resistance

Credit Hours: 3

Explores performance as a site of and means for creating social resistance and change.

Tampa | College of Arts and Sciences | Communication

ORI 6107 Texts in Performance

Credit Hours: 3

Explores contemporary literary texts through dramatic analysis, live performance, adaptation and staging strategies.

Tampa | College of Arts and Sciences | Communication

ORI 6250 Performance and Technology

Credit Hours: 3

Explores the relationship between live and mediated performance, the use of media technologies in performance, and the place of live performance in a Western mediated society.

Tampa | College of Arts and Sciences | Communication

ORI 6456 Performance Theory

Credit Hours: 3

A survey of modern and contemporary approaches to performance as constitutive of identity, verbal art, communication, and culture.

Tampa | College of Arts and Sciences | Communication

ORI 6506 Performance Criticism

Credit Hours: 3

Focuses on the development and honing of critical skills employed in response to performance. These skills can be applied to a multitude of acts and texts.

Tampa | College of Arts and Sciences | Communication

ORI 7930 Seminar in Performance Studies

Credit Hours: 3

Variable topics course.

Tampa | College of Arts and Sciences | Communication

PAD 5035 Issues in Public Administration and Public Policy

Credit Hours: 3

Selected issues and topics in Public Administration and Public Policy.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 5044 Environment of Public Administration

Credit Hours: 3

Examination of the legal, political, and ethical environment in which public managers work.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 5605 Administrative Law and Regulation

Credit Hours: 3

An examination of the constitutional and statutory base and limitations of the administrative process, administrative adjudication, rule-making, and the judicial review of such actions. An examination of the Constitutional and statutory base and limitations of the administrative process, administrative adjudication, rule-making, and the judicial review of such actions. Attention is also directed to regulatory commissions, their functions, powers, management and relationship with other branches of government.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 5700 Research Methods in Public Administration

Credit Hours: 3

Research design; skills in public agencies. Must be prepared to demonstrate proficiency in EXCEL, Access, and other relevant software programs.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 5807 Urban and Local Government Administration

Credit Hours: 3

Analysis of the role of the administrator at the municipal level, the division of functions, policy formation, alternative governmental structures, effects on the administrative process.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 5836 Comparative Public Administration

Credit Hours: 3

How organizations and managers perform within a particular environment, potential impact of innovation, and how service is accomplished in a variety of socio-economic environments.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6041 Ethics and Public Service

Credit Hours: 3

The purpose of this course is to provide students with an understanding of the ethical dimensions of public service, with particular attention focused on the role, duties and responsibilities of the public administrator. Additionally, the course seeks to help students develop awareness, skill, and value framework to act ethically in their public service and management roles.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6056 Practice of Public Management

Credit Hours: 3

An integrative course applying the skills, knowledge, and values taught in the core curriculum and applied to public issues or problems.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6060 Public Administration Theory

Credit Hours: 3

Examination of major theoretical and practical developments in public administration with focus on organization theory and current research trends in the field.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6105 Organization Theory and Leadership

Credit Hours: 3

In-depth coverage of organizational theory and focus with special attention to issues and problems of organizational change and reform in the public sector.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6134 Project Management

Credit Hours: 3

Course is designed to introduce students to the concepts, theories, principles, and practices in project management, as well as to the use of project management software.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6146 Nonprofit Management and Leadership

Credit Hours: 3

Role and importance of third-sector organizations in American society; unique problems of nonprofit administration, role of leadership in nonprofit organizations.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6207 Public Financial Administration

Credit Hours: 3

Examination of the fiscal organization of federal, state, and local governments. Current problems in budgeting, revenue, and indebtedness are considered.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6208 Financial Oversight for Nonprofit Organizations

Credit Hours: 3

Introduce the non-financial manger to financial information used to make decisions for nonprofit organizations. Students will learn how to use the principles of financial management to make operating and capital budgeting decisions and to analyze long-term financial options.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6222 Issues in Florida--Budgeting and Finance

Credit Hours: 3

Selected issues in public financial management and budgeting related to state agencies or local governments in Florida.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6227 Public Budgeting

Credit Hours: 3

Development, authorization, execution, and assessment of government budgets. Topics include current trends and issues in budget theory and practice, as well as reform efforts.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6231 Resource Development: Fundraising and Grantsmanship

Credit Hours: 3

Administration and management of the fundraising process; principles, skills, methods, and techniques. Administration and management of the grantsmanship process.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6275 Political Economy for Public Managers

Credit Hours: 3

Introduces students to the fundamental concepts, theories, principles and tools used in public sector managerial economics. Students will be using economic concepts and applying economic tools and techniques to address common issues faced by public managers.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6307 Policy Design and Implementation

Credit Hours: 3

The formulation, adoption, implementation, and evaluation of public policy. Analysis of public problems and program development; the causes and determinants of public policy and successful implementation; criteria for the assessment of program's impact.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6335 Strategic Planning and Social Innovation for Public and Nonprofit Organizations

Credit Hours: 3

Addresses strategic planning and social innovation. Emphasizes methods of strategic planning and the principles of social innovation as practiced by the public and nonprofits sectors. Contemporary research and literature is discussed.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6336 Community Development Programs and Strategies

Credit Hours: 3

Discusses community development principles and practices in historical and contemporary perspectives, federal, state and local initiatives, physical, social, and economic approaches to community development.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6338 Urban Land Use and Policy Administration

Credit Hours: 3

Focuses on the political, economic, and legal environment of urban land development. Examines public policies affecting the spatial distribution of urban land activities, overt and covert rationales of such policies; zoning; subdivision regulations; building codes, and other urban land use control measures.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6339 Housing and Public Policy

Credit Hours: 3

Explores housing policy in the broader context of public policy. Examination of housing market theories and the relationships between housing and city and regional planning.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6355 Urban Growth Management

Credit Hours: 3

Examines the political economy of controlling the growth and development of human settlements, regulatory and non-regulatory techniques of growth management, and the evolution of growth management practices in the U.S.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6417 Human Resources Management

Credit Hours: 3

A study of the major functions in public personnel, including recruiting, selection, testing, training, and development, and employee and human relations in the public service.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6427 Public Sector Labor Relations

Credit Hours: 3

Introduction to the historical, legal, political and procedural aspects of collective bargaining and labor relations in the public sector organizations. Addresses methods for resolving conflicts and grievances.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6703 Quantitative Analysis in Public Administration

Credit Hours: 3

Techniques, models, to analyze managerial/policy problems. Descriptive, inferential, associational statistics; evaluate/make recommendations/alternative policy/decisions.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6710 Public Information Management

Credit Hours: 3

Intro to policy issues related to managing public info. by non-technical public & nonprofit managers. Non-tech. manager's role with strategic tech. planning, process re-engineering, appl. dev., data admin., procurement, security, public access, Internet.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6717 GIS Applications for Urban Management

Credit Hours: 3

Provides a basic introduction to the use of Geographic Information Systems (GIS) for urban decision makers. No prior knowledge of GIS is assumed.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6907 Independent Study

Credit Hours: 1-3

A flexible format for conceptual or theoretical studies in public administration.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6909 Problem Report

Credit Hours: 3

Analysis of a significant administrative or policy problem facing a public agency or manager.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6915 Directed Research

Credit Hours: 1-3

A flexible format for structured field research in Public Administration.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6934 Selected Topics in Public Administration

Credit Hours: 1-3

A flexible format to offer specialized courses not available within the regular curriculum.

Tampa | College of Arts and Sciences | School of Public Affairs

PAD 6946 Internship in Public Administration

Credit Hours: 2-6

Structured learning and work experience in a public agency or non-profit organization.

Tampa | College of Arts and Sciences | School of Public Affairs

PCB 5256 Developmental Mechanisms

Credit Hours: 3

Topics in modern developmental biology to be covered in lecture and through readings so as to gain a detailed understanding of cellular and molecular mechanisms of differentiation and pattern formation in various eukaryotic species for majors/non-majors

Prerequisite(s): ZOO 4695
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 5307 Limnology

Credit Hours: 3

An introduction to the physical, chemical, and biological nature of fresh-water environments. Lecture only.

Prerequisite(s): PCB 3043, CHM 2210, PHY 2053, MAC 1105 or higher-level MAC course or STA 2023
Corequisite(s): None.
Co-Prerequisite(s): CHM 2211

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 5307L Limnology Laboratory

Credit Hours: 1

Laboratory portion of Limnology. Laboratory and field experience in the area of aquatic ecology.

Co-Prerequisite(s): PCB 5307

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 5616 Molecular Phylogenetics

Credit Hours: 3

Provides a theoretical (lecture) and practical (computer lab) framework to allow students to carry out phylogenetic analysis using molecular data.

Prerequisite(s): PCB 3063
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6093 Advances in Scientific Review

Credit Hours: 2

Introduce research graduate students to the review and generation of primary literature. It serves to prepare them for preparing their data for publication, and presenting it at national and international meetings.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6107 Advanced Cell Biology

Credit Hours: 4

Detailed examination of the structure, function and molecular biology of eukaryotic cells.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6205 Cancer Biology III - Cancer Genomics and Drug Discovery

Credit Hours: 3

An exploration of the normal and abnormal cancer biological processes as they pertain to regulation of the genome and of novel cancer gene discovery approaches, as well as methodological and conceptual approaches to oncologic drug design and development.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6230 Cancer Biology I - Basics of Molecular Oncology

Credit Hours: 3

An introduction to the basics of molecular oncology. Topics will include cytoplasmic and nuclear oncogenes, cell cycle control, apoptosis, tumor suppressor genes and cancer drug discovery.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6231 Cancer Biology II - Immunology and Applied Biology

Credit Hours: 4

An exploration of the normal and abnormal immune development and function as well as the basic and applied aspects of tumor immunology.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6236 Advanced Immunology

Credit Hours: 4

Discussion of the basic immune reaction, nature of antigenicity; basic immunological techniques and their use in biological research and the medical sciences. Lec/Lab.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6275 Cell Signaling

Credit Hours: 3

A detailed examination of the cellular, biochemical, and molecular mechanism involved in signal transduction in various eukaryotic organism with emphasis on reviewing recent experimental evidence.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6281 Cancer Immunotherapy

Credit Hours: 4

This course is focused on understanding applied immunology and the use of immunotherapeutic approaches to eliminate cancer.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6282 Cancer Biology and the Immune System

Credit Hours: 2

This course is a broad introduction to the components of the immune system specifically focused on understanding the role of the immune system in eliminating cancer and how tumors modulate immune function.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6365C Physiological Ecology

Credit Hours: 4

Effect of environmental factors on animal function at the cellular and organ system level with emphasis on control and mechanism.

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 6426C Population Biology

Credit Hours: 3

Introduction to population dynamics with emphasis on the ecological components of growth, competition, and perdition.

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 6447 Community Ecology

Credit Hours: 3

In-depth examination of community ecology with emphasis on diversity,

stability, trophic structure and the mechanisms which affect how communities are structured.

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 6455 Statistical Ecology

Credit Hours: 3

Introduction to exploratory data analysis in ecology. Techniques for dealing with encountered data are emphasized.

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 6456C Biometry

Credit Hours: 4

An introduction to statistical procedures for research in biological sciences. Experimental design, analysis of data, and presentation of results are emphasized. Lec./Dis.

Prerequisite(s): MAC 2241, MAC 2242
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 6458 Biometry II

Credit Hours: 3

Fundamental concepts in the design of experiments for biological research. Factorial experiments, multiple regression analyses, analyses of covariance and SAS computer programs are emphasized. Lec/Lab.

Prerequisite(s): PCB 6456C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 6525 Molecular Genetics

Credit Hours: 3

Detailed examination of DNA, RNA and protein synthesis; the effects of mutations on proteins and cellular control.

Prerequisite(s): PCB 3063
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6526 Cancer Biology IV - Concepts and Techniques in Cancer Genetics

Credit Hours: 3

This course will explore major concepts in Cancer Genetics, how they are derived from experimental results and how they can be applied to outstanding problems in Cancer Biology.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6910 Cancer Biology Lab Rotations

Credit Hours: 1-3

This course is designed to help the students choose a compatible Major Professor and allow students to develop necessary technical skills. It is graded on a satisfactory (pass) or unsatisfactory (fail) basis.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6920 Advances in Cell and Molecular Biology

Credit Hours: 1

A journal club in which graduate students present and discuss research publications from the preceding twelve months in the fields of molecular and cellular biology.

Prerequisite(s): PCB 6107
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6930 Current Topics in Cancer Biology

Credit Hours: 2

Renowned speakers from outside the USF Community will give weekly seminars on topics in oncology. Participants will meet weekly with the speakers and discuss the current state of the art.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6931 Advances in Cancer Biology Research

Credit Hours: 2

Advances in Cancer Research – Two participants will read and orally present current breaking research. They will gain experience in critically evaluating research reports and receive critique on presentation skills.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6932 Bioethics for Cancer Researchers

Credit Hours: 1

Explore the key issues of responsible conduct of research facing the cancer biologist. The course will use interactive open discussion sessions focused on individual ethics topics in cancer research.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6934 Advances in Cancer Chemical Biology

Credit Hours: 2

Students review and orally present current breaking research in chemical biology focused on applications for cancer research. Presentations require critical evaluation of the published data. Students also receive critique on presentation skills.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6936 Advances in Tumor Immunology and Cancer Research

Credit Hours: 2

Students review and orally present current breaking research in tumor immunology with critical evaluation of the data. Students also receive critique on presentation skills.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PCB 6939 Seminar in Ecology

Credit Hours: 1-3

A detailed examination of topics in ecology pertaining to individual organisms, populations, communities and/or ecosystems.

Tampa | College of Arts and Sciences | Biology - Integrative

PCB 6956 Scientific Grant Writing

Credit Hours: 3

Teach research graduate students the art of scientific grant writing. It also serves to prepare them for their written qualifying exam. It is only for research PhD students within the department of CMMB.

Tampa | College of Arts and Sciences | Biology - Cell, Microbiology and Molecular Biology

PET 5769 Principles and Issues in Coaching

Credit Hours: 3

This course is designed to provide a broad examination of many basic issues involved in coaching. The primary point is of a philosophical nature and in these discussions, students have the opportunity to form their own values in regards to sports.

Tampa | College of Education | Teaching and Learning

PET 6003 Theories & Models of Health & Physical Activity

Credit Hours: 3

This course covers the origin and application of theory in the general health and physical activity domains. Emphasis will be placed on learning the theoretical constructs and applied uses of classic and contemporary theories in health behaviors.

Tampa | College of Education | Educational and Psychological Studies

PET 6085 Body Composition: Assessment and Management

Credit Hours: 3

This course covers advanced principles of body composition assessment and management. The role of physical activity and medical intervention will be considered.

Tampa | College of Education | Teaching and Learning

PET 6086 Lifespan Fitness

Credit Hours: 3

The course is designed to assist students in developing an understanding of how fitness habits and recommendations change over a lifetime.

Tampa | College of Education | Educational and Psychological Studies

PET 6098 Topics in Strength and Conditioning

Credit Hours: 3

Covers selected topics in strength and conditioning. Some of the topics to be covered include: program design, periodization, core stabilization training, biochemical monitoring, overtraining, and strength training.

Tampa | College of Education | Educational and Psychological Studies

PET 6216 Sport Psychology

Credit Hours: 3

This course is designed to provide students with an understanding of the theoretical structure that underlies psychology applied to sport. There will be a particular emphasis on psychological concerns that confront coaches, educators, and athletes.

Tampa | College of Education | Educational and Psychological Studies

PET 6235 Motor Learning

Credit Hours: 3

This course deals with motor learning research as it relates to exercise science. Emphasis will be placed upon normal developmental patterns and behaviors and motor learning principles throughout the life span.

Tampa | College of Education | Teaching and Learning

PET 6256 Sport in Society: Contemporary Issues

Credit Hours: 3

This course is a study of organized sport in contemporary society. Issues such as race, social class, gender, politics, religion, economics, media, physical disabilities, sexual orientation, and ethics as they relate to sports will be studied. This course is a study of organized sport in contemporary society. Issues such as race, social class, gender, politics, religion, economics, media, physical disabilities, sexual orientation, and ethics as they relate to sports will be studied.

Tampa | College of Education | Teaching and Learning

PET 6317 Applied Biomechanics

Credit Hours: 3

The course involves the integration of advanced kinesiological foundations to exercise science. Topics include: physical growth and neuro-muscular control, laws of physics in human movement, and effects of exercise on the muscular and skeletal systems.

Tampa | College of Education | Teaching and Learning

PET 6367 Sports Nutrition and Exercise Metabolism

Credit Hours: 3

This course covers selected topics regarding exercise metabolism and sports nutrition. Some of the topics to be covered include: bioenergetics; protein, fat and carbohydrate metabolism during exercise; sports supplements designed to improve strength.

Tampa | College of Education | Educational and Psychological Studies

PET 6388 Physical Activity, Health, and Disease

Credit Hours: 3

This course focuses on the study of how physical activity is related to chronic diseases. Epidemiological techniques will be examined using physical activity as a factor in the cause of disease. The physiological basis will be examined.

Tampa | College of Education | Educational and Psychological Studies

PET 6389 Fitness Assessment and Prescription

Credit Hours: 3

This course covers advanced principles of physiological fitness assessment. Topics to be covered include the assessment and prescription of: aerobic capacity, anaerobic capacity, muscular strength, and muscular endurance.

Tampa | College of Education | Educational and Psychological Studies

PET 6396C Specialized Study in Bio-Kinetics of Human Movement

Credit Hours: 1-4

Will provide in-depth study in specific areas related to neurological, physiological, and mechanical principles of human development.

Tampa | College of Education | Teaching and Learning

PET 6419 Clinical Supervision in Physical Education

Credit Hours: 3

Provides specialized knowledge and skills for effective supervision of interns in physical education including observation and feedback techniques and communication skills.

Tampa | College of Education | Teaching and Learning

PET 6425 Curriculum and Instructional Process in Physical Education

Credit Hours: 3

Will provide in-depth study of the structure of subject matter, theoretical curriculum models, styles of teaching, and investigation of the nature of the learner as these relate to teaching physical education. Fieldwork may be required.

Tampa | College of Education | Teaching and Learning

PET 6443 Instructional Design and Content: Games

Credit Hours: 3

The purpose of this course is to help students plan and implement effective game content and instruction in K-12 physical education programs based on current research and best practice.

Tampa | College of Education | Teaching and Learning

PET 6444 Instructional Design and Content: Dance and Gymnastics

Credit Hours: 3

The purpose of this course is to help students plan and implement effective dance and gymnastics content in K-12 movement education/physical education programs based on current research and best practice.

Tampa | College of Education | Teaching and Learning

PET 6447 Specialized Study in Curriculum and Instructional Process in Physical Education

Credit Hours: 1-4

Will provide in-depth study in specific areas related to the teaching-learning process of physical education.

Tampa | College of Education | Teaching and Learning

PET 6494 Legal Aspects of Physical Activity

Credit Hours: 3

Addresses the law, legal liability, and risk management related to physical activity programs. Content will focus on tort and contract law with an emphasis on negligence.

Tampa | College of Education | Educational and Psychological Studies

PET 6516 Learner Assessment in Physical Education

Credit Hours: 3

This course is designed to help teachers assess student learning in pre/K-12 physical activity settings and to conduct program evaluation in physical activity settings.

Tampa | College of Education | Teaching and Learning

PET 6525L Laboratory Techniques in Exercise Science

Credit Hours: 3

The course covers laboratory applications as they relate to exercise science. Emphasis will be placed upon laboratory experiences in biomechanics and exercise physiology involving equipment setup, data collection, data acquisition, and data analysis.

Tampa | College of Education | Teaching and Learning

PET 6534 Research Methods in Exercise Science

Credit Hours: 3

Introduces students to the concepts, methods, and applications of research within exercise science. Development of research skills will be the primary focus.

Tampa | College of Education | Educational and Psychological Studies

PET 6542 Grant Writing

Credit Hours: 3

This course will provide the foundation to enable the students to create a grant project, find appropriate funding sources, write a competitive grant proposal, and manage a successful program grant to completion.

Tampa | College of Education | Teaching and Learning

PET 6645 Physical Education for Individuals with Disabilities

Credit Hours: 4

This course is concerned with the motor development and physical fitness of individuals with mental and motor related disabling conditions. Study includes psycho-educational characteristics; planning, conducting, and evaluating individualized programs of physical education; and review of relevant literature. Clinical fieldwork is required.

Tampa | College of Education | Teaching and Learning

PET 6706 Analysis of Research in Physical Education

Credit Hours: 3

This course is designed to help teachers better understand the process of conducting classroom research. The course provides a set of guidelines for reading research and sharing perspectives based on studying original research in physical education.

Tampa | College of Education | Teaching and Learning

PET 6716 Analysis of Teaching in Physical Education

Credit Hours: 3

The purpose of this course is to study teaching behaviors in physical activity settings. It includes a review of current research and involves the use of observation systems and other data collection strategies related to instructional effectiveness.

Tampa | College of Education | Teaching and Learning

PET 6802 Effective Teaching and Classroom Management in Physical Education

Credit Hours: 3

The purpose of this course is to help students develop into physically literate individuals by providing a comprehensive, yet concise, guide to what is most important for quality teaching in physical education.

Tampa | College of Education | Teaching and Learning

PET 6906 Independent Study: Professional Physical Education

Credit Hours: 1-6

Independent study. Students must have a contract with an instructor.

Tampa | College of Education | Teaching and Learning

PET 6910L Research Project in Physical Education

Credit Hours: 1-4

In-depth research study of selected topics concerning human movement. Topics will vary according to needs and interests of student.

Tampa | College of Education | Teaching and Learning

PET 6947 Internship in Exercise Science

Credit Hours: 1-6

Provides a field experience in an Exercise Science setting. Experiences will focus on all aspects of program development and delivery. Students may also be involved with administrative functions of a fitness/wellness center.

Tampa | College of Education | Teaching and Learning

PET 6971 Thesis: Physical Education

Credit Hours: 1-5

This course will provide the student with experience in research related to the disciplines of physical education and exercise science. Restricted to Graduate Program Majors only and repeatable for up to 6 credit hours.

Tampa | College of Education | Teaching and Learning

PET 7937 Graduate Seminar

Credit Hours: 1-6

Development of a research knowledge base that has significant depth for the seminar topic will be a primary focus.

Tampa | College of Education | Teaching and Learning

PHA 6114C Drug Delivery Systems I

Credit Hours: 3

Fundamental biological and physio-chemical principles important for the formulation, preparation, stability, and performance of pharmaceutical dosage forms (compounding) and various advanced drug delivery systems. A weekly laboratory session of three hours is included to provide students the opportunity to apply learned principles.

Tampa | College of Pharmacy | Pharmacy

PHA 6115C Drug Delivery Systems II

Credit Hours: 3

Fundamental biological and physiochemical principles important for the formulation, preparation, stability, and performance of pharmaceutical dosage forms (compounding). A weekly laboratory session is included to provide students the opportunity to apply learned principles.

Prerequisite(s): PHA 6114C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6118 Nanomaterials, BioMEMS, and Nanodevices in Medicine

Credit Hours: 3

Covers control of materials at a micro-/nano-scale (new polymer-based drug delivery systems for anticancer agents, specialized devices for minimally invasive surgery, remote sensors & cell sorting systems w/ high-throughput data collection).

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6119 Micro-/Nanoscale Drug Delivery Systems

Credit Hours: 3

This is an advanced course for pharmacy students on novel approaches to drug delivery as it relates to medicine. The course will consists of lectures describing micro- and nanoscale methods of drug delivery.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6124 Principles of Pharmacokinetics and Pharmacodynamics I

Credit Hours: 3

Provides a fundamental understanding of the concepts and principles underlying the discipline of pharmacokinetics and pharmacodynamics, including data analysis, dosage regimen design, determinants of ADME and study of concentration response relationships.

Prerequisite(s): PHA 6115C with a minimum grade of C, PHA 6804C with a minimum grade of B, PHA 6577 with a minimum grade of C, PHA 6451 with a minimum grade of C, PHA 6562 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6129 Clinical Pharmacokinetics and Pharmacodynamics

Credit Hours: 3

The second course of the series continues concepts taught in the principles of pharmacokinetics and pharmacodynamics. Special emphasis will be placed on in-patient medication management and advanced monitoring techniques. Class discussions will review formulation factors involved in drug delivery. Students will demonstrate the ability to utilize basic principles of pharmacokinetics and pharmacodynamics to optimize patient specific dosing regimens.

Prerequisite(s): PHA 6124
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6130C Translational Pharmacogenomics - Principles and Clinical Applications

Credit Hours: 3

Translational pharmacogenomics is designed as an introduction to the theory and practice of pharmacogenomics which are central to the personalized medicine paradigm. The course aims to provide students with the concepts and tools needed to interpret, analyze, and evaluate pharmacogenomics information. The goal is to enable students to gain a clear understanding of how genetic variations contribute to susceptibility to drug response and to incorporate this knowledge into routine clinical care.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6146 Introduction to Nanotechnology

Credit Hours: 3

Provides an overview of the distinctive features of nanotechnology and their application to biomedical problems. The course compares the macro/micro/nanoscale to highlight the unique properties of nanotechnology in nanomedicine.

Tampa | College of Pharmacy | Pharmacy

PHA 6147 Nanotechnology and Risk Management

Credit Hours: 3

An introduction into theory with simultaneous laboratory experience for instrumentation in nano-medicine, nanotechnology, and nano-pharmaceutics as well as risk management associated with nano production.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6148 Nanoformulations and Nanopharmaceuticals

Credit Hours: 3

Focus on developing an understanding of the fundamental properties, synthesis and characterization of nanomaterials, coupled with their applications in nanomedicine.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6177C Advanced Compounding and Industrial Pharmacy

Credit Hours: 3

Advanced formulations design, development and application in real world. Develop niche in the area of specialized compounding practices serving the needs of special population groups including geriatric patients and veterinary compounding.

Prerequisite(s): PHA 6115C with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6185 Drug Discovery and Frontier

Credit Hours: 3

This course will provide an overview of the drug development process, focusing on cutting-edge drug development science, regulation, and industry from the U.S. perspective.

Prerequisite(s): PHA 6575
Corequisite(s): None.
Co-Prerequisite(s): PHA 6577

Tampa | College of Pharmacy | Pharmacy

PHA 6186 Innovations in Bio-Pharmaceuticals

Credit Hours: 4

This course gives students an overview of Innovations in Bio-Pharmaceuticals in life science and global health. In particular biopharmaceutical processing from discovery to development phases, and pharmaceutical sciences.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6187 Introduction to Drug Manufacturing and Processes

Credit Hours: 3

This course gives students an overview of pharmaceutical processing and an understanding of the process validation as a major biotechnology processes associated with biotech manufacturing.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6188 New Drug Review: The Nexus of Basic Science and Clinical Practice

Credit Hours: 3

This course is focused on integrating pharmaceutical sciences with the practice of clinical pharmacy, while improving technical communication skills.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6221 Pharmacists' Role in Transitions of Care

Credit Hours: 2

The Transitions of Care (TOC) elective is focused on managing patients moving from different health care settings as it relates to the field of pharmacy. It is designed to address components of the TOC process through team-building activities, patient cases and problem-solving opportunities and further develop clinical decision-making, written and verbal communication skills. The course will allow students to identify strengths and limitations within TOC models and how to implement changes.

Prerequisite(s): PHA 6783C, PHA 6270
Corequisite(s): PHA 6784C, PHA 6874C
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6222 Pharmacy Practice Management

Credit Hours: 3

Provides students with practical knowledge to enable them to function as pharmacy leaders and managers with competence in several key areas.

Tampa | College of Pharmacy | Pharmacy

PHA 6223C Pharmacy Leadership

Credit Hours: 2

This course will focus on the perceptions, expectations, and necessary skill set for a leader in the pharmaceutical workplace, regardless of position or practice setting. Through various mediums, the students will have exposure to didactic and real-world application in order to cultivate the necessary tools to develop into future practitioners and leaders in the

healthcare workforce. Students will identify their personal strengths and design a plan for developing their leadership skills.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6224 Pharmaceutical Debates on Recent Issues Affecting the Profession

Credit Hours: 2

The course aims at providing an opportunity for students in the third professional year to discuss and debate critical issues affecting the pharmacy profession. Students will also learn to write a publication-quality paper and develop a presentation poster.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6225 Invention, Innovation and Entrepreneurship

Credit Hours: 3

Students will develop a theoretical and practical understanding of product development, including actions and methods appropriate in each phase using estimations, spreadsheets and geometric models.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6233C Jurisprudence

Credit Hours: 3

This course provides students with the essential concepts of pharmacy law, enabling them to practice pharmacy in compliance with federal and state statutes, rules, and regulations, as well as equipping them with the knowledge to pass the MPJE. Additionally, students receive an overview of federal and state government, agencies, health law topics, advocacy, ethics, and the policy process.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6243 Medical Informatics and Technology

Credit Hours: 2

The focus of this course is to emphasize the roles and responsibilities of the profession and individual pharmacists in the implementation and utilization of electronic health records, medical information technology, institutional and community software, and healthcare system database management.

Prerequisite(s): PY2 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6245 Pharmaceutical Informatics

Credit Hours: 3

Discuss the applications of computers to the storage, retrieval and analysis of drug and prescription information. In addition, the application of bioinformatics or chemoinformatics to drug discovery and development will be covered.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6261 Healthcare Administration and Economics

Credit Hours: 3

This course will discuss components of the U.S. Health Care System, including the administrative and financial determinants that influence patient care, and how pharmacy, pharmacists, and pharmacy systems contribute. An introduction to pharmacy leadership, management, planning, marketing, and financial and human resources management will also be covered.

Prerequisite(s): PHA 6898 and PY2 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6270 Healthcare and Medication Safety

Credit Hours: 2

This course will introduce and reinforce principles of human error and patient safety within healthcare settings. The students will engage in activities that analyze, discuss, and provide recommendations for solutions to patient safety problems. Students will have opportunities to conduct an incident investigation, gain an understanding of the advantages and limitations of error reporting, learn how to disclose errors and adverse events, and learn models for improving safety in various health care settings. Classes are designed to provide students with hands-on skills in systems thinking and in preventing, learning from, and dealing with medical error and adverse events.

Prerequisite(s): PY2 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6277 Ethics in Pharmaceutical Practice and Research

Credit Hours: 1

This course will cover the ethical considerations which control and influence pharmacy practice and research. Professional ethics will also be covered in this course.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6336 Tissue Engineering and Regenerative Medicine

Credit Hours: 3

How materials interact with cells through their micro-and nanostructure, mechanical properties degradation characteristics, surface chemistry and biochemistry. Principles of tissue engineering,design strategies for practical applications for tissue repair.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6352 Herbal Medicines and Alternative Therapy

Credit Hours: 2

An overview of the most commonly used herbal medicines and alternative therapy methods. Course content will be classified by organ system (i.e. nervous system, cardiovascular system) and will provide evidence based review of the use of herbal medicines and/or alternative therapies for particular disease states effecting these systems. Efficacy, safety, and drug interactions will be a major focus. Students will evaluate available scientific literature to make clinical decisions in patient care.

Prerequisite(s): PHA 6782C, PHA 6783C, PHA 6795, PHA 6618
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6428C Advanced Topics in Metabolic Syndrome Treatment

Credit Hours: 2

This course will explore advanced topics in the assessment and treatment of patients with metabolic syndrome, defined as hypertension, diabetes/insulin resistance, and hyperlipidemia. Mastery on the understanding of vascular inflammatory pathways, vascular complications, understanding laboratory values, pharmacotherapy for treatment, and key patient education points will be covered. Students will experience a combination active learning of lecture, online courses, and live patient encounters.

Prerequisite(s): PHA 6577, PHA 6783C, PHA 6946
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6449 Pharmacogenomics--Current and Future Prospects

Credit Hours: 3

The course is designed to include the scientific and societal components essential for the implementation of pharmacogenomics in the healthcare system and to provide a clear understanding of "Future Medicine for the Future Pharmacist".

Tampa | College of Pharmacy | Pharmacy

PHA 6451 Clinical Biochemistry

Credit Hours: 2

This course will provide a comprehensive study of the field of Clinical Biochemistry.

Tampa | College of Pharmacy | Pharmacy

PHA 6531 Clinical Toxicology

Credit Hours: 2

This course will focus on the basic principles of toxicology, and application to the potential health hazards and the risks associated with toxic exposure. The goal of the course is to review the specialized areas of toxicology, emphasizing the importance of dose effect and dose response relationship, absorption, distribution, and elimination of toxins, target organ and non-organ toxicity, toxic agents, natural toxins, applied toxicology, medial toxicology and management of poisoned patients.

Prerequisite(s): PHA 6577, PHA 6783C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6562 Physiologic Basis of Disease

Credit Hours: 4

This course entails the study of disease at molecular, cellular, and organ levels. It provides a foundation for understanding the etiologies and pathogenesis of diseases. It facilitates the interpretation of the changes induced by stimuli, correlating the microscopic and macroscopic changes with the manifestations of diseases and ultimately with a diagnosis. The knowledge gained from the study of these mechanisms will form the basis for therapeutic approaches, drug interaction and dependence.

Tampa | College of Pharmacy | Pharmacy

PHA 6575 Introduction to Principles of Drug Action

Credit Hours: 3

Explore the principles of pharmacology with application to anatomical and physiologic function. Including medication receptor recognition, specific organ systems, mechanisms of signaling response, and medication action at receptor sites.

Tampa | College of Pharmacy | Pharmacy

PHA 6577 Biochemical and Molecular Principles of Drug Action

Credit Hours: 4

This course will focus on principles of pharmacology with application to physiologic function. Emphasis on receptor recognition, drug structure, pharmacology, organ systems, signaling, adverse effects of medications, and physical chemical properties.

Prerequisite(s): PHA 6575
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6592C Advanced Cardiology Pharmacotherapy

Credit Hours: 2

Cardiovascular disease management is one of the most evidence-based areas of medicine and pharmacy practice. Students will also be evaluating medical literature and applying clinical evidence. This course provides an overview of selected cardiovascular topics. New topics will be discussed and topics covered in core courses augmented.

Prerequisite(s): PHA 6782C, PHA 6783C, PY3 Standing
Corequisite(s): PHA 6784C
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6598 Current Perspectives in Mental Health

Credit Hours: 2

The purpose of this clinical elective is to introduce the student to the mental health system, emphasizing the role of a pharmacist in the treatment of individuals with mental illnesses. Students will gain further knowledge of psychiatric pharmacotherapy, beyond knowledge acquired in previous pharmacotherapeutics courses.

Prerequisite(s): PHA 6783C and PY3 Standing
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6602 Pediatric Pharmacotherapy

Credit Hours: 3

The pediatric pharmacotherapeutics course will provide the student pharmacist an understanding of pediatric pharmaceutical care and management of pediatric patients in ambulatory, acute, critical, and emergency settings.

Tampa | College of Pharmacy | Pharmacy

PHA 6603C Internal Medicine Elective

Credit Hours: 3

This elective provides in-depth exposure to patient care in the acute care setting. Students will review relevant disease states, individualizing treatment regimens based on patient-related variables, and applying concepts to case-based scenarios.

Prerequisite(s): PHA 6784C with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6615C Ambulatory Care Pharmacy Practice Elective

Credit Hours: 2

This course is designed to teach pharmacy students how to develop patient-specific pharmaceutical care plans for the various disease states encountered in an ambulatory care setting. Along with therapeutic discussions, the course will involve active participation through mock patient assessments in a controlled setting, patient case presentations and therapeutic plan debates. The course will also introduce pharmacy students to the various roles pharmacists encounter in an ambulatory setting.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6618 Principles of Geriatric Medicine

Credit Hours: 3

Prepares future health professionals to address the needs of their older patients expanding student understanding of psychosocial and communication issues exposing participants to cross-cultural issues in health care.

Tampa | College of Pharmacy | Pharmacy

PHA 6618C Principles of Geriatric Pharmacotherapy

Credit Hours: 3

This course will reinforce geriatric pharmacotherapy issues including medication administration, impact of the aging process, and common social issues. Course includes discussions on health systems management and changing demographics in Florida and US.

Prerequisite(s): PY2 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6621 Graduate Program Internship in Pharmaceutical Sciences

Credit Hours: 6

This course is dedicated for the completion of an internship in an approved pharmacy industry, institute or center. Students will apply knowledge and skills gained in academic coursework to a real-world work setting.

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PHA 6622 Advanced Geriatric Pharmacy Care

Credit Hours: 3

Focuses on the clinical aspects and advanced training of pharmacists to become specialists in geriatrics to meet the needs of older adults.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6628 Introduction to Post Graduate Residency Training

Credit Hours: 2

This is an elective course designed to provide students an in-depth knowledge of postgraduate pharmacy residency training so that they are prepared to seek and obtain a residency position upon graduation. Topics to be covered include benefits of residency training, types of residency programs available, requirements to achieve a residency training certificate, application requirements, composing a letter of intent, curriculum vitae, choosing a residency program and interviewing for residency.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6707C Developing the Next Generation of Pharmacy Faculty

Credit Hours: 3

This course provides students with knowledge and skills for a career as a pharmacy faculty member, including effective teaching, scholarship/research responsibilities, and service requirements.

Prerequisite(s): HSC 6261 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6708 Teaching in Pharmacy

Credit Hours: 3

This course provides direct instruction in the field of academia specifically in the role of pharmacy faculty focusing on essential skills for effective classroom and laboratory teaching in the 21st century.

Tampa | College of Pharmacy | Pharmacy

PHA 6730C Drugs of Abuse, Addiction, and Law Enforcement

Credit Hours: 2

Course will consist of one to two hours of didactic lecture covering the medical chemistry and pharmacology for the drug and for certain topics, one hour of documentary on the drug in society. Students will also be required to write a book report on a book about drug addition taken from a list that will be provided of approved books. There will be two exams worth 40% each and the book report will be worth the remaining 20%.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6740 Grant Writing and Clinical Research

Credit Hours: 2

This course encompasses factors involved in the development of a research proposal and selection of grant funding sources. The evaluative processes of clinical research, grant development, and funding of the proposal will also be discussed and practiced.

Prerequisite(s): PHA 6792C, PHA 6795, PHA 6915C with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6755 Medical Microbiology and Immunology

Credit Hours: 2

This course will provide a comprehensive study of the field of medical microbiology and the immune system.

Tampa | College of Pharmacy | Pharmacy

PHA 6756 Bioengineering and Nanotherapeutic Approaches

Credit Hours: 3

This course provides an overview of modern bioengineering in life science and global health. It will emphasize the applications of bioengineering within applied biotechnology, nanotechnology, and microbiology from agricultural systems to public health.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6760 Non-Prescription and Herbal Therapies

Credit Hours: 3

This course will provide an in-depth examination of over-the-counter products and devices used for self-treatable conditions.

Tampa | College of Pharmacy | Pharmacy

PHA 6771C Clinical Nutrition in Pharmacy Practice

Credit Hours: 2

This course is designed to prepare pharmacy students to function as members of an interdisciplinary nutritional support team who will share responsibility for promoting maintenance and/or restoration of optimal nutrition status. This course will focus on internal and parenteral nutrition with an emphasis on nutritional guidelines, drug nutrient interactions, and disease state specific nutritional needs.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6780C Oncology Pharmacy Practice

Credit Hours: 2

This elective course will provide an overview of oncology pharmacotherapy and the roles of an oncology pharmacy practitioner. Concepts introduced in the oncology module of Pharmacotherapeutics III, including pharmacology, tumor types, anticancer therapy and supportive care strategies, will be further delineated and discussed in more comprehensive manner.

Prerequisite(s): PHA 6784C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6782C Pharmacotherapeutics I

Credit Hours: 5

Pharmacotherapeutics is an integrated course sequence utilizing medicinal chemistry, pharmacology, and pharmacy practice faculty. The over-arching goal of the sequence is to review and discuss the applied principles of pharmacotherapy/patient management following an organ system process to include cardiovascular, pulmonary, endocrine, and gastrointestinal systems.

Prerequisite(s): PY2 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6783C Pharmacotherapeutics II

Credit Hours: 5

Pharmacotherapeutics is an integrated course sequence utilizing medicinal chemistry, pharmacology and pharmacy practice faculty. The overarching goal of the sequence is to review and discuss the applied principles of pharmacotherapy/patient management following an organ system process. This is the second of four courses in the integrated course sequence. Areas to be covered include psychiatry, neurology, men's and women's health topics, and genitourinary system.

Prerequisite(s): PHA 6782C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6784C Pharmacotherapeutics III

Credit Hours: 5

Pharmacotherapeutics is an integrated course sequence utilizing medicinal chemistry, pharmacology and pharmacy practice faculty. The overarching goal of this semester is to review and discuss the applied principles of pharmacotherapy and patient management following an organ system process to include infectious diseases, hematology, oncology, and renal disease.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6786 Travel Medicine

Credit Hours: 3

Travel medicine is a service provided to travelers to prevent and manage health problems that arise as a result of international travel. Students will learn the various components to providing travel medicine services to patients.

Tampa | College of Pharmacy | Pharmacy

PHA 6787C Pharmacotherapeutics IV

Credit Hours: 5

Pharmacotherapeutics is an integrated course sequence utilizing medicinal chemistry, pharmacology and pharmacy practice faculty. The overarching goal of the sequence is to review and discuss the applied principles of pharmacotherapy/patient management following an organ system process to include critical care, nutrition, pediatrics, solid organ transplant, and drug induced diseases.

Prerequisite(s): PHA 6784C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6792C Drug Information/Literature Evaluation

Credit Hours: 2

Introduce and reinforce the fundamental principles of DI practice. Provide an introduction to databases used for DI inquiries; including text- and web-based media. Develop proficiency in using databases and other 2 literature resources to retrieve and/or supply DI. Learn the principles of proper literature evaluation, and begin to develop their skills in reviewing and evaluating 1 and 3 literature. Learn and apply medical writing principles.

Prerequisite(s): PY1 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6795 Research Methods and Biostatistics

Credit Hours: 3

This course focuses on the advanced application of scientific literature evaluation, to include the assessment of appropriateness of study design, performed statistical analysis, and clinical applications to pharmacy practice.

Prerequisite(s): PY2 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6797 Scientific Writing and Communication

Credit Hours: 1

Enhance student's personal and written communication, and develop effective presentation skills aiding students in effective communication within a professional workforce setting. Includes scientific grant and white paper proposal writing.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 6804C Pharmaceutical Calculations

Credit Hours: 2

Accurate pharmacy calculations enhance patient care in all areas of pharmacy practice. This course serves as an introduction to the clinical role calculations play in patient safety. Students will learn the direct application of their previous math and chemistry skills to the human body. Calculations will encompass different approaches to measurement including the metric, avoirdupois, and traditional apothecary systems. Course topics will include specific gravity/volume, percentage and ratio.

Tampa | College of Pharmacy | Pharmacy

PHA 6870C Pharmaceutical Skills I

Credit Hours: 2

The pharmaceutical skills sequence serves dual functions; the first is to

allow integration and application of materials learned during the semester, the second to address key professional competencies that are not otherwise addressed in the curriculum (professionalism, communication, ethics, and law). The first course in the sequence will include discussion regarding pharmaceutical care techniques, the history of pharmacy, professional communication tactics and behaviors, and cultural competency.

Tampa | College of Pharmacy | Pharmacy

PHA 6871C Pharmaceutical Skills II

Credit Hours: 3

The pharmaceutical skills sequence serves dual functions; the first is to allow integration and application of materials learned during the semester, the second is to address key professional competencies.

Prerequisite(s): PHA 6870C with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6872C Pharmaceutical Skills III

Credit Hours: 3

Integration of the principles of Pharmacotherapeutics I and Pharmacokinetics/Pharmacodynamics I will provide students with an opportunity to develop and monitor patient specific care plans in order to optimize therapeutic outcomes for patients with cardiovascular, respiratory, endocrine, and gastrointestinal diseases. Other activities will emphasize the patient-centered application of health policy, literature evaluation, and outpatient medication therapy management as well as introduce basic principles.

Prerequisite(s): PHA 6871C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6873C Pharmaceutical Skills IV

Credit Hours: 3

Integration of the principles of Pharmacotherapeutics II, Pharmacokinetics/Pharmacodynamics II, and Geriatric Pharmacotherapy will provide students with the opportunity to develop patient specific care plans for patients with neurologic, psychiatric, and musculoskeletal diseases as well as men's/women's health. Other activities will emphasize informatics and technology, the impact of medication errors on patient safety, and interprofessional education initiatives.

Prerequisite(s): PHA 6872C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6874C Pharmaceutical Skills V

Credit Hours: 3

Integration of the principles of Pharmacotherapeutics III and IPPE will provide students with the opportunity to develop patient specific care plans for patients with hematologic disorders, malignancies, infectious disease, and renal disorders. Other activities will emphasize principles of translational pharmacogenomics, research methods and grant writing, and interprofessional education initiatives.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6875C Pharmaceutical Skills VI

Credit Hours: 3

Integration of the principles of Pharmacotherapeutics IV will provide students with an opportunity to develop and monitor patient specific care plans in order to optimize therapeutic outcomes for patients with critical care, pediatric, nutritional, toxicology, and solid organ transplant disorders. Other activities will emphasize the patient-centered application of health policy, literature evaluation, and inpatient medication therapy management as well as introduce basic principles of health systems administration. Interprofessionalism will also be emphasized through simulated activities with medical and nursing students.

Prerequisite(s): PHA 6870C, PHA 6871C, PHA 6872C, PHA 6873C and PHA 6874C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6877C Critical Care Pharmacotherapy

Credit Hours: 2

The course provides an overview of critical care pharmacotherapy. The focus of the course will be the role of the critical care pharmacist and an introduction to medications, disease states, and conditions encountered in the critical care setting.

Prerequisite(s): PHA 6784C
Corequisite(s): PHA 6787C
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6879 Death and Dying for Healthcare Professionals

Credit Hours: 2-3

This course will undoubtedly be a daily theme for which healthcare professionals must be prepared to face. To best serve the needs of patients, this course will focus on the historical, cultural, and procedural issues related to a wide range of loss.

Tampa | College of Pharmacy | Pharmacy

PHA 6890 Interdisciplinary Approach to Women's Health

Credit Hours: 3

This interdisciplinary course is designed to address women's health across the lifespan, taking into account diseases unique to or with higher prevalence in women. It will concentrate on health promotion, disease prevention, and treatment.

Tampa | College of Pharmacy | Pharmacy

PHA 6898 Foundations of Public Health

Credit Hours: 3

This course provides the student with an introduction to public health. It covers the basic definition of public health, the analytical methods used in public health, the biomedical basis of public health, the social and behavioral factors related to health interactions, and environmental and medical care issues. Students will also learn about the relationship between public health and pharmacy, and the role of the pharmacist as it relates to Healthy People 2020 goals and objectives.

Prerequisite(s): PY1 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6907 Directed Independent Study

Credit Hours: 2-3

Individual study by students under the direction of a faculty member. Topics may vary and are selected on an individual basis. Hours may vary.

Tampa | College of Pharmacy | Pharmacy

PHA 6915C Pharmacy Longitudinal Research Project

Credit Hours: 1

Application of research principles through a longitudinal research project under direction of an approved mentor.

Co-Prerequisite(s): PHA 6795 with a minimum grade of C-

Tampa | College of Pharmacy | Pharmacy

PHA 6916 Directed Independent Research

Credit Hours: 3

Study abroad will be conducted in collaboration with RIWATCH (Research Institute for World Ancient Traditions, Cultures, and Heritage), Roing Arunachal Pradesh, India, an institute which has an agreement with USF World for student and faculty training and exchange. RIWATCH has the following centers: 1. Center for Social Work Research, 2. Center for Public Health Research, and 3. Center for Community Research. Students will create a project within one of these centers to submit before the trip.

Prerequisite(s): PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6935 Special Topics in Pharmacy

Credit Hours: 1-5

Special topics for discussion and analysis related to Pharmacy.

Tampa | College of Pharmacy | Pharmacy

PHA 6940 Introductory Pharmacy Practice Experience I

Credit Hours: 1

The first Introductory Pharmacy Practice Experience (IPPE) is the beginning course in a three year sequence of introductory experiences exposing pharmacy students to the principles of pharmaceutical care. IPPE will focus on special populations to promote health improvement, wellness, and disease prevention in cooperation with an interprofessional team of health care providers.

Prerequisite(s): PY1 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6945 IPPE Community Pharmacy Practice I

Credit Hours: 1

Introductory Pharmacy Practice Experience in Community Pharmacy is a structured course in which students will meet with an assigned community pharmacist for 15 consecutive weeks for the fall semester. Students will practice pharmacy under supervision while demonstrating and reinforcing skills taught in didactic course work. Upon completion of the course, the student should be knowledgeable about the basic functions of a pharmacist in a community pharmacy practice setting.

Prerequisite(s): PY2 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6946 IPPE Community Pharmacy Practice II

Credit Hours: 1

Introductory Pharmacy Practice Experience in Community Pharmacy is a structured course in which students will meet with an assigned community pharmacist for 15 consecutive weeks for the spring semester. Students will practice pharmacy under supervision while demonstrating and reinforcing skills taught in didactic course work. Upon completion of the course, the student should be knowledgeable about the basic functions of a pharmacist in a community pharmacy practice setting.

Prerequisite(s): PHA 6945
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6947 IPPE - Institutional Pharmacy Practice I

Credit Hours: 4

This course gives pharmacy students experience with basic distributive and administrative processes in patient care while interacting with patients, preceptor(s), technicians, and other pharmacy personnel in the institutional/hospital setting.

Prerequisite(s): PHA 6946 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6948 IPPE - Institutional Pharmacy Practice II

Credit Hours: 1

This course gives pharmacy students experience in the institutional/hospital setting, allowing them to achieve educational outcomes in the areas of patient care and institutional pharmacy practices. Students will learn the basic distributive and administrative processes in the institutional setting including but not limited to: dispensing, clinical research, administration, and drug information/formulary review; gaining experience interacting with patients, preceptor, technicians, and other pharmacy personnel.

Prerequisite(s): PHA 6947 and PY3 Standing
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 6952 Graduate Program Capstone in Pharmacy

Credit Hours: 3

This course provides up-to-date, most advanced information about Pharmaceutical Nanotechnology from subject matter experts; (ie: lab methods, assignments, equipment & specializations). Students will create and present their final projects in this class.

Tampa | College of Pharmacy | Pharmacy

PHA 6971 Master's Thesis

Credit Hours: 1

This course is for the completion of research hours and a written thesis related to a specific original research project based on experimental data. Includes submission of a final Committee-Approved Thesis, including oral defense.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHA 7626 Advanced Health-System Pharmacy Practice Experience

Credit Hours: 6

The goal of the advanced health-system pharmacy practice experience is to provide opportunities for students to build on knowledge and skills acquired through didactic education and introductory pharmacy practice experiences and apply them in direct patient care experiences.

Prerequisite(s): PHA 6940
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 7627 Advanced Community Pharmacy Practice Experience

Credit Hours: 6

The goal of the advanced community pharmacy practice experience is to provide opportunities for students to build on knowledge and skills acquired through didactic education and introductory pharmacy practice experiences and apply them in direct patient care activities in the community pharmacy setting. Students will participate in patient care services and patient-focused dispensing functions. These services will focus on identifying, resolution, and prevention of medication-related problems.

Prerequisite(s): PHA 6940
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 7644 Geriatrics Patient Care Pharmacy Practice Experience

Credit Hours: 6

The goal of the geriatrics patient care advanced pharmacy practice experience is to provide opportunities for students to build on knowledge and skills acquired through didactic education and introductory pharmacy practice experiences and apply them in the care of a specialized patient population.

Prerequisite(s): PHA 6940
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 7684 Advanced Pharmacy Practice Experience Elective

Credit Hours: 6

This course provides opportunities for students to build on knowledge and skills acquired through didactic education and introductory pharmacy practice experiences and apply them to various practice settings.

Prerequisite(s): PHA 6787C with a minimum grade of C, PHA 6875C with a minimum grade of C, PHA 6233C with a minimum grade of C, PHA 6947 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 7692 Advanced Ambulatory Pharmacy Practice Experience

Credit Hours: 6

The goal of the ambulatory care advanced pharmacy practice experience is to provide opportunities for students to build on knowledge and skills acquired through didactic education and introductory pharmacy practice experiences and apply them in direct patient care activities in the ambulatory care setting. This course takes place in an ambulatory care, multidisciplinary practice setting. Practice sites may include hospital-based clinics, physician group practices, community, and others.

Prerequisite(s): PHA 6940
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 7694 Advanced Adult Medicine Pharmacy Practice Experience

Credit Hours: 6

The goal of the adult medicine advanced pharmacy practice experience is to provide opportunities for students to build on knowledge and skills acquired through didactic education and introductory pharmacy practice experiences and apply them in direct patient care activities in the adult medicine setting. This course takes place in an internal medicine/general medicine unit where patients are managed using a team-based approach.

Prerequisite(s): PHA 6940
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Pharmacy | Pharmacy

PHA 7928 Professional Forum

Credit Hours: 1

The focus of professional forum is to reinforce knowledge and skills learned throughout the curriculum by integrating didactic, pharmacy practice, and career preparation.

Tampa | College of Pharmacy | Pharmacy

PHA 7930 Special Topics in Pharmacy

Credit Hours: 1-6

Special topics for discussion and analysis related to Pharmacy.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHC 5933 Special Topics

Credit Hours: 1-3

Provides students the opportunity to learn about the multiple ways to view controversial topics in public health. It covers current public health topics including biomedical issues, social and behavioral factors, and environmental issues.

Tampa | College of Public Health | Public Health

PHC 6000 Epidemiology

Credit Hours: 3

Study of epidemiological methods to evaluate the patterns and determinants of health and diseases in populations.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6002 Infectious Disease Epidemiology

Credit Hours: 3

The course help students to understand epidemiological patterns, etiology and risk factors of infectious diseases as they occur in populations, rather than in individual patients. Familiarity with epidemiological terminology and biostatistics is required.

Prerequisite(s): PHC 6588, PHC 6756
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6006 Epidemiological Methods in Infectious Diseases

Credit Hours: 3

In depth understanding of the implication of epidemiological methods

within the context of infectious disease. Focus will be on the application of methods such as study design, as applied to infectious disease.

Prerequisite(s): PHC 6588 with a minimum grade of C, PHC 6756 with a minimum grade of C, PHC 6010 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6007 Cancer Epidemiology

Credit Hours: 3

The course will consider the extent of the cancer problem, present the epidemiology of the major cancer sites, including those of the respiratory, digestive and reproductive systems, and evaluate the potential for primary and secondary preventive efforts.

Prerequisite(s): PHC 6000
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6008 Cardiovascular Disease Epidemiology

Credit Hours: 3

A review of the major issues in cardiovascular disease epidemiology, including trends, the extent of the disease nationally and internationally, implications of major epidemiological studies, and strategies for prevention.

Prerequisite(s): PHC 6756 with a minimum grade of B-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6010 Epidemiology Methods I

Credit Hours: 3

This course is designed to cover the important concepts in epidemiology and their application in epidemiological research. Emphasis on measures and quantitative techniques, proper interpretation and explanation of quantative measures and results.

Prerequisite(s): PHC 6756 with a minimum grade of B-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6011 Epidemiology Methods II

Credit Hours: 3

This course will cover methods and practices, principles and concepts in epidemiology research. It will provide training in implementing appropriate study design, analyzing results and presenting research findings to a wide variety of audiences.

Prerequisite(s): PHC 6010 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): PHC 6051 with a minimum grade of C

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6020 Clinical Trials: Design, Conduct, and Analysis

Credit Hours: 3

The course will familiarize students with the issues in the design, conduct, and analysis of clinical trials. Factors involved in randomization, sample size and power, missing data, RCT data analysis, reporting and interpreting RCT findings.

Prerequisite(s): PHC 6051 with a minimum grade of C and (PHC 6053 with a minimum grade of C or PHC 6756 with a minimum grade of C or PHC 6757) with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6021 Fundamentals of Clinical Trials

Credit Hours: 3

The course will familiarize students with the issues in the design, and conduct of clinical trials. Factors involved in randomizing subjects, determining sample size, reporting and interpreting of results, analyzing data from the study will be considered.

Prerequisite(s): PHC 6050 with a minimum grade of C-, (PHC 6051 with a minimum grade of C-or PHC 6756) with a minimum grade of C-, PHC 6757 with a minimum grade of C-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6035 Comorbidity of Mental and Physical Disorders

Credit Hours: 3

This course examines the comorbidity of mental and physical disorders, taking a lifespan epidemiological approach. Emphasis is placed upon theories and empirical research elucidating comorbidities, risk factors, and mechanisms.

Prerequisite(s): PHC 6000, PHC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6037 Public Health Virology

Credit Hours: 3

A lecture-based course that fosters class participation, critical thinking and literature review. The focus of this course is on human diseases caused by viral infections, with emphasis on diseases of public health importance. There are no restrictions.

Tampa | College of Public Health | Global Health

PHC 6042 Methods in Pharmacoepidemiology

Credit Hours: 3

Methods in pharmacoepidemiology will introduce the concepts of pharmacoepidemiology and expose students to the approaches in designing studies and analyzing pharmacoepidemiology data.

Prerequisite(s): PHC 6756 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6043 Trending Topics in Pharmacoepidemiology and Pharmacoeconomics

Credit Hours: 3

This course will cover trends in pharmacoepidemiologic and pharmacoeconomic research. Students will provide literature-based essays and presentations on specific methodologic topics (e.g., validity, surveillance), using existing literature.

Prerequisite(s): PHC 6756 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6050 Biostatistics I

Credit Hours: 3

Concepts, principles, and methods of statistics applied to public health issues.

Prerequisite(s): MAC 1105
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6051 Biostatistics II

Credit Hours: 3

Simple and multiple linear regression, ANOVA (Analysis of Variance) and ANCOVA (Analysis of Covariance), Model building procedure and diagnostics with applications in health research.

Prerequisite(s): PHC 6756 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6053 Categorical Data Analysis

Credit Hours: 3

Study of techniques used in analyzing data where subjects have been cross-classified by two or more categorical variables. Special emphasis given to problems frequently arising in epidemiology, public health, and medicine.

Prerequisite(s): PHC 6051
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6054 Applications of Advanced Biostatistical Methods in Public Health

Credit Hours: 3

This course introduces advanced biostatistical modeling approaches including linear regression, logistic and Poisson regression, proportional hazards regression, and more with emphasis on their applications in the field of public health.

Prerequisite(s): PHC 6050 with a minimum grade of C- or PHC 6756 with a minimum grade of C-
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6057 Biostatistical Inference I

Credit Hours: 3

This course is primarily designed for students majoring in Biostatistics, emphasis is given to understanding and mastering of biostatistical theory and methods such as probability distribution, expectations, estimation and hypothesis testing.

Prerequisite(s): PHC 6096 with a minimum grade of C+
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6060 Biostatistical Case Studies and Collaboration I

Credit Hours: 3

This course provides hands on experience in biostatistical consulting. Biostatistical methods and computer skills are presented, along with the skills required for participating in collaborative and consultative research roles. A Foundation for biostatistical consultation is presented, involving the goals, content, conduct and presentation of Biostatisticians working in applied health settings. Students apply these principles to at least one consultative project and one collaborative project.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6061 Biostatistical Case Studies and Collaboration II

Credit Hours: 3

This course prepares students to join an active biostatistical analyst of a multidisciplinary research groups. This collaborative role requires knowledge of successful grant writing and review, site visits, and formal presentations of analytical results. Special issues in collaborating research at a distance are discussed. The biostatistical methodology and theory pertaining to collaborative research projects chosen by the students covered in formal lectures.

Prerequisite(s): PHC 6060
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6063 Public Health Data, Information and Decision Making

Credit Hours: 3

This course provides an understanding of public health databases and methods necessary for decision making. The emphasis is on the appropriateness and application of methods widely used for analysis in public health.

Tampa | College of Public Health | Health Policy and Management

PHC 6081 Intermediate SAS in Epidemiology

Credit Hours: 3

This course is a fast-paced SAS language class for: (1) students majoring in epidemiology or biostatistics and (2) others intending to, as a substantial component of their careers, use SAS.

Prerequisite(s): PHC 6701 with a minimum grade of C+
Corequisite(s): None.
Co-Prerequisite(s): PHC 6051 with a minimum grade of C+

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6084 Bayesian Data Analysis

Credit Hours: 3

This course introduces the theory and practice of Bayesian inference for single and multiple parameter hypotheses, regression models, generalized linear models, hierarchical models,and analysis of health-related data and others via MCMC algorithms.

Prerequisite(s): PHC 6096 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6096 Fundamentals of Probability

Credit Hours: 3

Designed for students majoring in Biostatistics; emphasis is given to understanding and mastering of biostatistical theory and methods such as probability distribution and expectations.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6102 Principles of Health Policy and Management

Credit Hours: 3

General principles of planning, management, evaluation, and behavior of public and private health care organizations at the local, state, and national levels.

Tampa | College of Public Health | Health Policy and Management

PHC 6104 Management of Public Health Programs

Credit Hours: 3

Application of principles and methods for organization and management of government and non-government public health programs.

Tampa | College of Public Health | Health Policy and Management

PHC 6106 Global Health Program Development and Administration

Credit Hours: 3

Program Development and Administration is one of four foundation courses for the concentration in Global Health. As a foundation course, its primary role is to provide students with a solid knowledge base in managing global health programs and projects that will serve them in their field experiences and in any one of the seven focus areas available within the global health concentration.

Prerequisite(s): PHC 6761
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Global Health

PHC 6108 Foundations of Public Health

Credit Hours: 3

This course provides the student with an introduction to public health, the public health system, and the role of the public health professional and the pharmacist as it relates to Healthy People 2020 goals and objectives.

Tampa | College of Public Health | Public Health

PHC 6110 International Health and Health Care Systems

Credit Hours: 3

Study of global health problems and trends, translated to needs and demands; socio-economic and political impact on health delivery; prevailing international systems compared to U.S. system; the role of international health agencies.

Tampa | College of Public Health | Health Policy and Management

PHC 6120 Community Partnerships and Advocacy

Credit Hours: 3

Designed to familiarize students with key aspects of developing partnerships among private and public sector organizations for the purposes of assessing and improving the health of communities. Particular skills include coalition development, developing a constituency/partnerships, advocacy, team building, and leadership.

Tampa | College of Public Health | Community and Family Health

PHC 6121 Vaccines

Credit Hours: 3

Provides an overview of current immunization strategies and their public health rationale. In addition, students will learn the use of vaccines in disease control and eradication, vaccine immunogenicity and adverse reactions.

Tampa | College of Public Health | Global Health

PHC 6145 Translation to Public Health Practice

Credit Hours: 3

Designed to prepare students to translate core public health concepts and principles into real-world public health practice. This course is designed to provide students with hands-on experience pertaining to translation of core public health concepts and principles.

Prerequisite(s): PHC 6588, PHC 6756
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Public Health

PHC 6146 Health Services Planning and Evaluation

Credit Hours: 3

Study of health services planning concepts/methods, and evaluation, with an emphasis on facilities and manpower planning, providing an in-depth orientation to information requirements for health planning, and methods to cover gaps of information.

Tampa | College of Public Health | Health Policy and Management

PHC 6147 Managing Quality in Health Care

Credit Hours: 3

Study of methods and tools for managing quality in health facilities, physician practices, managed care and public health; including developments in quality assurance and improvement, utilization review, risk management, and patient satisfaction.

Tampa | College of Public Health | Health Policy and Management

PHC 6148 Strategic Planning and Health Care Marketing

Credit Hours: 3

The course reviews the fundamental steps in the strategic planning process and marketing approaches for health care organizations. The textbook and exercises emphasize non-profit organizations.

Tampa | College of Public Health | Health Policy and Management

PHC 6151 Health Policy and Politics

Credit Hours: 3

This course will examine the role of federal, state, and local government in health care organization, delivery, and financing in the United States and other comparable industrial nations.

Tampa | College of Public Health | Health Policy and Management

PHC 6160 Health Care Financial Management

Credit Hours: 3

Introduction to the financial management practices in health care organizations, cost behavior analysis, financial statement analysis, and the time value of money.

Prerequisite(s): ACG 2021 or ACG 2071
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Health Policy and Management

PHC 6161 Health Finance Applications

Credit Hours: 3

The development and application of skills in finance, costing, and capitol decision making relevant to health care management.

Prerequisite(s): PHC 6160 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Health Policy and Management

PHC 6166 Advanced Seminar in Health Care Management

Credit Hours: 2

The course further develops analytic and decision-making skills regarding health services issues and problems. Students integrate and apply content from previous courses, (including finance, management policy, strategy, and quality) to analyze and solve health service problems by defining issues and goals, identifying methodologies to address concerns, analyzing information and developing and defining conclusions and recommendations.

Prerequisite(s): PHC 6148, PHC 6160, PHC 6180, PHC 6191 (or ACG 6025)
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Health Policy and Management

PHC 6180 Health Services Management

Credit Hours: 3

Advanced study of specific topics in health care organization management including the managerial process, organizational theory, resource utilization and control, and human resource management.

Tampa | College of Public Health | Health Policy and Management

PHC 6181 Organizational Behavior in Health Services

Credit Hours: 3

Investigates the impact that individuals, groups, and structure have on behavior within organizations. The application of such knowledge is used toward advancing the effectiveness of health care and related organizations. Special consideration is given to human resource applications. Case studies and other exercises are used.

Tampa | College of Public Health | Health Policy and Management

PHC 6183 Overview of United States and International Emergency/Disaster Management

Credit Hours: 3

Public Health and other professionals will be given an overview of the disaster management process. Provides terms, definitions, and concepts of emergency management from a local, national, and international perspective.

Tampa | College of Public Health | Global Health

PHC 6184 Emergency/Disaster Recovery

Credit Hours: 3

The content of this course is designed to expose the concepts of: 1)recovery models used by the United States and International operations, 2)recovery planning and response to a disaster environment, especially in terms of major disaster incidents, 3)broadening and enhancing the understanding of roles and responsibilities, and 4)the importance to the overall recovery effort. In addition to the United States and international focus, the course also addresses the coordination and problem solving aspects of disaster operations.

Tampa | College of Public Health | Global Health

PHC 6185 Emergency/Disaster Preparedness and Planning

Credit Hours: 3

Emergency Preparedness and Planning provides an overview to preparedness strategies, emergency planning and assessment of hazards and resources. This course provides intermediate level direction and builds upon planning concepts learned in Overview of United States and International Energy Management. Studies include in-depth planning and analytical framework, hazard/vulnerability analysis, and management.

Tampa | College of Public Health | Global Health

PHC 6186 Public Health Emergencies in Large Populations (PHLEP)

Credit Hours: 3

To develop or improve the skills of persons interested in providing emergency health services in humanitarian emergencies. The course is divided into two parts: 1)meeting health needs large populations and 2)the humanitarian and ethical issues of refugees and displaced people. Topics covered include food and nutrition, water and sanitation, providing health services, reproductive health, control of communicable diseases, humanitarian law, human rights, ethics, and the geopolitical issues related to population displacement particularly from conflict.

Tampa | College of Public Health | Global Health

PHC 6190 Public Health Database Management

Credit Hours: 3

This course focuses on the creation of databases with applications to public health and clinical research; data entry and database management and checks for accuracy and consistency, and preparation of final databases for statistical analysis.

Prerequisite(s): PHC 6701
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6191 Quantitative Analysis in Health Services

Credit Hours: 3

Examines the use of quantitative modeling techniques to address operational problems in managing medical and health care settings. Topics: probability, sampling, hypotheses testing, estimation, time series, demand forecasting, simulation, and queuing.

Prerequisite(s): PHC 6760 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Health Policy and Management

PHC 6193 Qualitative Methods in Community Health Research

Credit Hours: 3

This course provides classroom instruction and field application of qualitative research methods for studying community health problems. It provides a general introduction to ethnographic field methods, emphasizing systematic approaches to collection and analysis of qualitative data. Students will learn to identify the kinds of research problems for which qualitative methods are appropriate, and to critique qualitative research in terms of design, technique, analysis and interpretation.

Tampa | College of Public Health | Community and Family Health

PHC 6194 Public Health Geographic Information Systems

Credit Hours: 3

This course will prepare student to work with Geographic Information Systems related to Public Health. GIS allows the user to simplify, visualize, analyze, interpret and understand data in a geospatial world to address Public Health concerns.

Tampa | College of Public Health | Global Health

PHC 6196 Information Systems in Health Care Management

Credit Hours: 3

The course is designed to prepare students to analyze and design information systems in health services organizations.

Tampa | College of Public Health | Health Policy and Management

PHC 6197 Secondary Data Analysis in Maternal and Child Health

Credit Hours: 3

The purpose of this course is to provide experience in the management and analysis of data sets relevant to public health. Among the data sets considered are vital statistics, health care utilization databases, practitioner and other registries, periodic surveys, selected surveillance

systems, and programmatic data.

Tampa | College of Public Health | Community and Family Health

PHC 6230 Foundations of Humanitarian Assistance

Credit Hours: 3

This course is designed to develop or improve the skills of persons interested in providing emergency health services in international humanitarian emergencies.

Tampa | College of Public Health | Global Health

PHC 6231 Organizing Emergency Humanitarian Actions

Credit Hours: 3

Topics to be covered in this course include the: use of early warning systems, logistics, security of food, safety, assessment and surveillance, epidemiology, malnutrition, feeding programs, water and sanitation, shelter, and communicable diseases.

Co-Prerequisite(s): PHC 6230

Tampa | College of Public Health | Global Health

PHC 6232 From Emergency to Development and Prevention

Credit Hours: 3

This course includes: resources, training for local agencies, basic services, cultural issues, Sphere Projects Minimum Standards, basic services, women after a disaster, and health service program.

Prerequisite(s): PHC 6230, PHC 6231
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Global Health

PHC 6233 Current Challenges in the Humanitarian Field

Credit Hours: 3

This course will review: leadership issues, advocacy, neutrality and impartiality, the media, prisoner visitations, torture, demobilization and decommissioning of combatants, expatriates, peace-keeping to peace-building, sovereignty, and reconstruction.

Prerequisite(s): PHC 6230, PHC 6231
Corequisite(s): None.
Co-Prerequisite(s): PHC 6232

Tampa | College of Public Health | Global Health

PHC 6235 Critical Infrastructure Protection for Public Health Concepts

Credit Hours: 3

The content exposes: 1) HS Presidential Directives 7 and 63, 2) critical infrastructures and key resources, 3) public-private partnerships, and 4) vulnerability analysis and risk analysis/reduction.

Tampa | College of Public Health | Global Health

PHC 6236 Business Continuity for Global Health and Security

Credit Hours: 3

Course covers effects of the environment on health, business, and national security; fundamentals of Business Continuity Management; development of a Business Continuity Plan and a family emergency plan.

Tampa | College of Public Health | Global Health

PHC 6251 Disease Surveillance and Monitoring

Credit Hours: 3

A review of epidemiological principles and methods used in the development and practice of disease and infection surveillance, prevention and control for public health in general and in the context of the hospital setting in particular. Basic epidemiological concepts will be focused in communicable diseases, nosocomial infections, environmental exposures, and emerging diseases.

Tampa | College of Public Health | Global Health

PHC 6254 Public Health Implications and Concerns in Homeland Security

Credit Hours: 3

Identifies the implications public health presents within the context of homeland security related to public health strategy, interagency capabilities, and the resources that are aimed at preventing and containing risks from tragic events.

Tampa | College of Public Health | Global Health

PHC 6255 Homeland Security: Law, Policy and Public Health

Credit Hours: 3

Examines the laws and policy documents that are the foundation of homeland security. It is both broad and in depth. Through rigorous analysis, and regular discussions and short papers, students will learn what makes homeland security happen.

Tampa | College of Public Health | Global Health

PHC 6300 Principles of Environmental Health

Credit Hours: 3

This course provides information regarding fundamental topics in environmental and occupational health including air pollution, water pollution, solid and hazardous waste, and environmental health law and ethics.

Tampa | College of Public Health | Public Health

PHC 6303 Community Air Pollution

Credit Hours: 3

A study of air pollutants. Emphasis is given to sources and control technologies as well as health effects and environmental impact.

Prerequisite(s): CHM 3610C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6305 Environmental Analytical Laboratory

Credit Hours: 3

Techniques used for quantitative sampling and analysis of air, water, and soil contaminants.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6307 Principles of Exposure Assessment & Control

Credit Hours: 3

The student learns the principles and details of processes involved in assessment of inhalation, ingestion, and dermal contact exposures to chemical and biological agents encountered in environmental and occupational settings.

Tampa | College of Public Health | Public Health

PHC 6310 Environmental Occupational Toxicology

Credit Hours: 3

A study of the nature of industrial and environmental toxins and toxic by-products, generated and distributed, leading to disease, disability, or death, and the control measures available. Lecture and appropriate laboratory methods are used.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6313 Indoor Environmental Quality

Credit Hours: 3

Students will learn the importance of maintaining acceptable indoor environmental quality in occupational and residential settings. The course will emphasize current techniques, data interpretation methods, and proper data / conclusions reporting.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6314 Infection Control Program Design

Credit Hours: 3

This course will review educational program design for health care workers, instructional methods, personnel and financial resource management, role of Infection Control (IC) personnel, development of goals, mission statement, action plans for IC, evaluation of programs, communication with administration, physicians and care givers.

Tampa | College of Public Health | Global Health

PHC 6319 Modern Human Diseases, Diagnosis, and Treatment

Credit Hours: 3

This course will cover topics regarding current-day human diseases and conditions. We will explore a new topic that is affecting our society, including but not limited to cancer, HIV, diabetes, nosocomial infections, and the current vaccination debate.

Tampa | College of Pharmacy | Pharmaceutical Nanotechnology

PHC 6325 Environmental Laboratory Principles

Credit Hours: 3

This course familiarizes students with analytical measurement methodologies in quantitative sampling and analysis of air, water, soil contaminants, and analytical chemistry generally.

Tampa | College of Public Health | Public Health

PHC 6326 Global Issues in Environmental Health

Credit Hours: 3

Introduces students to global issues regarding civilization, industrialization and globalization and their effects on the environment and the health of workers and their families.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6345 HSE Management & Administration

Credit Hours: 3

A study of techniques and administrative practices which are instrumental in the initiation and maintenance of programs and procedures that are geared to prevent and reduce work related injuries, illnesses, and discomfort.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6351 Occupational Medicine for Health Professionals

Credit Hours: 3

Designed to enhance the skills of select health professionals in identifying, evaluating and charting a course of action for medical conditions resulting from occupational exposures and hazards.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6353 Environmental and Occupational Health Risk Assessment

Credit Hours: 3

This course is designed to provide the student the knowledge about the principles and methods used in the practice of environmental and occupational human health risk assessment.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6355 Principles of Occupational Safety

Credit Hours: 3

A study of safety management as it relates to hazard identification, accident investigation and training, enabling the safety manager to reduce costs to business, industry, and government.

Tampa | College of Public Health | Public Health

PHC 6356 Industrial Hygiene

Credit Hours: 2

A study of the recognition, evaluation, and control of the workplace affecting the health of employees.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6357 Environmental and Occupational Health

Credit Hours: 3

The study of major environmental and occupational factors that contribute to development of health problems in industrialized and developed countries.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6358 Physical Agents - Assessment and Control

Credit Hours: 2

Presents advanced aspects of recognition, assessment and control of occupational physical agents. This is the synthesis course for industrial hygiene students, and students will apply knowledge of hazards evaluation and control.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6360 Safety Management Principles and Practices

Credit Hours: 2

A study of safety management as it relates to hazard identification, accident investigation and training, enabling the safety manager to reduce costs to business, industry, and government.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6361 Industrial Ergonomics

Credit Hours: 2

Systems logic and methodology for assessing the potential impact of work environments on the health and safety of workers; application of occupational ergonomics and human factors to the design and evaluation of complex work environments.

Prerequisite(s): PHC 6360
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6362 Industrial Ventilation

Credit Hours: 2

Basic principles of fluid mechanics and exhaust ventilation are employed in the design and evaluation of the performance of industrial ventilation systems.

Prerequisite(s): PHC 6356
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6364 Industrial Hygiene Aspects of Plant Operations

Credit Hours: 2

Field visits to industrial plants will be conducted so as to familiarize students without prior experience to the health hazards associated with various processes and the methods of control employed to prevent excessive exposures.

Prerequisite(s): PHC 6356
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6365C Analytical Methods in Industrial Hygiene I

Credit Hours: 2

Analytical measuring methodologies and instruments employed in evaluating exposure to chemical agents are described and detailed. Hands-on laboratory exercises permit full familiarization in the calibration and use of these instruments. Problem solving sessions result in the development of a routine for the proper handling of laboratory data.

Prerequisite(s): PHC 6356
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6366C Analytical Methods in Industrial Hygiene II

Credit Hours: 2

Analytical measuring methodologies and instruments employed in evaluating exposure to physical agents are described and detailed. Hands-on laboratory exercises permit full familiarization in the calibration and use of these instruments. Problem solving sessions result in the development of a routine for the proper handling of laboratory data.

Prerequisite(s): PHC 6356
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6369 Industrial Toxicology

Credit Hours: 2

This course will focus on specific industries, industrial processes and the chemicals that worker's may be potentially exposed to, and their impact on Public Health. The Standard Industrial Classification (SIC) division structure will be used to identify industries that have been studied by NIOSH or other agencies. For each industry identified, chemical hazards, exposure routes, toxicology effects, and monitoring methods will be discussed emphasizing the need for a multidisciplinary approach in providing information aimed at reducing worker exposures to industrial toxicants.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6373 Protecting Public Health: Bioterrorism/Biodefense

Credit Hours: 3

The theoretical, historical and contemporary issues associated with public health protection and safety. This includes quarantine, health and safety management, homeland security, and the history of biological warfare.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6377 Hazardous Materials and Communication

Credit Hours: 3

This course identifies hazardous materials used in the industrial workplace. Students learn the hazards associated with a range of industrial chemicals including metals, caustics, gases, aliphatic, aromatic, chlorinated hydrocarbons, and plastics.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6401 Homelessness: Implications for Behavioral Healthcare

Credit Hours: 3

A study of the structural, personal, treatment, and sociopolitical issues related to homelessness. Causes of homelessness from structural and personal factors are explored. Quantitative and qualitative data are reviewed to examine the experience of homelessness, pathways into homelessness including mental health, substance abuse, and violence/trauma. A special focus will be on the research conducted by the instructors on services for homeless families and the prevention of homelessness among individuals with severe mental illness.

Tampa | College of Public Health | Community and Family Health

PHC 6408 Health Education and Counseling

Credit Hours: 3

This course will provide students with an understanding of multi-level factors that contribute to individual's lived experiences coping with loss, disabilities and genetic or chronic health conditions. Students will learn advanced counseling skills.

Tampa | College of Public Health | Global Health

PHC 6410 Social and Behavioral Sciences Applied to Health

Credit Hours: 3

A review of the conceptual, empirical, and theoretical contributions of the Social and Behavioral Sciences as they contribute to an understanding of health and illness.

Tampa | College of Public Health | Community and Family Health

PHC 6411 Introduction to Social Marketing for Public Health

Credit Hours: 3

This course is designed to analyze the components and applications of social marketing for public health: theoretical foundations; research methods; strategy development; program design and implementation, materials pretesting, and ethics.

Tampa | College of Public Health | Community and Family Health

PHC 6412 Health Disparities and Social Determinants

Credit Hours: 3

This course is designed to explore health disparities in the U.S. and multi-level strategies to reduce those disparities. Discussions will focus on a critique of the literature from a variety of disciplinary perspectives and an analysis of case studies.

Tampa | College of Public Health | Community and Family Health

PHC 6413 Family and Community Violence in Public Health

Credit Hours: 3

The objective of this course will be to identify and to focus on the most serious policy and research issues which are specific to the field of family violence. The course will cover theory, research, and applied programs in community settings.

Tampa | College of Public Health | Community and Family Health

PHC 6414 Adolescent Health

Credit Hours: 3

The purpose of this course is to provide an overview of adolescent health issues and trends. With this primary aim, the objectives are organized around the knowledge of health assessment and interventions with adolescents and the skills needed for effective teaching methodologies to enhance health provider communication with adolescents. This course is not restricted to Public Health graduate students.

Tampa | College of Public Health | Community and Family Health

PHC 6420 Health Care Law, Regulation and Ethics

Credit Hours: 3

This is a survey course of the most significant issues in health care law. Core topics include licensure, malpractice, reproductive issues, the right to die, and managed care. Students will develop and understanding of substantive law, legal decision making, and the relationship between health care law and ethics. Graduate students from other departments may take the course.

Tampa | College of Public Health | Community and Family Health

PHC 6421 Public Health Law and Ethics

Credit Hours: 3

This course provides students with an overview of major ethical and legal concepts. The course considers the role of the legal system in resolving public health problems through the legislature, the courts, and administrative agencies.

Tampa | College of Public Health | Health Policy and Management

PHC 6423 Environmental and Occupational Health Law

Credit Hours: 3

Review and analysis of Federal and State laws and regulations in relation to occupational and environmental health and safety.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6430 Health Economics I

Credit Hours: 3

Microeconomic analysis of the structure of the health care industry and economic incentives facing physicians, patients, and hospitals.

Prerequisite(s): ECO 2023
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Health Policy and Management

PHC 6435 Comparative Health Insurance Systems

Credit Hours: 3

Overview of health insurance concepts and major systems in developed countries, using microeconomic tools relevant to management and public policy.

Prerequisite(s): ECO 2023
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Health Policy and Management

PHC 6442 Global Health Applications in the Field

Credit Hours: 3

This course prepares students for fieldwork in the global public health arena. A comparative approach is taken to highlight similarities and differences across countries at variable levels of socioeconomic development.

Prerequisite(s): PHC 6106
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Global Health

PHC 6450 Patient-centered Communication and Professionalism

Credit Hours: 3

This course will introduce patient-provider communication skills to health students. Through role modeling, practice, and case studies, students will develop effective patient interviewing and communication skills and demonstrate professionalism.

Tampa | College of Public Health | Global Health

PHC 6460 Social Marketing Program Management

Credit Hours: 3

Address the operational and planning issues associated with social marketing programs. Develop social marketing problem-solving, and planning skills. Topics include budgeting, branding, implementation, evaluation.

Prerequisite(s): PHC 6411, PHC 6705
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6461 Advanced Social Marketing

Credit Hours: 3

This course enables students to use the social marketing framework to analyze public health problems and design program solutions. The course focuses on a managerial perspective to improve organizational efficiency and social design principles.

Prerequisite(s): PHC 6411, PHC 6705
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6462 Cultural Competency in Public Health Practice

Credit Hours: 2

An overview of the knowledge and skills needed to work in multicultural environments and apply the principles of cultural competency. Designed to critically examine this construct by incorporating anthropological perspectives and techniques.

Tampa | College of Public Health | Public Health

PHC 6500 Theoretical and Behavioral Basis for Health Education

Credit Hours: 4

Assessment of and current methodologies related to understanding and influencing psychosocial, cultural, and situational factors in voluntary behavior change process; theories of health behavior.

Tampa | College of Public Health | Community and Family Health

PHC 6505 Program Planning in Community Health

Credit Hours: 3

This course is designed to prepare students to analyze the planning and

development process for community health programs. The PRECEDE-PROCEED model and intervention Mapping will be used as the primary planning frameworks.

Prerequisite(s): PHC 6500
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6507 Health Education Intervention Methods

Credit Hours: 3

Prepares students to analyze and incorporate effective content and process in health education program delivery. Course not restricted to health education majors.

Prerequisite(s): PHC 6500, PHC 6505
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6510 Exotic and Emerging Infectious Diseases

Credit Hours: 3

A study of human infectious disease with particular emphasis on diseases caused by parasites, viruses, bacteria, and fungi found in sub-tropical and tropical environments.

Tampa | College of Public Health | Global Health

PHC 6511 Public Health Immunology

Credit Hours: 3

Immunology as applied to public health. Emphasis is on applications of immunology and immunological techniques used in surveillance, prevention, and control of public health problems.

Tampa | College of Public Health | Global Health

PHC 6512 Vectors of Human Disease

Credit Hours: 3

Biology of the vectors of human disease: major groups include the arthropods, mollusks, and mammals. Emphasis on the ecology of the vectors and their transmission of pathogens as they relate to public health.

Tampa | College of Public Health | Global Health

PHC 6513 Public Health Parasitology

Credit Hours: 3

Human diseases caused by parasite infection with emphasis on diseases related to environmental exposure and of public health importance. Major groups include the protozoan, cestodes, trematodes, and nematodes of human disease.

Tampa | College of Public Health | Global Health

PHC 6514 Infectious Disease Control in Developing Countries

Credit Hours: 3

Focuses on disease control strategies for selected infectious and communicable diseases. Diseases covered have been selected on the basis of their relative contribution to the burden of disease in developing countries.

Prerequisite(s): PHC 6000
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Global Health

PHC 6515 Food Safety

Credit Hours: 3

Overview of food safety practices and principles emphasizing the role of food safety in public health. Emphasis is placed on the leading causes of foodborne illness and their associated food groups.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 6516 Tropical Diseases

Credit Hours: 3

The course approaches tropical and infectious diseases from the preventive and global public health perspectives but takes the biological aspects of the host-parasite relationship as bases for its control.

Tampa | College of Public Health | Global Health

PHC 6517 Infectious Disease Prevention Strategies

Credit Hours: 3

This course focuses on surveillance criteria, outbreak criteria, data collection and study design. Also included will be data analysis and reporting; interaction with public health agencies; preparation for Joint Commission on Accreditation of Healthcare Organizations (JCAHO); prevention and intervention; sanitation, disinfection, antisepsis and sterilization; role of immunization, antimicrobial prophylaxis and therapy.

Tampa | College of Public Health | Global Health

PHC 6521 Public Health Nutrition

Credit Hours: 3

Review of nutrition issues and programs for infants, children, adolescents, adults and elderly, food security, and the role of nutrition education in improving public health.

Tampa | College of Public Health | Community and Family Health

PHC 6522 Nutrition in Health and Disease

Credit Hours: 3

Overview of nutrients required for health, regulatory mechanisms influencing requirements and metabolism in growth, reproduction, disease, senescence, psychological and sociological implications, and the coming impacts of genomic (personal) nutrition.

Tampa | College of Public Health | Community and Family Health

PHC 6530 Issues and Concepts in Maternal and Child Health

Credit Hours: 3

The purpose of this course is to provide for the foundation of Maternal and Child health for students who will be concentrating in this area, or as an overview for non-majors.

Tampa | College of Public Health | Community and Family Health

PHC 6532 Women's' Health Issues in Public Health

Credit Hours: 3

A public health orientation of women's health needs with their impact on society, family, and children.

Tampa | College of Public Health | Community and Family Health

PHC 6537 Case Studies in MCH Programs, Policies and Research

Credit Hours: 3

Capstone course intended to provide unifying opportunity to utilize concepts, principles, and skills learned in other MCH and public health courses.

Prerequisite(s): PHC 6530, PH Core Courses
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6539 Foundations in Adolescent Behavioral Health

Credit Hours: 3

Examines the interaction of epidemiology, disease surveillance, social neuroscience, environmental vulnerability, pharmacology, and developmental risk & resiliency that affect youth populations at risk for drug use and mental disorders.

Tampa | College of Public Health | Community and Family Health

PHC 6543 Foundations in Behavioral Health Systems

Credit Hours: 3

This web-based course is a graduate course in Behavioral Health within

the Department of Community and Family Health. It is designed to provide the graduate student with an overview and understanding of the significant issues and trends in community & family mental health delivery systems in America. Four major areas of mental health will be emphasized: 1) history and legislation; 2) systems delivery; 3) programs and policies; 4) and selected at-risk populations.

Tampa | College of Public Health | Community and Family Health

PHC 6544 Children's Mental Health Services

Credit Hours: 3

The content of this course is designed to prepare professionals to work in partnership with families and other professionals and participate in interdisciplinary teams in a variety of settings to meet the needs of children with mental health problems.

Tampa | College of Public Health | Community and Family Health

PHC 6545 Evaluation in Mental Health

Credit Hours: 3

A study of the theories and practical approaches to the development of evaluative methods for behavioral health.

Prerequisite(s): PHC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6546 Epidemiology of Mental Disorders

Credit Hours: 3

Students in this course will study relevant factors that determine the frequency and distribution of mental disorders in human populations. Mental health intervention strategies also will be explored.

Tampa | College of Public Health | Community and Family Health

PHC 6547 Case Management in Community Mental Health

Credit Hours: 3

This course focuses on case management systems with a special emphasis on clinical case management for vulnerable populations, especially persons with severe mental illness and older adults. This course is designed for persons who are interested in providing case management services, managing such services, or have an interest in the field. The course examines elements critical for the effective provision and evaluation of case management services.

Tampa | College of Public Health | Community and Family Health

PHC 6550 Child Health and Development

Credit Hours: 3

This course examines the biological, social and environmental factors that influence child development, the epidemiology of child health, issues related to children with special needs, child health policy, prevention, and intervention.

Tampa | College of Public Health | Community and Family Health

PHC 6561 Laboratory Techniques in Public Health

Credit Hours: 3

This is a unique interactive laboratory based course. Each lecture will be supported by a "wet lab" where students would get hands on experience of laboratory research techniques using basic and advanced biochemical and molecular tools.

Tampa | College of Public Health | Global Health

PHC 6562 Microbiology for Healthcare Workers

Credit Hours: 3

An overview of contemporary microbiology, with emphasis on the significance of microorganisms in the environment and clinical disease. The structure, physiology, molecular genetics, taxonomy, immunological and clinical aspects, and public health implications of microorganisms will be covered.

Tampa | College of Public Health | Global Health

PHC 6587 Health & Wellness Coaching: Advanced Methods

Credit Hours: 3

Advanced methods and skills in the Wellness Mapping 360 methodology. Emphasis is placed on cultivating proficiency in core Health & Wellness Coaching competencies as defined by the International Coach Federation and the International Consortium of Health.

Prerequisite(s): PHC 6589 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Public Health

PHC 6588 History and Systems of Public Health

Credit Hours: 1

An overview of the public health profession, including core functions and values, essential services, history, current challenges, and US and global public health systems.

Tampa | College of Public Health | Public Health

PHC 6589 Health & Wellness Coaching: Core Principles

Credit Hours: 3

Introduction to core framework, methods, and skills utilized in Health & Wellness Coaching. Emphasis is placed on professional coaching competencies and skill-building practice to effectively guide individuals towards healthy & sustained lifestyle change.

Tampa | College of Public Health | Public Health

PHC 6591 Reproductive and Perinatal Epidemiology

Credit Hours: 3

This course is an introduction to reproductive/perinatal epidemiology and its application in Maternal and Child Health. It examines perinatal & family planning issues and emphasizes factors that affect reproductive, pregnancy and infant health outcomes.

Prerequisite(s): PHC 6756 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6593 Professional Development in Genetic Counseling

Credit Hours: 1

This course will prepare students to begin their career as an independent genetic counselor by fostering skills needed for lifelong learning and ongoing professional development.

Tampa | College of Public Health | Global Health

PHC 6595 Applied Clinical Genetics

Credit Hours: 3

Medical genetics concepts relevant to human diseases and the practice of clinical genetics and genetic counseling are covered. The course builds on concepts from Genomics in Medicine and Public Health, which is recommended but not required.

Tampa | College of Public Health | Global Health

PHC 6596 Introduction to Genetic Counseling

Credit Hours: 1

Students will be introduced to the goals and basic components of genetic counseling sessions as well as basic medical genetics terminology, an historical perspective of the profession, and research topics in genetic counseling, genetics, and genomics.

Tampa | College of Public Health | Global Health

PHC 6597 Quantitative Genomics and Genetics

Credit Hours: 3

This course will introduce quantitative genetic and genomic concepts and skills to health students. Through real world case studies and student projects, students will develop effective analytical skills to handle fundamental problems in genomics.

Tampa | College of Public Health | Global Health

PHC 6601 Human Genomics in Medicine and Public Health

Credit Hours: 3

Introduction of modern genetic technologies to health students who have limited training in molecular biology and biochemistry. The course will integrate these rapidly developing technologies into the real world of personal health.

Tampa | College of Public Health | Global Health

PHC 6701 Computer Applications for Public Health Researchers

Credit Hours: 3

Course covers essential computer-based techniques for a public health researcher; data entry, editing, management, subsample selection, and data encryption for confidentiality are all covered. SAS is used extensively. Course open to all graduate students.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 6705 Formative Research Methods in Social Marketing

Credit Hours: 3

This course is designed to familiarize students with the basic principles and techniques in conducting formative research for social marketing program development. The major topics covered include: principles of formative research design, qualitative data collection methods, interviewing techniques, qualitative data analysis, survey design, pretesting, and implementation, ethical principles and protection of human subjects.

Prerequisite(s): PHC 6411
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6708 Evaluation Methods in Community Health

Credit Hours: 3

This course will cover contextual issues surrounding evaluation, evaluation designs and methodological issues, steps involved in conducting an evaluation, communicating the results, and ensuring that evaluation findings are used by intended users.

Prerequisite(s): PHC 6505
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6716 Advanced Formative Research Methods

Credit Hours: 3

This course gives students an advanced, applied perspective of formative research methods. The focuses on: survey design; online quantitative research; translating findings into social marketing strategy; and applied data reporting techniques.

Prerequisite(s): PHC 6705
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6722 Laboratory Rotations in Global Health Research

Credit Hours: 3

Designed to familiarize MSPH students with ongoing research and laboratories within the Department of Global Health. Students will choose from a list of laboratory-projects rotation options.

Tampa | College of Public Health | Global Health

PHC 6725 Focus Group Research Strategies

Credit Hours: 3

This course is an intensive overview of focus group procedures in the public health environment. Attention will be placed on question development, moderator skills, analysis strategies and planning critical logistical details of focus group interviews, and analyzing results of focus group interviews. The course will examine unique methodological characteristics of focus group interviews, identify emerging trends, and explore areas of appropriate and inappropriate use.

Tampa | College of Public Health | Community and Family Health

PHC 6728 Translational Research Methods in Adolescent Behavioral Health

Credit Hours: 3

Focuses on research methods and measurement models relevant to translational research, implementation science & the transfer of knowledge from research to practice. Adolescents with co-occurring disorders are a special population of focus.

Prerequisite(s): PHC 6539
Corequisite(s): PHC 6946
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6729 Advanced Research Education in Adolescent Behavioral Health

Credit Hours: 3

Focuses on advanced topics in community-based participatory research in adolescent behavioral health. It will also focus on organization readiness to adopt evidence-based practices in adolescent behavioral health.

Prerequisite(s): PHC 6539, PHC 6728
Corequisite(s): PHC 6947
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6756 Population Assessment: Part 1

Credit Hours: 5

Fundamentals of population assessment in public health including concepts and skills in systems thinking, public health biology, health behavior, environmental health, health policy, global health, epidemiology, and biostatistics. Part 1 or 2.

Prerequisite(s): None.
Corequisite(s): PHC 6588
Co-Prerequisite(s): None.

Tampa | College of Public Health | Public Health

PHC 6757 Population Assessment: Part 2

Credit Hours: 3

Fundamentals of population assessment in public health including concepts and skills in systems thinking, public health biology, health behavior, environmental health, health policy, global health, epidemiology, and biostatistics. Part 2 of 2.

Prerequisite(s): PHC 6588, PHC 6756
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Public Health

PHC 6760 Research Methods in Public Health Programs

Credit Hours: 3

Improves the students' skills in quantitative research methods that are used evaluating public health programs and health service delivery systems.

Tampa | College of Public Health | Health Policy and Management

PHC 6761 Global Health Assessment Strategies

Credit Hours: 3

This course provides a systematic approach for the assessment of public health interventions in low resource countries by providing tools and skills to collect, retrieve, manage, assemble, analyze and communicate information at the community level.

Prerequisite(s): PHC 6764, PHC 6000, PHC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Global Health

PHC 6764 Global Health Principles and Contemporary Issues

Credit Hours: 3

This course introduces students to the global context of public health and

its dimensions particular to international settings; examines major themes and policies in global health; and analyzes health problems and varying responses globally.

Tampa | College of Public Health | Global Health

PHC 6765 International Health Education

Credit Hours: 3

This travel abroad course compares the practice and venues of health education as they occur in another country with those in the United States. Specific course location varies. Focus is on comparative assessment of individual and community health education needs, program planning, implementation, and evaluation, coordination and administration of programs, resource availability of programs, resource availability, health communication mechanisms, application of research principles, and status of the health education profession.

Tampa | College of Public Health | Community and Family Health

PHC 6766 Global Health Challenges: In-Country Case Study (Field Course)

Credit Hours: 3

This travel abroad course compares the practice and venues of public health as they occur in another country with those in the United States. Health issues unique to and associated with the country are examined.

Tampa | College of Public Health | Public Health

PHC 6907 Independent Study: Public Health

Credit Hours: 1-6

Independent study determined by the student's needs and interests.

Tampa | College of Public Health | Public Health

PHC 6911 Clinical Research I

Credit Hours: 1

Students will apply principles of research design and theory to plan their own research project. Students will complete human subjects training and most of the basic components they need to submit a research proposal to the IRB.

Tampa | College of Public Health | Global Health

PHC 6912 Clinical Research II

Credit Hours: 1

Students collect data, review and critique published literature, work on writing for lay audiences and scholarly publication, practice data analytic techniques, trouble shoot research challenges; complete background and methods sections for project.

Prerequisite(s): PHC 6911
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Global Health

PHC 6915 Clinical Research III

Credit Hours: 1

Students will complete their data analysis and write up their abstract, results and discussion which they will combine with prior work to complete a journal manuscript and present their final research project.

Prerequisite(s): PHC 6911, PHC 6912
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Global Health

PHC 6917 Master of Health Administration Internship Report

Credit Hours: 2

In-depth analysis of an approved management problem at a health organization that results in a management consulting report based on the field-based practice experience.

Prerequisite(s): PHC 6160 with a minimum grade of B, PHC 6180 with a minimum grade of B, PHC 6181 with a minimum grade of B, PHC 6760 with a minimum grade of B, PHC 6756 with a minimum grade of B, PHC 6588 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): PHC 6941 with a minimum grade of S

Tampa | College of Public Health | Health Policy and Management

PHC 6930 Public Health Seminar

Credit Hours: 1-3

Interaction of faculty, students and select health professionals in relation to public health issues and research.

Tampa | College of Public Health | Public Health

PHC 6934 Selected Topics in Public Health

Credit Hours: 1-6

The content of this course will be governed by student demand and instructor interest.

Tampa | College of Public Health | Public Health

PHC 6940 Clinical Practicum in Genetic Counseling

Credit Hours: 1-6

Students will apply genetic counseling skills in clinical practice settings through reviewing the medical and genetic basis of clinical cases, interpreting genetic test results, and patient interactions.

Tampa | College of Public Health | Global Health

PHC 6941 Master of Health Administration Internship

Credit Hours: 2

Students demonstrate MHA-competency attainment through an integrative field-based practice experience analyzing a management problem for a public or private health organization.

Prerequisite(s): PHC 6160 with a minimum grade of B, PHC 6180 with a minimum grade of B, PHC 6180 with a minimum grade of B, PHC 6760 with a minimum grade of B, PHC 6756 with a minimum grade of B, PHC 6588 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Health Policy and Management

PHC 6942 Health & Wellness Coaching: Practicum

Credit Hours: 3

Students will demonstrate competencies required for Health & Wellness Coaching credentialing through engaging as a Health & Wellness Coach in professional/clinical practice settings under the supervision of a certified health and wellness coach.

Prerequisite(s): None.
Corequisite(s): None.
Co-Prerequisite(s): PHC 6587 with a minimum grade of B

Tampa | College of Public Health | Public Health

PHC 6943 Integrated Learning Experience

Credit Hours: 3

Student will demonstrate synthesis of MPH competencies through an integrated learning experience. This course is a culminating experience for the MPH.

Tampa | College of Public Health | Public Health

PHC 6945 Supervised Field Experience

Credit Hours: 1-12

Internship in a public health agency or setting. Application of administrative, program, and/or research models now employed in government and private public health organizations.

Tampa | College of Public Health | Public Health

PHC 6946 Service Learning in Adolescent Behavioral Health I

Credit Hours: 2

Orient students to the organizational context of adolescent behavioral health community agencies and communty implementation of evidence-based practices. Students complete first phase of the Capstone project.

Prerequisite(s): PHC 6539
Corequisite(s): PHC 6728
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6947 Service Learning in Adolescent Behavioral Health II

Credit Hours: 2

Facilitate completion of the second phase of the Capstone Project, the service learning component of the Institute. Students will implement research projects conceptualzed in the first service learning course.

Prerequisite(s): PHC 6539, PHC 6728, PHC 6946
Corequisite(s): PHC 6729
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6948 Service Learning in Adolescent Behavioral Health III

Credit Hours: 2

Facilitate completion of the third phase of the Capstone Project. Students will analyze and report findings from research projects conducted during the Service Learning II course.

Prerequisite(s): PHC 6539, PHC 6728, PHC 6729, PHC 6946, PHC 6947
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 6949 Applied Practice Experiences

Credit Hours: 3

Students demonstrate MPH-competency attainment through applied practice experiences. This course is a culminating experience for the MPH.

Tampa | College of Public Health | Public Health

PHC 6971 Thesis: Master of Science in Public Health

Credit Hours: 2-19

Research-oriented study for students seeking the M.S. degree in Public Health.

Tampa | College of Public Health | Public Health

PHC 6977 Special Project: MPH

Credit Hours: 3

In-depth study of a selected issue in public health. A topic will be selected according to student's needs and interests.

Tampa | College of Public Health | Public Health

PHC 7018 Environmental Epidemiology

Credit Hours: 3

This course will consider the relationship between environmental (non-occupational) factors and the occurrence of disease in human populations, including the chemical and physical extrinsic agents to which humans are exposed.

Prerequisite(s): PHC 6000
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7019 Occupational Epidemiology

Credit Hours: 3

Examines the existing epidemiologic data pertaining to the health effects of specific occupational exposures and the epidemiologic methods involved in the conduct of occupational studies.

Prerequisite(s): PHC 6000
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7044 Neuroepidemiology

Credit Hours: 3

This course provides an overview of the epidemiology of selected neurologic diseases. Particular emphasis is placed on how methodologic

problems apply to the epidemiologic study of a variety of neurologic diseases.

Prerequisite(s): PHC 6000, PHC 6050
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7045 Practical Issues in Epidemiology

Credit Hours: 3

This course provides an understanding of the everyday tasks faced by an epidemiologist working in research. Topics include, ethics, data collection, and implementation of interventions.

Prerequisite(s): PHC 6000 with a minimum grade of B, PHC 6010 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): PHC 6756 with a minimum grade of B

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7055 Biostatistical Computing

Credit Hours: 3

This course provides a broad foundation in modern biostatistical computing methods relevant to public health research. It prepares Ph.D. students with advanced computing skills for dissertation research. Topics include algorithms in matrix algebra, Newton Raphson, Fisher's scoring, the EM algorithm, bootstrap, random number generation, Monte Carlo Markov Chain, and data augmentation.

Prerequisite(s): STA 6447, PHC 7058
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7056 Longitudinal Data Analysis

Credit Hours: 3

This course is a discussion of recent development of methods for analysis of longitudinal data. Covered topics include generalized estimating equations, mixed effects models, hierarchal models.

Prerequisite(s): PHC 7058, PHC 7098
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7058 Biostatistical Inference II

Credit Hours: 3

This course covers the foundation of biostatistical inference, required for biostatistic program. Topics include likelihood theory, modern Bayes theory, estimation and testing, non-parametric theory.

Prerequisite(s): STA 6447
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7059 Advanced Survival Data Analysis

Credit Hours: 3

This course addresses advanced topics of survival data analysis. Topics include recurrence multiple events and faulty models. Counting process based theory is discussed. Real data sets are used for illustration.

Prerequisite(s): STA 6447, PHC 7058
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7067 Probability Models

Credit Hours: 3

Probability theory and models with applications in Public Health. Contents: fundamental probability theories; stochastic process; probability modeling with application to health data.

Prerequisite(s): College-level calculus
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Public Health

PHC 7085 Public Health Laboratory Bioinformatics

Credit Hours: 3

This course will teach students the principles and methods for bioinformatics in public health laboratory programs, including systems for surveillance, outbreak investigation, and diagnostics.

Tampa | College of Public Health | Global Health

PHC 7098 Generalized Linear Models

Credit Hours: 3

The course provides an in-depth coverage of the theory of generalized linear models with application in public health. Topics covered are numerical algorithms, exponential family, modeling checking, logistic regression, loglinear models, estimating equations.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7103 Transforming Public Health Practice

Credit Hours: 3

An introduction to the needs for developing the contemporary public health infrastructure. An overview of current issues and methods of public health practice in addition to issues and methods of public health leadership and management.

Tampa | College of Public Health | Community and Family Health

PHC 7119 Organizational Behavior in Public Health Systems

Credit Hours: 3

This course investigates the impact that individuals, groups, and structure have on behavior within organizations. The application of such knowledge is used toward advancing the effectiveness of public health systems.

Tampa | College of Public Health | Public Health

PHC 7122 Vaccinology

Credit Hours: 3

Provides advanced information regarding the current state of vaccinology. Besides currently available vaccines, the course reviews vaccines under experimentation for emerging and re-emerging diseases as well as vaccines for neglected tropical diseases.

Prerequisite(s): Graduate or undergraduate immunology course.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Public Health

PHC 7149 Practical Applications II: Public Health Leadership

Credit Hours: 1

Designed to engage future public health leaders in discussions and critical thinking activities regarding leadership roles and responsibilities as they contribute to a leadership framework in public health academic, governmental or community practice.

Prerequisite(s): PHC 7103
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 7152 Policy and Practice in Community and Family Health

Credit Hours: 3

This course is designed to prepare students to critically analyze issues and develop skills pertaining to effective policy development and practice in community and family health public health programs.

Tampa | College of Public Health | Community and Family Health

PHC 7154 Evidence-informed Public Health I

Credit Hours: 3

This course provides an overview of evidence-informed public health practice in addition to skills for evidence-informed decision making.

Tampa | College of Public Health | Community and Family Health

PHC 7156 Evidence-Informed Public Health II

Credit Hours: 3

An overview of evidence-informed public health decision making including: assessment of scientific evidence; development and quantification of problem statement; prioritizing evidence-informed options; and, translating evidence to action.

Prerequisite(s): PHC 7154
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 7198 Advanced Qualitative Methods in Community Health Research

Credit Hours: 3

This course provides advanced instruction and supervision of field application of qualitative research methods for studying community health problems. Content focuses on the skills to critically evaluate theory-based mixed method designs.

Prerequisite(s): PHC 6193, PHC 6500
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 7317 Risk Communication in Public Health

Credit Hours: 3

Communicating with the public about environmental and occupational health risks that affect individuals, families, and communities is a central task facing public health professionals. Analyzes the structure, function, content and process of risk communication in order to maximize effective, responsible and ethical public interaction and to describe the issues related to the legal implementation of risk communication in public health organizations.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 7368 Aerosol Technology in Industrial Hygiene

Credit Hours: 2

An advanced study of the properties, behavior, and measurement of aerosols, including the physical and chemical principles affecting behavior. Various applications of aerosol technology in industrial hygiene will be investigated, including inhalation and deposition of aerosols, aerosol sampling, and control.

Tampa | College of Public Health | Environmental and Occupational Health

PHC 7405 Theoretical Application to Public Health Issues

Credit Hours: 3

Designed for the advanced doctoral student focusing on the application of theory for developing, implementing, and evaluating public health interventions.

Tampa | College of Public Health | Community and Family Health

PHC 7437 Applications in Health Economics

Credit Hours: 3

1. in depth, economic evaluation techniques, cost-benefit, cost-effectiveness, and cost-utility analysis. 2. critical review of selected peer reviewed empirical studies. 3.students use a large dataset and estimate an effect size.

Prerequisite(s): PHC 6430
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Health Policy and Management

PHC 7466 Health Disparities and Cultural Competency in Public Health

Credit Hours: 1

This course is designed to explore multi-level strategies to reduce health disparities in the U.S. and globally, and to develop the cultural competence needed to work in multicultural and diverse environments in public health.

Tampa | College of Public Health | Public Health

PHC 7504 Innovative Education in Public Health

Credit Hours: 1

This course examines public health education, through assessment of community knowledge and learning needs, and the use of innovative pedagogical practices to deliver experiences that promote learning in academic, organizational, and community settings.

Tampa | College of Public Health | Public Health

PHC 7565 Public Health Laboratory Management I

Credit Hours: 3

This course will provide students a comprehensive report on the history and evolution of public health laboratories (PHLs) in the United States, management theory and organizational tools for use in PHLs.

Tampa | College of Public Health | Global Health

PHC 7566 Public Health Laboratory Safety and Security

Credit Hours: 3

This course will teach students the principles, policies, and methods for management of public health laboratory safety and security programs. Topics include: Biosecurity, PPE, engineering controls, biological, chemical, radiological, and animal safety.

Tampa | College of Public Health | Global Health

PHC 7567 Public Health Laboratory Molecular Biology and Molecular Diagnostics

Credit Hours: 3

This course will teach students to apply knowledge of cellular structure and function to molecular diagnostic procedures.

Tampa | College of Public Health | Global Health

PHC 7583 Community-Based Health Promotion

Credit Hours: 3

This course is designed to familiarize students with key historical underpinnings and principles and practices of community-based participatory research.

Prerequisite(s): PHC 7198, PHC 7405
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 7702 Advanced Public Health Research and Evaluation Methods

Credit Hours: 3

This course focuses on advanced research and evaluation methods of multi-level community based public health initiatives. Models and processes for evaluation of multi-level program interventions, study design and appropriate methods are covered.

Prerequisite(s): PHC 6010, PHC 6708, PHC 6701, PHC 6410, PHC 6500, PHC 6193
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 7703 Advanced Research Methods in Epidemiology

Credit Hours: 3

Course emphasizes summary and statistical analysis of data. Methods include life tables, logistic and proportional hazards regression, assessment of confounding, interaction, and bias. Includes a two-hour weekly computer lab.

Prerequisite(s): PHC 6011
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Epidemiology and Biostatistics

PHC 7704 Applied Research Methods in Community and Family Health

Credit Hours: 3

Focuses on the application of appropriate theories, models, and methods of research inquiry to multi-level public health research and evaluation.

Prerequisite(s): PHC 6050, PHC 6708
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Community and Family Health

PHC 7908 Specialized Study in Public Health

Credit Hours: 1-9

Demonstration of an in-depth study in a specialized public health area. This study may be used to address areas where a student needs to demonstrate a higher level of competency.

Tampa | College of Public Health | Public Health

PHC 7910 Directed Research

Credit Hours: 1-19

Advanced research design and application.

Tampa | College of Public Health | Public Health

PHC 7931 Advanced Interdisciplinary Seminar in Public Health

Credit Hours: 1-3

Students, faculty and other health professionals will participate in presenting and discussing contemporary health issues and possible solutions.

Tampa | College of Public Health | Public Health

PHC 7932 Practical Applications I: Policy, Advocacy and Public Health

Credit Hours: 1

This seminar course is designed to engage current public health practitioners in discussions and critical thinking activities that build skills for influencing health policy and program decision-making.

Tampa | College of Public Health | Community and Family Health

PHC 7934 Writing for Scholarly Publication in Health Science

Credit Hours: 3

The purpose of this course is for the development of skills that culminate in publishable works in health-related journals and other related publications. There will be an emphasis on writing, editing, reviewing and other applicable skills.

Tampa | College of Public Health | Public Health

PHC 7935 Special Topics in Public Health

Credit Hours: 1-3

Content will include recent or current issues in public health.

Tampa | College of Public Health | Public Health

PHC 7936 Seminar in Health Care Outcomes Measurement

Credit Hours: 3

This course is designed to prepare doctoral students and advanced masters degree students to design both population-based and practice-based studies of health care outcomes.

Tampa | College of Public Health | Public Health

PHC 7937 Advanced Seminar in Grant-Writing

Credit Hours: 3

This course addresses advanced skills and techniques necessary for writing successful research grant proposals. The focus is on writing grant proposals aimed at public health research and evaluation of public health interventions.

Tampa | College of Public Health | Community and Family Health

PHC 7944 Advanced Applied Practice Experiences

Credit Hours: 1

Students demonstrate DrPH-competency attainment through applied practice experiences. This course is part of a culminating experience for the Dr.P.H.

Prerequisite(s): PHC 7156 with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Public Health | Public Health

PHC 7980 Dissertation

Credit Hours: 2-19

Tampa | College of Public Health | Public Health

PHC 7982 Introduction to Doctoral Training in Public Health

Credit Hours: 1

An introduction for Public Health doctoral students to the competencies and milestones that will be reached at the successful completion of a doctoral program. Topics include Public Health research methods, writing for publication, teaching and service.

Tampa | College of Public Health | Community and Family Health

PHH 6105 Seminar in Ancient and Medieval Philosophy

Credit Hours: 3

Examine major texts in ancient and medieval philosophy.

Tampa | College of Arts and Sciences | Philosophy

PHH 6205 Seminar in Medieval Philosophy

Credit Hours: 4

Examines major texts, topics, and thinkers in medieval philosophy.

Tampa | College of Arts and Sciences | Philosophy

PHH 6310 Seminar in 17th and 18th Century Philosophy

Credit Hours: 3

This course examines major philosophical texts from the seventeenth and eighteenth centuries.

Tampa | College of Arts and Sciences | Philosophy

PHH 6426 Seminar in Eighteenth Century Philosophy

Credit Hours: 4

Examines major texts in Eighteenth Century Philosophy.

Tampa | College of Arts and Sciences | Philosophy

PHH 6645 Contemporary Continental Philosophy

Credit Hours: 4

This course examines four new directions in contemporary continental philosophy, genealogy, feminist critiques of the history of philosophy, Marxist-Hegelian analyses of popular culture, and mathematical-scientific approaches to continental philosophy.

Tampa | College of Arts and Sciences | Philosophy

PHH 6677 Seminar in German Idealism

Credit Hours: 3

Overview of the central theoretical currents in the development of German Idealism from Immanuel Kant through G.W.F. Hegel, with emphasis on the intermediary developments in the works of K.L. Reinhold and J.G. Fichte.

Tampa | College of Arts and Sciences | Philosophy

PHH 6938 Seminar in the History of Philosophy

Credit Hours: 3

A seminar in the history of philosophy. The instructor will determine the subject matter. Variable titles: Ancient, Modern, Recent, Contemporary.

Tampa | College of Arts and Sciences | Philosophy

PHI 5135 Symbolic Logic

Credit Hours: 3

Study of topics such as the following: Metatheory of propositional and predicate logic, related metatheoretic results, alternative logic.

Prerequisite(s): PHI 2101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Philosophy

PHI 5225 Philosophy of Language

Credit Hours: 3

An examination of semantically, syntactical, and functional theories of language with special attention given to the problems of meaning, linguistic reference, syntactical form, and the relations between scientific languages and ordinary linguistic usage. Seminar format.

Prerequisite(s): Eight hours of philosophy
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Philosophy

PHI 5913 Research

Credit Hours: 1-4

Individual research supervised by a faculty member.

Tampa | College of Arts and Sciences | Philosophy

PHI 5934 Selected Topics

Credit Hours: 1-3

Selected topics according to the needs of the student.

Tampa | College of Arts and Sciences | Philosophy

PHI 6305 Seminar in Epistemology

Credit Hours: 3

An analysis of recent and contemporary problems of knowledge. Seminar format.

Tampa | College of Arts and Sciences | Philosophy

PHI 6405 Seminar in the Philosophy of Natural Science

Credit Hours: 3

A study of the nature and status of physical theories, some basic problems associated with scientific methodology, and the philosophical implications of modern science. Seminar format.

Tampa | College of Arts and Sciences | Philosophy

PHI 6425 Seminar in the Philosophy of Social Science

Credit Hours: 3

Philosophical issues arising in the social sciences; value assumptions, laws and the theories, models, etc. Seminar format.

Prerequisite(s): 8 hours of philosophy
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Philosophy

PHI 6506 Seminar in Metaphysics

Credit Hours: 3

In this course students will examine selected topics in classical and contemporary metaphysics, for example, the concept and categories of Being or existence, the existence of God, the problem of universals or general terms, the a priori, the mind--body problem, and the identity

thesis.

Tampa | College of Arts and Sciences | Philosophy

PHI 6605 Seminar in Ethics

Credit Hours: 3

Advanced study of the problems of moral philosophy.

Tampa | College of Arts and Sciences | Philosophy

PHI 6634 Seminar in Biomedical Ethics

Credit Hours: 3

A focused examination of a particular topic in biomedical ethics such as clinical bioethics, healthcare organizational ethics, philosophy of medicine, medical ethics and law, or medical ethics and conflict resolution.

Tampa | College of Arts and Sciences | Philosophy

PHI 6645 Developmental Ethics

Credit Hours: 3

This course presents and critically examines the major ethical theories related to both national and international development institutions, policies, and practices.

Tampa | College of Arts and Sciences | Philosophy

PHI 6665 Metaethics

Credit Hours: 3

A study of alternative theories of metaethics including emotivism, moral point of view, supererogate virtue theory.

Prerequisite(s): PHI 2600
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Philosophy

PHI 6686 Climate Change and Societal Evolution

Credit Hours: 3

Mitigating climate change, reducing the biospherical overshoot, and transitioning to sustainability require a societal evolution towards a postcarbon and circular economy. The course charts cultural and societal aspects of viable evolutionary pathways.

Tampa | College of Arts and Sciences | Philosophy

PHI 6808 Seminar in Aesthetics

Credit Hours: 3

An analysis of fundamental special problems of aesthetics; value, perception, communication, technique, context. Seminar format.

Tampa | College of Arts and Sciences | Philosophy

PHI 6908 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Philosophy

PHI 6934 Selected Topics

Credit Hours: 1-3

Selected topics according to the needs of the student. Approval slip from instructor required.

Tampa | College of Arts and Sciences | Philosophy

PHI 6945 Graduate Instruction Methods

Credit Hours: 1-3

Special course to be used primarily for the training of teaching assistants.

Tampa | College of Arts and Sciences | Philosophy

PHI 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Philosophy

PHI 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Philosophy

PHM 5126 Social Issues in Biomedical Ethics

Credit Hours: 3

An examination of the social and political issues arising from rapid changes in medicine and technology. Topics covered may include social issues related to the just distribution of health care, reproductive technologies, HIV and AIDS, eugenics, genetic testing, and maternal-fetal relations.

Tampa | College of Arts and Sciences | Philosophy

PHM 6105 Seminar in Social Philosophy

Credit Hours: 3

A detailed study of the philosophical theories of society, class societies (Capitalism), advanced technocracy (all types). Seminar format.

Tampa | College of Arts and Sciences | Philosophy

PHM 6265 Continental Philosophy I: Phenomenology of Hermeneutics

Credit Hours: 3

A general survey of the 20th century continental schools of phenomenology, ontology, and hermeneutics, with an emphasis on Husserl and Heidegger.

Tampa | College of Arts and Sciences | Philosophy

PHM 6266 Continental Philosophy II: Political and Social Theory

Credit Hours: 3

A general survey of 20th century continental social and political theory, dealing both with the younger and older generations of the Critical Theory tradition, together with their contemporaries and critics.

Tampa | College of Arts and Sciences | Philosophy

PHM 6267 Continental Philosophy III: Structuralism and Deconstruction

Credit Hours: 3

An examination of leading philosophical texts in 20th century continental philosophical movements known as structuralism, post-structuralism, postmodernism and deconstruction, with special emphasis on the works of Michel Foucault and Jacques Derrida.

Tampa | College of Arts and Sciences | Philosophy

PHM 6305 Seminar in Political Philosophy

Credit Hours: 3

An examination of the main political philosophies. Seminar format.

Tampa | College of Arts and Sciences | Philosophy

PHM 6506 Seminar in the Philosophy of History

Credit Hours: 3

The analysis of language and logic of historical explanation, historical idealism, historical materialism, positivism, and historical sociology. Seminar format.

Tampa | College of Arts and Sciences | Philosophy

PHP 6005 Plato

Credit Hours: 3

A systematic study of Plato's dialogues.

Tampa | College of Arts and Sciences | Philosophy

PHP 6015 Aristotle

Credit Hours: 3

A systematic study of Aristotle's philosophy.

Tampa | College of Arts and Sciences | Philosophy

PHP 6405 Seminar in Descartes' Philosophy

Credit Hours: 4

Examination of Descartes' major philosophical texts.

Tampa | College of Arts and Sciences | Philosophy

PHP 6415 Kant

Credit Hours: 3

A survey of Kant's critical philosophy, emphasizing transcendental epistemology and Kant's critique of metaphysics. This course is open to graduate students (majors and non-majors). Prior knowledge of the history of philosophy is required, in particular of early-modern philosophy.

Prerequisite(s): None.
Corequisite(s): Computer Applications.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Philosophy

PHP 6420 Seminar in Leibniz's Philosophy

Credit Hours: 4

Examination of Leibniz's major philosophical texts.

Tampa | College of Arts and Sciences | Philosophy

PHP 6505 Seminar on Hegel's Philosophy

Credit Hours: 4

Careful interpretation and critical analysis of Hegel's seminal and perhaps most enduring work, the Phenomenology of Spirit.

Tampa | College of Arts and Sciences | Philosophy

PHP 6525 Nietzsche and the Nietzscheans

Credit Hours: 4

Examines Nietzsche's major texts as well as the radical differences in Nietzsche reception from 1889 to the present. For graduate students only.

Tampa | College of Arts and Sciences | Philosophy

PHP 6624 Adorno

Credit Hours: 4

Examines Adorno's major texts, methodology, collaborations with other members of the Frankfurt School, and impact on twentieth-century continental philosophy and sociology. For graduate students only.

Tampa | College of Arts and Sciences | Philosophy

PHP 6645 Foucault

Credit Hours: 4

Examines Foucault's major texts, methodology, similarities and differences with structuralism and deconstruction, and impact on contemporary continental philosophy and history. For graduate students only.

Tampa | College of Arts and Sciences | Philosophy

PHT 7710C Foundations in Hand and Upper Limb Rehabilitation

Credit Hours: 4

Introduces the specialized practice of hand therapy emphasizing interprofessionalism, evidence-informed practice, clinical reasoning, and components of patient/client management. Common conditions are integrated to synthesize foundation topics.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

PHT 7711C Clinical Decision Making I for Hand and Upper Limb Rehabilitation

Credit Hours: 4

Emphasizes clinical decision making for rehabilitation of hand & upper limb joint pathology. that affect the joints and surrounding soft tissues. Anatomy, biomechanics, examination, and therapy for each region: shoulder, elbow, wrist, & hand are covered.

Prerequisite(s): PHT 7710C with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

PHT 7712C Clinical Decision Making II Hand and Upper Limb Rehabilitation

Credit Hours: 4

Emphasizes clinical decision making for nerve injuries, neurogenic pain, and traumatic hand injuries. Patient management using advanced examination and intervention skills is practiced. Rehabilitation for select specialized populations is included.

Prerequisite(s): PHT 7710C with a minimum grade of B
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

PHY 5720C Electronics for Research

Credit Hours: 3

A rigorous introduction to the fundamentals of analog and digital electronics. Theoretical circuit analysis and weekly labs introduce practical use of diodes, transistors, analog and digital Ics, breadboarding techniques and electronics test instrumentation. Spring Semester.

Tampa | College of Arts and Sciences | Physics

PHY 5937 Selected Topics in Physics

Credit Hours: 1-4

Each topic is a course in directed study under the supervision of a faculty member.

Tampa | College of Arts and Sciences | Physics

PHY 6346 Electromagnetic Theory I

Credit Hours: 3

Electrostatics, magnetostatics, potential and boundary value problems. Maxwell's equations. First semester of sequence PHY 6346, PHY 6347.

Prerequisite(s): PHY 4324 or PHZ 5115
Corequisite(s): PHZ 5115
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHY 6347 Applied Electromagnetic Theory

Credit Hours: 3

Second semester of sequence PHY 6346, PHY 6347. Electromagnetic waves, wave guides and resonant cavities, diffraction, relativistic-particle kinematics and dynamics, plasmas and magnetohydrodynamics.

Prerequisite(s): PHY 6346
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHY 6436 Applied Materials Physics

Credit Hours: 3

Introduces students to properties and applications of advanced functional materials, such as nanostructured materials and biomaterials.

Tampa | College of Arts and Sciences | Physics

PHY 6446 Lasers and Applications

Credit Hours: 3

Optical modes, optical resonator theory, gain saturation, theory of laser oscillators, specific laser systems, Q-switching and mode-locking, optical waveguides.

Prerequisite(s): PHY 4324, PHY 4604
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHY 6447 Physics of Lightwave Devices and Applications

Credit Hours: 3

Nonlinear optics including optical phaseconjugation, second harmonic and sum frequency generation, and stimulated Raman scattering. Selected applications of lasers and nonlinear optics.

Tampa | College of Arts and Sciences | Physics

PHY 6536 Statistical Mechanics

Credit Hours: 3

Kinetic theory, configuration and phase space. Boltzmann theorem, Liouville theorem, ensemble theory, quantum statistics.

Prerequisite(s): PHY 6645
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHY 6645 Quantum Mechanics I

Credit Hours: 3

Hilbert space, continuous spectrum, matrix and wave mechanics, quantum dynamics, symmetries, angular momentum, perturbation methods

Prerequisite(s): PHY 4604 or PHZ 5115
Corequisite(s): PHZ 5115
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHY 6646 Applied Quantum Mechanics

Credit Hours: 3

Approximation and perturbation methods, hydrogen fine structure, scattering, identical particles, second quantization, Dirac equation.

Prerequisite(s): PHY 6645
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHY 6753 Measurement and Instrumentation

Credit Hours: 3

Measurement, signals and noise; analog/digital conversion; data communication; digital signal processing. LabVIEW programming, instrument control, data acquisition through RS232 and GPIB interface. Familiarity with electronic circuits recommended.

Tampa | College of Arts and Sciences | Physics

PHY 6909 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Physics

PHY 6911 Directed Research

Credit Hours: 1-19

An individual investigation of a research topic under the supervision of an instructor.

Tampa | College of Arts and Sciences | Physics

PHY 6935 Graduate Seminar

Credit Hours: 1

Tampa | College of Arts and Sciences | Physics

PHY 6938 Selected Topics in Physics

Credit Hours: 1-10

Each topic is a course in directed study under the supervision of a faculty member.

Tampa | College of Arts and Sciences | Physics

PHY 6940 Supervised Teaching

Credit Hours: 3

Laboratory teaching under the direction of a Physics Department faculty member.

Tampa | College of Arts and Sciences | Physics

PHY 6971 Thesis: Master's

Credit Hours: 2-12

Tampa | College of Arts and Sciences | Physics

PHY 7910 Directed Research

Credit Hours: 1-9

Tampa | College of Arts and Sciences | Physics

PHY 7980 Dissertation: Doctoral

Credit Hours: 2-12

Tampa | College of Arts and Sciences | Physics

PHZ 5115 Methods of Theoretical Physics I

Credit Hours: 3

Applications of mathematical techniques to classical and modern physics. Vector spaces including Hilbert space, orthogonal functions, generalized functions, Fourier analysis, transform calculus, and variational calculus.

Prerequisite(s): MAP 2302 or PHZ 3113
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHZ 5116 Methods of Theoretical Physics II

Credit Hours: 3

Applications of mathematical techniques to classical and modern physics. Selected topics in complex analysis, differential and integral equations, numerical methods, and probability theory.

Prerequisite(s): PHZ 5115
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHZ 5154C Introduction to Computational Physics

Credit Hours: 3

Introduction to the use of computers for solving problems in physics. No programming experience required.

Tampa | College of Arts and Sciences | Physics

PHZ 5156C Computational Physics I

Credit Hours: 3

C or Fortran programming applied to science and engineering problems. Data analysis, numerical algorithms, modeling, parallel computation. Subjects: neurobiology, quantum magnetism, chaos, etc. Familiarity with programming in a compiled language assumed.

Prerequisite(s): COP 5016, PHZ 5154C, PHZ 4151C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHZ 5405 Solid State Physics I

Credit Hours: 3

Crystal structure, x-ray and electron diffraction, mechanical and thermal

properties of solids, electrical and magnetic properties of metals, band theory of metals, insulators, and semiconductors. First semester of sequence PHZ 5405, PHZ 6426.

Prerequisite(s): PHY 4605 or PHY 6645
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHZ 5430 Introductory Physics of Materials

Credit Hours: 3

Phenomenological introduction to the structural, thermal, electrical, magnetic, mechanical, and optical properties of materials.

Tampa | College of Arts and Sciences | Physics

PHZ 6204 Atomic/Molecular Spectra

Credit Hours: 3

Hydrogen atom, one electron systems, centralfield and vector models, perturbations, Zeeman and Stark effect, hyperfinestructure, atomic structure calculations; diatomic spectra, rotational andvibration analysis, intensities, temperatures from spectra, isotope effects.

Prerequisite(s): PHY 6645
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHZ 6426 Solid State Physics II

Credit Hours: 3

Optical, electrical and magnetic properties of insulators, superconductivity, imperfections in solids. Second semester of sequence PHZ 5405, PHZ 6426.

Prerequisite(s): PHZ 5405
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHZ 6715 Biophysics I

Credit Hours: 3

This is part one of a two-semester introductory course in biophysics designed to apply concepts from thermodynamics, statistical mechanics and electromagnetism to describe the physical behavior of macromolecules and biological membranes.

Tampa | College of Arts and Sciences | Physics

PHZ 6716 Biophysics II

Credit Hours: 3

This is part two of the two-semester introductory course in cellular and molecular biophysics. The course is designed to extend the concepts introduced in the prior semester to explore the connection between molecular structure and cellular functions.

Prerequisite(s): PHZ 6715
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Physics

PHZ 7940 Industrial Practicum

Credit Hours: 3

he practicum allows students first-hand experience in a non-academic-research setting.

Tampa | College of Arts and Sciences | Physics

POS 5159 Urban Policy Analysis

Credit Hours: 3

Application of policy framework for urban government & policies. Examine forms of government and how policies such as economic development, law enforcement, community policing, neighborhood policies (with non-profit groups) can be analyzed.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6045 Seminar in American Government & Politics

Credit Hours: 3

Advanced study of selected topics of institutions and processes of American national government and politics.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6095 Seminar in Intergovernmental Relations

Credit Hours: 3

Advanced study of selected topics of institutions, processes, and behavior of American state governments and Florida government.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6127 Issues in State Government and Politics

Credit Hours: 3

Advanced study of selected topics in institutions, processes, and behavior of American state governments and Florida government.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6455 Political Parties and Interest Groups

Credit Hours: 3

Analysis of statutes, functions, and characteristics of political parties and interest groups, as well as their interactions with political processes, actors, and institutions.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6702 Teaching Political Science

Credit Hours: 3

Prepares graduate students enrolled in the PhD in Government, as well as MA students enrolled in the MA in Government and International Affairs to teach for the department.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6707 Qualitative Analysis

Credit Hours: 3

Introduces graduate students to different methods of conducting qualitative empirical research in political science. Students will learn how to establish validity and reliability of findings in conducting case studies and field research.

Prerequisite(s): POS 6736
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6735 Foundations of Political Inquiry

Credit Hours: 3

Survey of philosophical, intellectual, and theoretical issues, including historical development of political science. Topics include empirical approaches, rational choice theory, and critical approaches such as pragmatics, hermeneutics, genealogy, and critical theory.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6736 Research Design

Credit Hours: 3

Introduces a variety of research methods, which provide students with tools to conduct their own research. It covers topics such as stating a research question;literature review;causation,hypotheses,and variables;among others.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6746 Quantitative Analysis I

Credit Hours: 3

Provide graduate students in political science, international relations, and public policy the necessary tools for analyzing and conducting quantitative research in the discipline.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6909 Independent Study

Credit Hours: 1-3

Specialized independent study determined by the student's needs and interests. Needs instructor's consent.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6918 Seminar in Quantitative Methods

Credit Hours: 3

Advanced topics in quantitative political analysis, including OLS variants, regression problems, time series, limited dependent variables, and SPSS.

Prerequisite(s): POS 6746 with a minimum grade of C+
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6919 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6933 Selected Topics in Political Science

Credit Hours: 3

Selected topics, issues, and problems in political science.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6942 Field Work in Political Science

Credit Hours: 1-3

Application of research models now employed in governmental agencies, including development of a structured research proposal.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Government and International Affairs

POS 7910 Directed Independent Research

Credit Hours: 3

The purpose of this Independent Study Project is to provide PhD students in Government admitted into candidacy the necessary tools for developing a dissertation proposal in their chosen area of research.

Tampa | College of Arts and Sciences | Government and International Affairs

POS 7980 Dissertation

Credit Hours: 2-19

This course will allow PhD candidates to conduct research on their dissertation topic in partial fulfillment of the requirements for the PhD in Government. This research takes place following the successful defense of a dissertation proposal.

Tampa | College of Arts and Sciences | Government and International Affairs

POT 6007 Seminar in Political Theory

Credit Hours: 3

Provides students who are capable of independent work with the opportunity to explore advanced problems of political theory.

Tampa | College of Arts and Sciences | Government and International Affairs

PPE 6058 Personality

Credit Hours: 3

Survey of research and theories of personality, including its relationship to the development of normal and abnormal behavior.

Tampa | College of Arts and Sciences | Psychology

PSB 6056 Physiological Psychology

Credit Hours: 3

Survey of data and research methods in Behavioral Neuroscience. Basic learning theories and CNS function in behavior, and disorders associated with CNS dysfunction will be covered.

Tampa | College of Arts and Sciences | Psychology

PSY 6065 Introduction to Advanced Psychology

Credit Hours: 1-4

This course introduces students to the major ideas in the discipline of psychology, history of psychology, and cultural and diversity issues and promotes practice in scholarly discourse and professional development.

Tampa | College of Arts and Sciences | Psychology

PSY 6217 Research Methods and Measurement

Credit Hours: 2-4

Courses in research strategies, design and analysis, and measurement theory in psychological experimentation. Inferential statistics, anova, correlation methods, and interpretation.

Tampa | College of Arts and Sciences | Psychology

PSY 6605C History and Systems of Psychology

Credit Hours: 2

A review of the history of modern psychology with emphasis on the major systematic approaches that have influenced the current structure of psychology. Persisting polarities and common underlying issues are studied in various historical contexts.

Tampa | College of Arts and Sciences | Psychology

PSY 6907 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Psychology

PSY 6917 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Psychology

PSY 6946 Practicum and Internship in Clinical Psychology

Credit Hours: 1-15

Supervised training in community and university settings in the application of Psychology.

Tampa | College of Arts and Sciences | Psychology

PSY 6947 Graduate Instruction Methods

Credit Hours: 1-3

Special course to be used primarily for the training of teaching assistants.

Tampa | College of Arts and Sciences | Psychology

PSY 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Psychology

PSY 7908 Directed Readings in Psychology

Credit Hours: 1-15

An advanced reading program of selected topics in Psychology under the supervision of a Psychology faculty member. The reading program is designed to meet the individual requirements and interest of graduate students in Psychology, with selected topics chosen by the student in close collaboration with a faculty member.

Tampa | College of Arts and Sciences | Psychology

PSY 7918 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Psychology

PSY 7931 Seminar in Ethics and Professional Problems

Credit Hours: 2

Ethical issues and professional problems in the practice of psychology.

Tampa | College of Arts and Sciences | Psychology

PSY 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Psychology

PUP 5607 Public Policy and Health Care

Credit Hours: 3

The study of health care policy as it relates to the policy process in the American setting.

Tampa | College of Arts and Sciences | Government and International Affairs

PUP 6007 Seminar in Public Policy

Credit Hours: 3

Examination of public policy from a theoretical and practical decision. Analysis will be presented in terms of their usefulness in designing policy.

Tampa | College of Arts and Sciences | Government and International Affairs

PUR 5505 Introduction to Strategic Communication Theory and Practice

Credit Hours: 3

The course is designed to act as a "bridge" between undergraduate and graduate public relations and advertising education, and between professional communication practices and strategic communication scholarship.

Tampa | College of Arts and Sciences | Mass Communications

PUR 6603 Strategic Communication Campaigns

Credit Hours: 3

A problem-solving approach emphasizing the environmental context of strategic communication problems, applied to strategic communication management in organizational settings. Nonmajors with prerequisites allowed. Not repeatable for credit.

Tampa | College of Arts and Sciences | Mass Communications

PUR 6607 Strategic Communication Management

Credit Hours: 3

The focus is on the theoretical basis of public relations and advertising as a management function. These theories are applied to strategic communication management. Nonmajors allowed with necessary prerequisites. Not repeatable for credit.

Tampa | College of Arts and Sciences | Mass Communications

QMB 6304 Analytical Methods for Business

Credit Hours: 3

The course will cover analytical methods based on statistical techniques for business operations. The course will use a statistical software like R or equivalent to teach students how to use statistics for business decisions.

Tampa | Muma College of Business | Information Systems and Decision Sciences

QMB 6305 Managerial Decision Analysis

Credit Hours: 2

A study of the general concepts of interval estimation, hypothesis testing, correlation and multiple regression with an emphasis on applications, concepts and interpretation of results.

Tampa | Muma College of Business | Information Systems and Decision Sciences

QMB 6357 Statistics for Business Professionals

Credit Hours: 3

This course covers the basic principles of Statistics as used by business professionals. Topics include descriptive statistics, hypothesis testing, analysis of variance, regression, time series models, non-parametric methods, statistical quality control.

Sarasota-Manatee | College of Business | Information Systems and Decision Sciences

QMB 6358 Data Analytics for Business

Credit Hours: 2

This course will provide an introduction to data analytics for managers. It is targeted for MBA students and provides an overview of data collection, visualization and business dashboards, as well as classification models on customer data.

Prerequisite(s): QMB 6305
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

QMB 6375 Applied Linear Statistical Models

Credit Hours: 3

A study of multivariate data analysis techniques and their applications to problems and systems in business.

Prerequisite(s): QMB 6305
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

QMB 6603 Operations Management and Quality Enhancement

Credit Hours: 2

Principles of managing manufacturing and service organizations. Topics include: competitive use of operations, comprehensive manufacturing strategies, production system design, material requirements planning, JIT systems, quality management, statistical process control, and project management.

Prerequisite(s): MAC 1105
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Information Systems and Decision Sciences

QMB 6615 Lean Operations

Credit Hours: 3

Course focuses on the concepts/principles of Lean Operations. Methods/tools/techniques utilized in Value Stream Transformation and for improving operational efficiencies as they relate to manufacturing, service, and healthcare organizations are emphasized.

Prerequisite(s): ISM 6436
Corequisite(s): None.
Co-Prerequisite(s): None.

Sarasota-Manatee | College of Business | Information Systems and Decision Sciences

QMB 6696 Six Sigma

Credit Hours: 3

Course focuses on the concepts/principles of Six Sigma. Methods/tools/techniques utilized to design and optimize product/process/service quality for Six Sigma levels of performance in manufacturing, service, and healthcare organizations are emphasized.

Prerequisite(s): QMB 6357, ISM 6436
Corequisite(s): None.
Co-Prerequisite(s): None.

Sarasota-Manatee | College of Business | Information Systems and Decision Sciences

QMB 7557 Research and Writing Skills for Doctoral Students

Credit Hours: 1

Required of all doctoral students in their first semester, this course is intended to develop skills in data collection and statistical programming and improve students ability to write for academic publication.

Tampa | Muma College of Business | Information Systems and Decision Sciences

QMB 7565 Introduction to Research Methods

Credit Hours: 3

A course in research strategies, design, analysis, and measurement for business research.

Tampa | Muma College of Business | Information Systems and Decision Sciences

QMB 7566 Applied Multivariate Statistical Methods

Credit Hours: 3

A course in research analysis and measurement focusing on multivariate statistical analysis techniques.

Tampa | Muma College of Business | Information Systems and Decision Sciences

QMB 7939 Executive Issues in Operations Research and Operations Management

Credit Hours: 2-4

A research seminar for executives that explores contemporary issues in OR and operations management. The specific theme of the seminar will be determined through consultations between the instructor and the students prior to the first class meeting.

Tampa | Muma College of Business | Information Systems and Decision Sciences

RCS 5035 Rehabilitation Counseling: Concepts and Applications

Credit Hours: 3

Introduction to the profession of Rehabilitation Counseling and current issues in the field. Coverage includes rehabilitation history, legislation, case management and related services for Americans with disabilities.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 5080 Medical Aspects of Disability

Credit Hours: 3

A survey of medical conditions and disabilities encountered by rehabilitation and mental health counselors. Examines the relationship of client handicaps, physical and mental, to rehabilitation and mental health programming.

Prerequisite(s): RCS 5780
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 5450 Fundamentals of Substance Abuse Counseling

Credit Hours: 3

An overview of alcohol and other drug abuse. Explores the extent and rate of abuse in the United States, causes, biology, psychosocial aspects, legal aspects, and treatment.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 5780 Legal, Ethical, Professional Standards and Issues in Counseling

Credit Hours: 3

An overview of all aspects of professional functioning including history, roles, organizational structures, ethics, standards and credentialing. Contemporary and developing issues in the field of professional counseling will also be addressed.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 5905 Directed Studies

Credit Hours: 1-4

Supervised rehabilitation studies under the direction of a faculty member.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6220 Individual Evaluation and Assessment

Credit Hours: 3

Examines assessment procedures utilized in rehabilitation and mental health counseling settings and critical issues in the evaluation of people who are mentally and physically disabled.

Prerequisite(s): RCS 5080, RCS 5780, RCS 6440
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6301 Career and Lifestyle Assessment

Credit Hours: 3

Career development, lifestyle, and related factors with special emphasis on the needs of individuals with disabilities. Includes job placement and a survey of work requirements in different occupations and how these relate to functional limitations.

Prerequisite(s): RCS 5080, RCS 5035, MHS 5020, RCS 6440
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6407 Counseling Theories and Practice

Credit Hours: 3

An extension and intensification of the rehabilitation and mental health counseling skills developed in RCS 5404. Includes the study of counseling theories and their contribution to successful counseling and rehabilitation practice.

Prerequisite(s): MHS 5020, RCS 5035, RCS 5080, RCS 6440
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6408 Diagnosis and Treatment of Psychopathology

Credit Hours: 3

Psychopathology as applied to psychotherapy and case management in mental health, addictions, and other rehabilitation settings.

Prerequisite(s): MHS 5020, RCS 6440, RCS 5080, RCS 5035
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6440 Social and Cultural Foundations of Counseling

Credit Hours: 3

Counseling issues in a multicultural and diverse society. Special emphasis on psychosocial adjustment and counseling for individuals with physical and mental disabilities.

Prerequisite(s): RCS 5780
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6456 Counseling Approaches for Substance Abusers

Credit Hours: 3

The focus of this course is on deepening the student's understanding of the practice of addictions counseling with an emphasis on biopsychosocial multidisciplinary intervention. Restricted to majors.

Prerequisite(s): RCS 5450
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6459 Professional Skills for Addictions Counselors

Credit Hours: 3

The course will be a more in depth and hands on approach to the transdisciplinary foundations that are essential for the work of substance abuse professionals. Application to practice and professional readiness will be the focus.

Prerequisite(s): RCS 5450
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6476 Human Sexuality Counseling

Credit Hours: 3

Course is designed to introduce students & mental health professionals to the diverse nature and construct of human sexuality. The curriculum meets the Florida Statute 491 licensure requirement as a contact area in "human sexuality theories". Majors only.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6510 Group Theories and Practice

Credit Hours: 3

Theoretical and empirical issues in group counseling are examined in the context of an ongoing group. Emphasis is on application to rehabilitation and mental health counseling.

Prerequisite(s): RCS 5035, RCS 5080, MHS 5020, RCS 6440
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6740 Research and Program Evaluation

Credit Hours: 3

Training in the evaluation and utilization of available research studies and the development of research skills. An individual research project is required.

Prerequisite(s): RCS 5780
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6803 Practicum in Counseling

Credit Hours: 3

Field work experience in rehabilitation mental health counseling.

Prerequisite(s): RCS 5080, MHS 5020, RCS 6440, RCS 5035
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6825 Internship

Credit Hours: 3-6

Student placement in an approved intern setting for a minimum of 600 hours of supervised experience.

Prerequisite(s): RCS 6803, RCS 6407
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6906 Independent Study

Credit Hours: 1-19

Independent study where the student must have a contract with a faculty member.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6930 Seminar in Rehabilitation Counseling

Credit Hours: 1-4

Selected issues and problems in rehabilitation counseling with subject and scope to be determined by instructor.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RCS 6971 Master's Thesis

Credit Hours: 2-6

The Master's Thesis for the MA in Rehabilitation and Mental Health Counseling is a research project designed to result in an original research product.

Prerequisite(s): RCS 6740
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Rehabilitation and Mental Health Counseling

RED 6068 Adolescent Literacy: In and Out of School Literacy Practices

Credit Hours: 3

Explore the literate practices (both in and out of school) of adolescent learners, including the ways that race, gender, and culture inform and impact students' agency a identity.

Tampa | College of Education | Teaching and Learning

RED 6116 Current Trends in Elementary Reading Instruction

Credit Hours: 3

Approaches, materials, and procedures in Elementary Reading instruction, with emphasis on pertinent research.

Prerequisite(s): RED 4310
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

RED 6247 Supervision and Coaching in Literacy

Credit Hours: 3

Planning and administering literacy programs and preparation as coaches in reading within STEM area content courses. Intensive work on individual research and projects with a focus of integrating literacy strategies in STEM area content courses.

Tampa | College of Education | Teaching and Learning

RED 6316 Emergent Literacy: Skills, Strategies, and Assessment

Credit Hours: 3

Understand the developmentally appropriate, research-based theories and practices that support children's emergent literacy and language learning.

Tampa | College of Education | Teaching and Learning

RED 6317 Intermediate Literacy: Assessment, Skills, and Strategies

Credit Hours: 3

Understand the developmentally appropriate, research-based theories and practices that support children's literacy learning in the intermediate grade levels.

Prerequisite(s): RED 6316
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

RED 6365 Disciplinary Literacies and Reading

Credit Hours: 3

Compares the reading, writing, thinking, and discourse across various professional and educational learning contexts. Students research and implement their learning into various disciplinary discourse communities.

Tampa | College of Education | Teaching and Learning

RED 6449 Literacy and Technology

Credit Hours: 3

Students will develop the skills and cultural competencies necessary to engage in participatory culture and develop strategies for integrating digital tools and media literacies into school and school-like settings.

Tampa | College of Education | Teaching and Learning

RED 6514 The Reading Process in the Elementary Grades

Credit Hours: 3

Prepares students in the foundations of literacy including learning principles, teaching and assessment strategies for providing literacy instruction to emergent, novice, transitional, and accomplished readers and writers in the elementary grades.

Tampa | College of Education | Teaching and Learning

RED 6540 Assessment in Developing Literacies

Credit Hours: 3

This course is a classroom based course in pk-6 literacy assessment. Students use reading assessments to improve reading of all pk-6 students. Students will develop their capacity for integrating literacy assessment and intervention with in STEM content areas for young readers.

Prerequisite(s): LAE 6315, RED 6544, RED 6545
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

RED 6544 Cognition, Comprehension, and Content Area Reading: Remediation of Reading

Credit Hours: 3

In-depth study of reading comprehension. Emphasis is placed on discussion of the concepts of cognition and learning, metacognition and comprehension of text included in the reading process. Process in the reading/writing, connection, specific reading strategies, and procedures for comprehension of text in the content areas are presented.

Tampa | College of Education | Teaching and Learning

RED 6545 Issues in Vocabulary and Word Study

Credit Hours: 3

The purpose of this course is to provide students with an understanding of current theory and research about reading and writing vocabulary instruction and the interactive causes of literacy disabilities.

Tampa | College of Education | Teaching and Learning

RED 6656 Literature for a Diverse Society

Credit Hours: 3

Focuses on the examination of historical and contemporary multicultural children's, adolescent and young adult literature in order gain a pluralistic perspective of society. On-line course requires intensive writing and how to write in an Academic Voice.

Tampa | College of Education | Teaching and Learning

RED 6748 Teacher Research Methods in Reading

Credit Hours: 3

Teacher Research Methods in Reading familiarizes students with the application of classroom action research methodologies in literacy. Course content is directed toward developing understandings of the need for teacher research and a mindset for becoming a teacher researcher. Students will develop a knowledge base in quantitative, qualitative, case study and portfolio-base research methodologies for teachers.

Tampa | College of Education | Teaching and Learning

RED 6749 History and Foundations in Reading and STEM Disciplines

Credit Hours: 3

Introduces historical approaches to literacy, traces the history of science/STEM movement in Education, presents connections between current research and practice and former models in literacy, and their deployment with STEM areas of curriculum.

Tampa | College of Education | Teaching and Learning

RED 6846 Practicum in Reading

Credit Hours: 3

Practicum in Reading is a graduate course covering topics relevant to assessment and remediation of literacy in school-aged children. Students work with struggling readers. Intervention is also directed at implementing reading strategies within STEM areas.

Prerequisite(s): RED 6540, RED 6544, RED 6545, RED 6749
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

RED 6906 Independent Study: Reading Education

Credit Hours: 1-6

Independent study in which students must have a contract with an instructor.

Tampa | College of Education | Teaching and Learning

RED 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of Education | Teaching and Learning

RED 7048 Reading as a Symbolic Process

Credit Hours: 3

Seminar designed to develop critical thinking about the reading process and reading acquisition.

Prerequisite(s): RED 6116 or RED 6365
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

RED 7315 Survey of Literacy Research Methods

Credit Hours: 3

Students will survey current methods used in literacy research. Students will determine standards of quality and employ data collection and analysis techniques to address literacy research questions. Open to non-majors. Not repeatable for credit.

Tampa | College of Education | Teaching and Learning

RED 7742 Research in Vocabulary and Word Study

Credit Hours: 3

Students will critically examine research in word acquisition, development, and instruction from preschool through the intermediate grades linguistic diversity.

Tampa | College of Education | Teaching and Learning

RED 7745 Research in Reading Instruction

Credit Hours: 3

Seminar examining in depth the current research on instruction in the field of reading education.

Prerequisite(s): RED 6116 or RED 6365
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

RED 7798 Research in Transdisciplinary Texts and Teaching

Credit Hours: 3

The purpose of this course is to familiarize advanced graduate students with research and instructional practices utilizing a variety of texts within a "Transdisciplinary" context.

Tampa | College of Education | Teaching and Learning

RED 7910 Directed Research in Reading/Language Arts

Credit Hours: 1-19

Independent student-faculty research course.

Tampa | College of Education | Teaching and Learning

RED 7938 Advanced Graduate Seminar

Credit Hours: 1-3

Discussion and evaluation of current issues and research in Reading/Language Arts and related fields. Rpt. To 6 hours.

Tampa | College of Education | Teaching and Learning

RED 7980 Dissertation: Doctoral

Credit Hours: 2-30

Tampa | College of Education | Teaching and Learning

REE 6045 Real Estate Decisions

Credit Hours: 3

Provides an introduction to real estate with a focus on property rights (legal considerations), financial/investment analysis, and market (or location) analysis. The primary objective is to show how to make effective real estate decisions.

Tampa | Muma College of Business | Finance

REE 6207 Real Estate Finance

Credit Hours: 2

Provides an advanced treatment of the mortgage markets, including coverage of the primary and secondary mortgage markets, the

securitization of mortgages, the valuation of mortgage securities, and commercial mortgage analysis.

Prerequisite(s): FIN 6406, REE 6045
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

REE 6305 Real Estate Investment

Credit Hours: 2

Introduction to the procedures and analytical methods used to evaluate real estate markets and real estate investments. It focuses on the topic of real estate investment primarily from the private investor's (equity) perspective.

Prerequisite(s): FIN 6406, REE 6045
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

REE 6737 Real Estate Development

Credit Hours: 3

This capstone course deals with the application of analytical techniques used to determine the feasibility of real estate projects. Various systems (models) that are applied for evaluating real estate investment and development proposals are covered.

Prerequisite(s): REE 6305, REE 6207, GIS 5049, URP 6232
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Finance

REE 6938 Selected Topics in Real Estate

Credit Hours: 2-4

Topics to be selected by instructor and department chairperson on pertinent real estate issues.

Tampa | Muma College of Business | Finance

RLG 6035 Theory and Methods in Religious Studies

Credit Hours: 3

An introduction to and research methods used in Religious Studies proper and those of other disciplines. In the former are to be found comparative religion, religious hermeneutics, and theological analysis. Among the latter are included comparative literature, literary criticism, sociology, philosophy, and historiography.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6126 Religion in America

Credit Hours: 3

Studies in the history of native American religions, of the rise of American denominations, churches, and sects, of the relationship between church and state, and religious thought in America. Open to non-majors.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6143 Religion, Culture, and Society

Credit Hours: 3

Scholarly study of religion in its complex relationship of culture and society, including definitions and theories of religion, research methods, becoming religious, social organization, and interconnections with other social institutions.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6145 Religion and Politics

Credit Hours: 3

This interdisciplinary course examines the conceptual and historical connections between religion and politics as they impact political theory, theories of religion, US domestic policy, foreign affairs, and international relations.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6189 Comparative Religious Ethics

Credit Hours: 3

This seminar explores key issues and the diverse methodological approaches to the comparative study of religious ethics, including history of religions, social scientific, philosophical and theological approaches.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6196 Religion and Modernization

Credit Hours: 3

This course will explore the unique characteristics of modern and post-modern civilization, with special attention given to the secularizing effects of modern science, technology, economics, and politics on the world's religions and their various responses to these factors.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6285 Studies in Biblical Archaeology

Credit Hours: 3

A study of various problems in Biblical Archaeology including excavation techniques, principles of interpretation, problems in correlation of the text of the Bible and specific finds, chronology, reconstruction of culture from archaeological evidence, and others.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6327 Seminar: Ancient Religions and Literatures

Credit Hours: 3

A research seminar in some aspect of ancient religion and literature: Hebrew Bible, New Testament, Mithraism, Mystic Religions, Pseudepigrapha, and others taught in translation.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6438 Modern Christian Thought

Credit Hours: 3

Examines themes, thinkers, and movements in Christian thought since the 16th century.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6906 Independent Study

Credit Hours: 1-3

Independent study in which the student must have a contract with the instructor.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6911 Directed Research

Credit Hours: 1-3

Individual guidance in concentrated reading in a carefully delimited area of religious studies research skills.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6938 Special Topics in Religious Studies

Credit Hours: 2-4

Open to non-majors. Variable titles offered on topics of special interest.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6940 Graduate Instruction Methods

Credit Hours: 1-4

Offered primarily for the supervision of Graduate Teaching Assistants.

Tampa | College of Arts and Sciences | Religious Studies

RLG 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Religious Studies

RSD 6111 Introduction to Rehabilitation Sciences

Credit Hours: 3

Introduction to & overview of rehabilitation sciences, emphasizing the interdisciplinary and interprofessional nature. The enablement-disablement process and literature highlighting quantitative and qualitative inquiry is highlighted.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 6112 Advanced Rehabilitation Sciences

Credit Hours: 3

This course provides an in-depth analysis of theoretical and methodological issues in rehabilitation science research, education and practice.

Prerequisite(s): RSD 6111
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 6920 Colloquium in Rehabilitation Sciences 1

Credit Hours: 1

Weekly meetings with faculty & guest speaker presentations on timely topics and current research in the field. Students present results of projects in which they are involved or lead discussion of contemporary journal articles in rehabilitation sciences.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 6921 Colloquium in Rehabilitation Sciences 2

Credit Hours: 1

Weekly meetings with faculty and guest speaker presentations on timely topics and current research in the field. Students may present results of projects in which they are involved or lead discussion of contemporary journal articles in rehabilitation sciences.

Prerequisite(s): RSD 6920
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 6941 Teaching Practicum in Rehabilitation Sciences

Credit Hours: 3

Covers learning theories, teaching methods, assessment techniques and curriculum construction for the adult learner. Students are paired with a teacher-mentor and serve as a teaching assistant in a course relevant to their rehabilitation discipline.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 7306 Rehabilitation Ethics

Credit Hours: 3

This course is designed to introduce the student to the social, moral and ethical dimensions of rehabilitative healthcare including informed consent, research on human subjects, health care allocation and disparities.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 7900 Directed Readings in Rehabilitation Sciences

Credit Hours: 3

Individually planned readings guided by a faculty member involved in the area of students' concentration-(a) Chronic Disease, (b) Veterans' Health/Reintegration or (c) Neuromusculoskeletal Disability, but not currently covered by formal course work.

Prerequisite(s): RSD 6111, RSD 6112
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 7911 Mentored Research Apprenticeship

Credit Hours: 1

Directed research in rehabilitation sciences.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 7930 Research Proseminar in Rehabilitation Sciences

Credit Hours: 2

Students explore current topics in rehabilitation science research and develop in-depth analysis in a research area related to the concentration. Students will gain experience in presenting, facilitating and discussing the research of interest to them.

Prerequisite(s): RSD 6111, RSD 6112
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 7931 Special Topics in Chronic Disease

Credit Hours: 3

Creates a framework for understanding rehabilitation for individuals with chronic health conditions. Application of validated rehabilitation examination and intervention approaches or strategies that are consistent with evidence-based practice.

Prerequisite(s): RSD 6111, RSD 6112
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 7932 Special Topics in Neuromusculoskeletal Disability

Credit Hours: 3

Understanding rehabilitation for neuromusculoskeletal disability. Focuses on the application of validated rehabilitation examination and intervention approaches or strategies that are consistent with evidence-based practice.

Prerequisite(s): RSD 6111, RSD 6112
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 7933 Special Topics in Veteran's Health/Reintegration

Credit Hours: 3

Understanding rehabilitation for veterans directed toward successful reintegration, long-term health, and holistic care. Application of validated rehabilitation examination and intervention approaches consistent with evidence-based practice.

Prerequisite(s): RSD 6111, RSD 6112
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

RSD 7980 Dissertation - Directed Research in Rehabilitation Sciences

Credit Hours: 3-12

Dissertation research for the Ph.D. in Rehabilitation Sciences. Under the supervision of a faculty advisor and committee students will pursue independent study of a topic, research or project relevant to contemporary rehabilitation sciences.

Tampa | Morsani College of Medicine | Physical Therapy and Rehabilitation Sciences

SCE 5325 Methods of Middle Grades Science Education

Credit Hours: 3

Prepare 5-9 sci teachers to tch sci skills, content; interrelationship,

applications of sci as a human endeavor; nature of sci; instructional methods; nature scientific inquiry; development of sci process skills; integration of subj areas; & assessment.

Tampa | College of Education | Teaching and Learning

SCE 5337 Methods of Secondary Science Education

Credit Hours: 3

Course concentrates on goals, subject matter teaching strategies for high school curricula; assessment and using data to improve student achievement; and development pedagogical content knowledge as it pertains to the teaching and learning of science.

Tampa | College of Education | Teaching and Learning

SCE 5564 Reading and Communication in Science Education

Credit Hours: 3

This course prepares secondary science teachers to teach literacy practices in science. It includes methods for selecting appropriate reading and language approaches. Communication in science and functional aspects of scientific literacy are examined.

Tampa | College of Education | Teaching and Learning

SCE 5937 Selected Topics in Science Education

Credit Hours: 1-4

Tampa | College of Education | Teaching and Learning

SCE 6115 Trends in Science Instruction

Credit Hours: 3

Topics in the biological and physical sciences appropriate for teaching in elementary school programs. Analysis of modern curriculum materials used in presenting science as a process of inquiry.

Prerequisite(s): SCE 4310
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

SCE 6315 Teaching Elementary (K-5) School Science

Credit Hours: 3

This course addresses the concepts, materials, methods around ele school science and immerses you in learning experiences that provide a robust understanding of science teaching and learning from the perspective of both learner and teacher.

Tampa | College of Education | Teaching and Learning

SCE 6347 Methods for Interpretive and Transformative Standards Based Education

Credit Hours: 3

Current theories from research in brain physiology, cognitive psychology and science education explaining how humans of all ages learn to make meaning from experiences are translated into practice to bridge the gap between information and understanding.

Tampa | College of Education | Teaching and Learning

SCE 6416 Teaching Secondary School Biology

Credit Hours: 3

Effective use and production of instructional materials in the biological sciences. Interrelation of philosophy, materials, and classroom practices.

Prerequisite(s): At least 12 hours in science.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

SCE 6444 Community Resources for Environmental Education

Credit Hours: 3

Identify, access, and acquire community resources (media; business/industry); prof. natural science, engineering and social science societies; government and non-government agencies; civic groups,

universities) to incorporate into learning opportunities for diverse audiences at all school levels.

Tampa | College of Education | Teaching and Learning

SCE 6456 Teaching Secondary School Physical and Earth Science

Credit Hours: 3

Effective use and production of instructional materials in the physical and earth sciences. Interrelation of philosophy, materials, and classroom practices.

Prerequisite(s): At least 12 hours in science.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

SCE 6634 Current Trends in Secondary Science Education

Credit Hours: 3

Curricular patterns and instructional practices in secondary science.

Tampa | College of Education | Teaching and Learning

SCE 6645 Mathematics and Science Education Policy, Change, and School Improvement

Credit Hours: 3

Knowledge, skills, and strategies are developed to become a facilitator of change for mathematics and science school improvement. Original change initiatives are designed and implemented.

Tampa | College of Education | Teaching and Learning

SCE 6646 Environmental Site Explorations

Credit Hours: 3

On-site experiences at informal science institutions (ISI) provide first hand opportunity to construct a holistic view of informal education industry, its organization, career paths, management concerns, niches, nature and relationships among programs.

Tampa | College of Education | Teaching and Learning

SCE 6738 Trends in STEM Education for Middle Grade Teachers

Credit Hours: 3

This course will help students to develop an understanding of the theoretical frameworks and familiarity with literature on the multiple perspectives underpinning Science, Technology, Engineering, Math (STEM) education.

Tampa | College of Education | Teaching and Learning

SCE 6744 Survey Update of Environmental Research Management Policies

Credit Hours: 3

Current & future scientific research topics of long term importance are explored providing an integrated update in science. Complex connections among the various natural, math, & social science; agriculture; psychology; & engineering are emphasized.

Tampa | College of Education | Teaching and Learning

SCE 6865 Technology: Solving Societal Problems

Credit Hours: 3

Specific examples of mathematics/science/technology/society interaction are provided for integration into school-based mathematics and natural science courses.

Tampa | College of Education | Teaching and Learning

SCE 6866 Understanding Mathematics, Science, and Technology: Human Enterprises

Credit Hours: 3

Science, mathematics, and technology are presented as one multifaceted, dynamic, human-made enterprise responding to the human search for an understanding of the realities of the world. Different "Ways of Knowing" are compared.

Tampa | College of Education | Teaching and Learning

SCE 6906 Independent Study in Science Education

Credit Hours: 1-6

Independent Study in which students must have a contract with the instructor. Rpt. S/U

Tampa | College of Education | Teaching and Learning

SCE 6938 Topics in Science Education: Field Practicum

Credit Hours: 3

This seminar provides teacher candidates with opportunities to interact with peers, public school faculty and university faculty regarding classroom and related school-based experiences. This course is restricted to science education majors.

Tampa | College of Education | Teaching and Learning

SCE 6947 Internship in Secondary Education for Social Sciences

Credit Hours: 6

Students will work with a cooperating teacher and university supervisor to complete their internship requirements in a classroom setting assigned by the university.

Tampa | College of Education | Teaching and Learning

SCE 7076 Historical, Social, and Epistemological Foundations of Science Education

Credit Hours: 3

This course is to provide students with an interactive forum to review, analyze, evaluate and discuss topics related to historical, social and epistemological foundations in science education.

Tampa | College of Education | Teaching and Learning

SCE 7345 Theories and Practices of Science Teaching and Learning

Credit Hours: 3

This course will address historical and contemporary theoretical frameworks for teaching and learning and how they inform science teaching and science education research.

Tampa | College of Education | Teaching and Learning

SCE 7636 Advanced Trends in Science Education

Credit Hours: 3

The purpose of this course is to provide students with an advanced forum for interactive discussions of seminal and recent trends as they are conceptualized in contemporary science education research literature and realized in practice.

Tampa | College of Education | Teaching and Learning

SCE 7697 Socioscientific Issues in Science Education

Credit Hours: 3

The purpose of this course is to provide students with an interactive forum to review, analyze, evaluate and discuss topics related to the role of socioscientific issues in science education.

Tampa | College of Education | Teaching and Learning

SCE 7740 Doctoral Research in Science Education

Credit Hours: 3

This course prepares students for proposal writing including review of successful proposals and literature, developing research questions and objectives, presenting preliminary results and developing a research program. Required for Sci Ed PhD students.

Tampa | College of Education | Teaching and Learning

SCE 7895 Philosophy and Nature of Science

Credit Hours: 3

This course focuses on the philosophy and nature of science, including how science and scientists function, the ontological and epistemological foundations of science, and the reciprocal role between science and society.

Tampa | College of Education | Teaching and Learning

SCE 7910 Directed Research in Science Education

Credit Hours: 1-19

This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.

Tampa | College of Education | Teaching and Learning

SCE 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Teaching and Learning

SCM 6006 Supply Chain Management

Credit Hours: 3

Overview of key supply chain processes and functions, including logistics, marketing, finance, operations, and procurement, and the implications of supply chain management for creating value for customers and other supply chain members.

Tampa | Muma College of Business | Marketing

SCM 6200 Logistics and Physical Distribution Management

Credit Hours: 3

A study of managerial methods focusing on the establishment and control of optimum customer service levels in the areas of inventory, transportation, fixed facility location, material handling, and information. Component parts of each system are analyzed quantitatively. Reading, lecture, and case analysis.

Prerequisite(s): MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

SCM 6206 Logistics Systems and Analytics

Credit Hours: 3

Introduction to software tools and decision support models which are frequently used in the design and operation of integrated supply chains.

Prerequisite(s): QMB 6603
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

SDS 6042 Introduction of Student Affairs

Credit Hours: 3

Provides students with knowledge of the history, philosophy, organization and structure of Student Affairs, Student Affairs functions and professional competencies, and legal and ethical issues.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6260 Assessment in Student Affairs

Credit Hours: 3

This course is available only to students in a College Student Affairs cohort, unless otherwise approved by the instructor. The purpose of this course is to teach theory and application of assessment principles and techniques necessary for the student affairs profession.

Prerequisite(s): EDF 6481
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6344 Student Success in College

Credit Hours: 3

This course will draw upon Astin's Inputs-Environments-Outputs (IEO) to unpack student demographic information, pre-college characteristics, examine organizational behavior and practices that shape student experiences and outcomes in higher education.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6411 Introduction to Student Personnel Work in Higher Education

Credit Hours: 2

Study of student personnel services in institutions of higher education. Identification of the needs of students and of the ways to respond to meet these needs. Survey of service units on a campus in terms of structure, organization, funding, etc.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6501 Group Theory and Practicum: Children

Credit Hours: 4

Experiential study of group structures, group dynamics, methodology, and leadership models applicable to counseling in the elementary schools. Skill building through supervised practicum in leading groups of elementary school children.

Prerequisite(s): SDS 6411
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6621 Financial Aid Administration

Credit Hours: 2

The purpose of this course is to provide an overview of the history, fundamental concepts, and organization of financial aid administration. The role of financial aid in enrollment management will be addressed.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6624 Ecology of Campus Life

Credit Hours: 3

Provides students with an understanding of the changing demographics, environmental and developmental issues facing college students.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6641 Student Affairs Auxiliary Functions

Credit Hours: 3

Review of major auxiliary functions in Student Affairs. Includes strategic and operational issues in planning for and operating auxiliary facilities and technological innovations.

Prerequisite(s): SDS 6042
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6645 Student Development Theory

Credit Hours: 3

An in-depth study of student development theories including those in the areas of cognitive, psychosocial and typology theories. Students will examine theoretical perspectives and learn how to apply them in practical situations encountered in higher education settings.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6648 Introduction to Academic Advising

Credit Hours: 3

Introduce the basic principles of academic advising.

Prerequisite(s): SDS 6645

Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6650 Organization and Administration of Student Affairs

Credit Hours: 3

Provide a solid foundation of core competencies and skills related to management. The effective student affairs administrator is able to manage staff, systems, and activities with efficiency.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6700 Advising Diverse Populations

Credit Hours: 3

This course was designed to equip advisors to work with special populations of students with specific needs.

Prerequisite(s): SDS 6645
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6701 Issues in Diversity

Credit Hours: 2

Addresses individual and organizational issues of multiculturalism and diversity in higher education.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6702 Issues in Academic Advising

Credit Hours: 3

This course was designed to address special topics that may arise in an academic advising setting.

Prerequisite(s): SDS 6645, SDS 6648, SDS 6700
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6703 The Law and Student Affairs

Credit Hours: 3

This course for graduate students in College Student Affairs will focus on the legal context associated with the duties of the student affairs professional. The focus will be on an understanding of constitutional, statutory, and contract law.

Prerequisite(s): SDS 6042, SDS 6624, SDS 6645, EDF 6165
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6801 Practicum in Counseling Children

Credit Hours: 4

Supervised counseling experiences for integration of knowledge and skills gained in didactic study. Focus is on working with elementary age children, parent and teachers.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 6820 Internship in School Counseling

Credit Hours: 3-6

Field experience involving one semester of full-time participation or two semesters of part-time participation in all guidance related activities in an elementary or secondary school; classroom guidance; individual and group counseling; assessment/evaluation; staffing; record keeping; etc.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 7640 Student Affairs Administration

Credit Hours: 4

Leadership, management and organizational models, perspectives and issues in administration of Student Affairs will be studied.

Prerequisite(s): SDS 6042
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 7642 Advanced Seminar in Student Affairs

Credit Hours: 1-4

This seminar will nurture students' creativity and enhance their appreciation for scholarly academic work and effective administrative practice in Student Affairs. Issues and trends in Student Affairs will also be studied.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 7643 Advanced Student Development Theories

Credit Hours: 4

Contemporary theories of college student development will be examined in the categories of psychosocial, cognitive-structural, and typology. Research, case analysis, and assessment instruments will be studied in translating theoretical models into programmatic interventions in Student Affairs.

Prerequisite(s): SDS 6645
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 7644 Enrollment Management

Credit Hours: 4

Introduction to and overview of a multi-faceted process of enrollment management in higher education. The breadth of theory, models, and principles that contribute to the field of enrollment management will be explored.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 7830 Advanced Internship in Counselor Education

Credit Hours: 2-8

Supervised field experiences in an approved agency, educational institution, or industrial setting: counseling, consulting, supervision, applied research, administration, and evaluation of counseling/guidance services.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 7945 Advanced Internship in Student Affairs Administration

Credit Hours: 1-6

Supervised field experiences in an approved functional area of Student Affairs in an institution of higher education that will involve administrative functions, applied research and program evaluation.

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SDS 7980 Dissertation

Credit Hours: 2-24

Tampa | College of Education | Leadership, Counseling, Adult, Career, and Higher Education

SLA 7910 Directed Research in Second Language Acquisition/ Instructional Technology

Credit Hours: 1-6

This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U.

Tampa | College of Education | Teaching and Learning

SLA 7911 Second Language Acquisition Research Laboratory

Credit Hours: 1-4

This course, offered every semester, provides students with a variety of research tools and directed research experiences that eventually lead to production of publishable materials. Classes are conducted as seminars with instructor and students sharing leadership role. S/U

Tampa | College of Education | Teaching and Learning

SLA 7938 Advanced Seminar in Second Language Acquisition

Credit Hours: 3

This doctoral level seminar examines in depth the theory and research in the field of Second Language Acquisition. It builds upon the information and concepts presented in introductory SLA theory courses allowing students to more deeply and carefully explore selected topics.

Tampa | College of Education | Teaching and Learning

SLA 7980 Dissertation

Credit Hours: 2-18

Tampa | College of Education | Teaching and Learning

SOP 6068 Personality and Social Psychology

Credit Hours: 3

This course is a survey of modern personality and social psychology. It will examine how personal attributes and social situations influence human behavior. Major contemporary theories of how personality and social variables individually and collectively affect human feelings, thoughts and actions will be presented.

Tampa | College of Arts and Sciences | Psychology

SOP 6669 Topics in Social-Organizational Psychology

Credit Hours: 3

Courses on topics, such as experimental social psychology, organizational psychology, attitudes, and group process.

Tampa | College of Arts and Sciences | Psychology

SOW 6105 Foundations in Human Behavior

Credit Hours: 3

Introduces a systems perspective on understanding the relationships inherent in human growth and development. Special emphasis is placed on issues involving minorities, women, the disabled, various family forms, and sexual preference.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6124 Psychopathology

Credit Hours: 3

This third course in the behavior sequence focuses on mental and emotional disorders. Content includes broad classifications of mental and behavioral disorders and their biopsychological disorders and implications of social work practice in dealing with these disorders.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6126 Health, Illness, and Disability

Credit Hours: 2

this fourth course in the behavior sequence focuses on physical disorders and implications of social work practice in the area of long-term protracted chronic illnesses and the ensuing psychosocial disabilities.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6186 Foundations of Social Work Macro Practice

Credit Hours: 2

Introduction to the process of planned change at macro-level practice within neighborhoods, communities, and organizations. Examines development of strategic models and techniques that primarily support social change.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6235 Foundations of Social Welfare Policy

Credit Hours: 3

Examines historical antecedents of social welfare as an institution and current state of social welfare programs in America. Emphasis is placed on understanding social, economic, and political forces that shape policies and programs.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6236 Social Welfare Policy Development & Analysis

Credit Hours: 3

Presents various methods of policy analysis with emphasis on distinctions among legislative, administrative, and judicial policy. Examines roles and responsibilities of the professional practitioner in the policy process.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6305 Foundations of Social Work Micro Practice

Credit Hours: 3

Describes full range of social work interventions, from micro to macro. Historical development of practice methods and survey of current techniques.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6342 Social Work Practice with Individuals

Credit Hours: 3

Application of clinical practice to work with individuals. Psychosocial model is emphasized. Professional laboratory develops skills in practice.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6348 Diversity and Social Justice

Credit Hours: 3

Theories for clinical practice, with emphasis on the psychosocial model. Explores basic skills for clinical practice.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6362 Social Work Practice with Couples and Families

Credit Hours: 3

Emphasizes selection of techniques in the psychosocial model of treatment. Primary focus on family, couple, and parent-child problems. Course includes skill practice lab sessions.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6368 Social Work Practice with Groups

Credit Hours: 3

Focus on psychosocial model of group treatment. Comparison with individual and family modality.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6375 Advanced Social Work Macro Policy

Credit Hours: 3

Studies facets of organizational environment in which clinical practice takes place; develops skills in various macro practice functions of the agency, such as supervision, program operations, and interagency relations.

Prerequisite(s): SOW 6426, SOW 6368, SOW 6536
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6405 Foundations of Social Work Research and Statistics

Credit Hours: 3

This is the first of four research methods courses intended to introduce students to the various methods, designs, measurements, and statistical techniques in social work research.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6426 Field Research I

Credit Hours: 1

This is the third in a series of four research courses. It provides the structure for supervision of graduate research projects.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6427 Field Research II

Credit Hours: 1

This is the fourth and final research course. It provides the mechanism for supervision of the graduate research project.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6438 Evaluation of Clinical Practice in Diverse Setting

Credit Hours: 3

Course builds on foundation content of SOW 6405. Program evaluation, single subject/system design, and statistical and qualitative concepts are discussed in order to facilitate the use of empirical and evidence based interventions in social work practice.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6534 Field Instruction I

Credit Hours: 1

Supervised field instruction in a social service agency, consisting of 20 hours per week, plus a 3-hour practice seminar.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6535 Field Instruction II

Credit Hours: 4

Supervised field instruction in a social service agency, consisting of 32 hours per week, plus a 2-hour practice seminar.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6536 Field Instruction III

Credit Hours: 2-4

Supervised field instruction in a social service agency, consisting of 20 hours per week, plus a 2-hour practice seminar. Includes integrative paper or exam.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6539 Field Instruction IV

Credit Hours: 4

The last field seminar course is designed to offer a structured environment in which to integrate academic course work with the field placement. Students learn advanced clinical skills in preparation for professional clinical social work practice.

Prerequisite(s): SOW 6534, SOW 6535, SOW 6536
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6553 Field Instruction Sequence IA: Part-Time

Credit Hours: 2

This is the first of a series of seven field instruction courses designed to provide students with opportunities to develop beginning clinical social work competency in applying knowledge to practice situations.

Prerequisite(s): SOW 6348
Corequisite(s): SOW 6124
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6554 Field Instruction Sequence IB: Part-Time

Credit Hours: 2

This course is the second of seven sequential courses. Each consists of 10-15 hours per week (150 hours total) of agency field learning taught by an agency field instructor with a one-hour practice seminar taught by a University-based instructor.

Prerequisite(s): SOW 6553
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6555 Field Instruction Sequence IIA: Part-Time

Credit Hours: 2

This course is the third of seven sequential courses. Each consists of 10-15 hours per week of agency field taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor.

Prerequisite(s): SOW 6554
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6556 Field Instruction Sequence IIB: Part-Time

Credit Hours: 2

This course is the fourth of seven sequential courses. Each consists of 10-15 hours per week of agency field taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor.

Prerequisite(s): SOW 6555
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6557 Field Instruction Sequence IIC: Part-Time

Credit Hours: 2

This course is the fifth of seven sequential courses. Each consists of 10-15 hours per week of agency field taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor.

Prerequisite(s): SOW 6556
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6558 Field Instruction Sequence IIIA: Part-Time

Credit Hours: 2

This course is the sixth of seven sequential courses. Each consists of 10-15 hours per week of agency field taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor.

Prerequisite(s): SOW 6557
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6559 Field Instruction Sequence IIIB: Part-Time

Credit Hours: 2

This course is the last of seven sequential courses. Each consists of 10-15 hours per week of agency field learning taught by an agency field instructor on a one-hour practice seminar taught by a University-based instructor.

Prerequisite(s): SOW 6558
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6900 Independent Study

Credit Hours: 1-3

A reading program in selected topics under supervision of a faculty member. A formal contract must be approved by School Director.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 6931 Selected Topics in Social Work

Credit Hours: 1-4

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7417 Advanced Statistics in Social Work Research

Credit Hours: 3

This course provides students a detailed and practical understanding of Adv. Statistical techniques that are of use to Social Work Academicians, Administrators, and Researchers as they conduct critical research into policy, practice, and social issues.

Prerequisite(s): SOW 6405
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7446 Evaluation of Social Work Practice/Program Evaluation

Credit Hours: 3

Prepares students in the development of research skills to conduct social work practice and program evaluation. Emphasis placed on the integration of knowledge from previous courses. Ethical considerations will also be examined. Ph.D. Majors only.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7490 Foundations of Social Work Research Methods

Credit Hours: 3

This is a doctoral level course designed to prepare students on the role of research in the profession. This course will focus primarily on understanding and applying basic research methods within a social work context.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7491 Theoretical Perspectives in Social Work Research

Credit Hours: 3

Systems theory will be presented as a theoretical base for developing testable hypotheses to produce empirical knowledge for the social work profession. Students will demonstrate the ability to conceptualize research topics in terms of existing theory.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7496 Qualitative Research Methods in Social Work

Credit Hours: 3

The course will assist the doctoral student to better understand and become equipped to fulfill a role as social work researcher. The course will consider the theoretical, scientific, and political issues related to qualitative research.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7497 Quantitative Methods in Social Work Research

Credit Hours: 3

This course provides the student with a broad overview of Quantitative Methods of use to those during research in Social Work. It also serves as a review of basic quantitative methods for the Advanced Statistics course offered later in the program.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7616 Advanced Clinical Practice with Complex Problems

Credit Hours: 3

Challenges the participants to access and utilize the most advanced evidence based knowledge to assess and recommend intervention for complex social problems. PR: Ph.D. Majors only.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7775 Critical Issues in Social Work

Credit Hours: 3

Explores critical issues facing the profession. Themes include social work research, practice, leadership, and policy. Leading expert views will help students understand key issues driving the development of the profession. PR: Ph.D. Majors only.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7776 The Social Work Educator in the University

Credit Hours: 3

Further critical thinking about the role of the social work educator in the university. The doctoral candidate will be equipped to fulfill this role, consider issues related to university governance as well as social work ed. PR: majors only; Ph.D. stdt

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7919 Directed Studies in Social Work Research

Credit Hours: 3

This course prepares students to identify a research topic, review existing literature and formulate a research question or hypothesis as the basis of the dissertation. Students will learn to prepare a scholarly manuscript to submit for publication.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7980 Dissertation Hours

Credit Hours: 2-4

Dissertation hours

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7981 Scientific Communication and Dissemination Practices

Credit Hours: 3

This course instructs doctoral students in the process of scientific dissemination and guides students through the various formats including proposal and dissertation writing, scholarly articles, poster presentations, writing style, and library use.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 7982 Proposal Writing II

Credit Hours: 3

Guides doctoral students in preparing a dissertation proposal to be presented to the committee for final approval. The process will be explored from concept formation through the preparation of a detailed written proposal. PR: Ph.D. Majors Only.

Tampa | College of Behavioral and Community Sciences | Social Work

SOW 8907 Capstone Project

Credit Hours: 1

Students will complete an independent project which requires the synthesis of content from their theoretical, research, practice, field, and policy courses and the application of this content to a current field practicum case.

Prerequisite(s): SOW 6124, SOW 6342, SOW 6362, SOW 6438, SOW 6236
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Social Work

SPA 5120 Psychoacoustics

Credit Hours: 3

Relationship between physical auditory stimuli and psychological response. Human perception of intensity, loudness, frequency, and pitch. Impact of cochlear hearing loss and age on auditory perception.

Measurement of auditory perception.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5132 Audiology Instrumentation

Credit Hours: 3

Instruction in the use of clinical and laboratory instrumentation. Emphasis placed on electronic circuitry, signal generation, filtering, and calibration. Hands-on experience with equipment typically used in clinical auditory research will be provided.

Prerequisite(s): SPA 5120, SPA 6930, SPA 5506
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5133C Speech Science Instrumentation

Credit Hours: 3

Underlying principles and laboratory exercises in the use of audio recording, acoustic analysis, and clinical instrumentation.

Prerequisite(s): SPA 3011
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5153 Quantitative Problem Solving in Speech Pathology and Audiology

Credit Hours: 3

Covers fundamental mathematical and statistical concepts underlying the field of Communication Sciences and Disorders and application of these concepts to practical and clinical problems. Not restricted to majors or repeatable for credit.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5204 Advanced Clinical Phonology

Credit Hours: 3

The principles of generative phonology will be applied to the assessment and treatment of phonological disorders. Emphasis is placed on making a child's phonology more functional for communication purposes.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5303 Auditory Anatomy and Physiology

Credit Hours: 3

Provide a comprehensive understanding of the physiological acoustics of the auditory periphery, neuroanatomy and electrophysiology of the central auditory system, and psychoacoustic principles as they relate to clinical audiologic measurement paradigms.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5328 Rehabilitative Audiology for Adults

Credit Hours: 3

Assess and manage persons with hearing loss. Effects of hearing impairment, assessment issues, and appropriate intervention strategies. Prosthetic intervention, perceptual intervention, communication strategies intervention, and counseling issues.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5403 Language-Learning in the School-Age Years

Credit Hours: 3

Metalinguistic and metacognitive development are linked to the interactional demands of classroom and clinical discourse; observational tools are applied to evaluation and intervention planning.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5506 Speech-Language Pathology and Audiology Practicum

Credit Hours: 1-8

Participation in speech-language pathology and audiology practicum in the University Communication Disorders Center and selected field settings.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 5552 Diagnostic Principles and Practices

Credit Hours: 3

The administration, evaluation, and reporting of diagnostic tests and procedures used in assessment of speech and language disorders.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6102 Neuroanatomy for Speech and Hearing

Credit Hours: 3

Neuroanatomical and neurophysiological principles, structures and functions that subserve speech, hearing, language, and cognition are studied. A case-based approach illustrates the behavioral manifestations of neuropathologies. Majors only.

Prerequisite(s): SPA 3101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6211 Advanced Vocal Disorders

Credit Hours: 3

Students will be familiarized with perceptual, physiological, psychological, and behavioral processes involved in voice production, and apply this knowledge to assessment and treatment of voice disorders. Restricted to majors and may not be repeated.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6225 Advanced Fluency Disorders

Credit Hours: 3

This course covers characteristics of people who stutter, the morphology of stuttering in children and adults, motor and linguistic processes of normal speech, theories of causes of stuttering, and methods for evaluating and treating stuttering.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6232 Neuromotor Communication Disorders

Credit Hours: 3

A study of the medical, physical, occupational, speech, language, and hearing problems of the neuro-motorically impaired client. Therapy techniques are reviewed and evaluated.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6245 Craniofacial Communication Disorders

Credit Hours: 3

An in-depth study of speech, language, and hearing problems associated with cleft lip and cleft palate and other craniofacial dysmorphologies. Consideration is given to the multidisciplinary approach to therapy and rehabilitation.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6253 Speech Language Pathology Management of Complex Movement Disorders

Credit Hours: 3

This course covers neuroanatomy, etiology, symptoms, and evidence-based interventions for diagnosis and management of complex movement disorders associated with respiratory, speech, swallowing, and voice, and cognitive function, and dysfunction.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6305 Pediatric Audiology

Credit Hours: 3

Etiologies and manifestations of hearing loss within a pediatric population. Survey of procedures used in early identification and quantified measurement of hearing loss in young and non-communicative children.

Prerequisite(s): SPA 5506
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6307 Speech Perception and Sensorineural Hearing Loss

Credit Hours: 3

The course will provide an overview of the factors involved in quantifying speech perception ability in listeners with normal and impaired hearing.

Prerequisite(s): SPA 5120, SPA 5303
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6311 Medical Audiology

Credit Hours: 3

Anatomy & patho-physiology of the auditory system, medical genetics, congenital & acquired ear diseases, disorders of balance, & tinnitus. These areas will be related to audiology test results; diagnostic imaging, medical & surgical treatments.

Prerequisite(s): SPA 5120, SPA 6535L
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6314 Electrophysiology

Credit Hours: 3

This course focuses on the auditory brainstem response (ABR) as an essential diagnostic and screening tool. The course follows a combined lecture/laboratory mode with weekly class meetings and weekly laboratory exercise.

Prerequisite(s): SPA 5506, SPA 6311, SPA 5120, SPA 5303
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6316 Vestibular Evaluation and Treatment

Credit Hours: 3

Principles and clinical practices of assessing the peripheral and central components of the human vestibular system using electrical recordings of induced and spontaneous nystagmus.

Prerequisite(s): SPA 5303
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6324 Aural Rehabilitation: Children

Credit Hours: 3

Provide information and strategies for aural habilitation intervention with hearing impaired children. Includes techniques of speech reading, auditory training, and language for hearing impaired.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6329 Educational Audiology

Credit Hours: 3

Provides information on consulting and collaborating with speech pathologists, teachers, and others about the relationship of hearing loss to the development of psychosocial, communicative, cognitive, physical, academic, and vocational skills of a child.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6340 Principles of Amplification I

Credit Hours: 3

Provide information and training concerning the design and measurement of the modern hearing aid. The history of hearing aids, types of hearing aids, hearing aid components, measurement and modification of hearing aid response, and earmold acoustics.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6341 Principles of Amplification II

Credit Hours: 3

The general goal of this second of three hearing aid courses is to provide information and training related to the assessment, selection, fitting, verification, and validation processes associated with the modern hearing aid.

Prerequisite(s): SPA 6340
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6349 Advanced Study of Sensory Aids for Hearing Impaired

Credit Hours: 3

This course is designed to supplement and expand on previous coursework through a discussion of advanced technical, clinical, and professional issues related to the design, measurement, and fitting of sensory aids.

Prerequisite(s): SPA 6340, SPA 6341
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6354 Hearing Conservation

Credit Hours: 3

An investigation of the hazardous properties of noise and their effects upon the human auditory systems; hearing conservation programs in industry; and the extra-aural effects and control of community noises.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6392 Profession of Audiology

Credit Hours: 2

Acquaint students with a basic understanding of the profession of Audiology. Topics covered include: Historical underpinnings, scope of practice, ethics, legal issues, evidence-based practice, professional organizations, and current issues.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6393 Audiology Practice Management

Credit Hours: 3

The foundation necessary to initiate and manage a successful practice: individual management styles, selection and appraisal of office staff, marketing, budgeting, fiscal fitness, Florida licensure laws, and certification standards.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6401 Pediatric Language Disorders

Credit Hours: 3

An examination of the pre-verbal and language skills of the infant and preschool child, and of the Speech-Language Pathologist's role in the diagnosis, treatment, and as parent-trainer for these children.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6404 Language Learning Disabilities

Credit Hours: 3

Examination of research and clinical literature pertaining to causes and effects of atypical language and literacy learning and developmental frameworks for integrated intervention in oral and written language.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6410 Aphasia and Related Disorders

Credit Hours: 3

Consideration of the neurological and psychological aspects of aphasia and related disorders as they relate to communication disorders. Specific language therapy approaches are discussed and evaluated.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6417 Communication + Cognition in Traumatic Brain Injury

Credit Hours: 3

This course focuses on theoretical foundations of the study and management of neurocognitive disorders associated with right brain damage and traumatic brain injury, with special attention to major differences between focal and diffuse brain pathology.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6473 Bilingual Assessment and Intervention

Credit Hours: 3

The overall course aim is to develop cross-cultural clinical competence in providing services to children and families with varying sociocultural and sociolinguistic heritages.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6503 Entry Level Practicum

Credit Hours: 3

Participation in speech-language pathology and audiology practicum in the University clinical laboratory.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6505 Practicum

Credit Hours: 1-10

Participation in speech-language pathology and audiology practicum in the University clinical laboratory and selected field settings.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6508 Advanced Audiology Practicum

Credit Hours: 3-6

Students are placed at a clerkship/externship site(s) and participate in a variety of clinical and professional activities to develop advanced clinical skills through direct practical experience in diagnostics, treatment, and patient management.

Prerequisite(s): SPA 6505
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6511 Family Centered Intervention for the Speech Language Pathologist

Credit Hours: 3

Identification, evaluation, and treatment of children ages 0-5 with speech and language delays and disabilities in a family centered framework. Emphasizes counseling and coaching of caregivers with overview of legal

basis for early intervention.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6535L Audiology Clinical Laboratory I

Credit Hours: 3

Covers the operation of clinic equipment and test procedures used in the basic assessment of hearing sensitivity. Practice with equipment and test procedures takes place in the lab and clinical settings.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6536L Audiology Clinical Laboratory II

Credit Hours: 3

Covers development of skills in the assessment and management of auditory ability and function, including site of lesion; auditory processing; tinnitus; cochlear implant candidacy; and auditory (re)habilitation pediatric and adult populations.

Prerequisite(s): SPA 5506
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6553 Advanced Differential Diagnosis and Treatment Planning

Credit Hours: 3

The interpretation of evaluation results and the integration of these data in order to make a differential diagnosis leading to an appropriate therapy plan. The administration, evaluation, and reporting of advanced evaluation techniques not covered in SPA 5552.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6559 Augmentative & Alternative Communication

Credit Hours: 3

Listed in catalog as 6413 this course details the in-depth assessment and treatment of communication modes in nonspeaking individuals. Students will be presented with the variety of aided and unaided systems which exist for helping non-speaking persons; students gain experience in the use of these devices.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6564 Seminar in Aging, Cognition, and Communication

Credit Hours: 3

1. This course focuses on the interdependence of communication and cognition in older adults, emphasizing relationships among physical health, social context, cognition, and communication.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6565 Seminar in Dysphagia

Credit Hours: 3

The course covers normal and abnormal anatomy/physiology related to swallowing function, etiology, symptoms, and technique/instrumentation for diagnosis and management of dysphagia and procedures for analysis, treatment, and management.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6571 Ethical Practice Issues in Communication Sciences and Disorders

Credit Hours: 1-2

Topics include: legal and ethical issues affecting practice, licensure, and ASHA certification, the ASHA Code of Ethics, laws and regulations in healthcare and educational settings and quality assurance standards. Must be repeated for 2 total credits.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6645 Language for the Hearing Impaired

Credit Hours: 3

Listed in catalog as spa 6421 techniques and materials of teaching language to children with auditory disorders as well as evaluation and analysis of contemporary intervention and clinical methods.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6674 Curriculum Procedures and Materials for Hearing Impaired

Credit Hours: 3

Curricular adaptation, methods, techniques, and organization necessary for teaching the hearing impaired.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6675 Reading for the Hearing Impaired

Credit Hours: 2

Techniques and materials for teaching reading to children with auditory disorders. Evaluation and analysis of contemporary programs and methods.

Prerequisite(s): RED 4310
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6805 Research Procedures in Communication Sciences and Disorders

Credit Hours: 3

Advanced research and experimental design techniques employed in clinical and laboratory settings in speech-language pathology and audiology.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6906 Independent Study

Credit Hours: 1-19

Independent study in which students must have a contract with an instructor.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6910 Directed Research

Credit Hours: 1-19

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6930 Selected Topics

Credit Hours: 3

A reading program of topics in speech pathology and/or audiology conducted under the supervision of a faculty member.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7150 Advanced Speech Science

Credit Hours: 3

Advanced study of the acoustics, production, and perception of normal and disordered speech.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7330 Advanced Vestibular Evaluation and Treatment

Credit Hours: 3

Provides students with advanced concepts, protocols, and research activity in vestibular assessment and rehabilitation.

Prerequisite(s): SPA 6316, SPA 6505, SPA 5132, SPA 5303 and SPA 6536L
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7331 Advanced Medical Audiology

Credit Hours: 3

This is a seminar course which will prepare audiologists to work in a medical setting. Topics will include pharmacology, medical genetics, and diagnostic imaging.

Prerequisite(s): SPA 6311, SPA 6505, SPA 6536L
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7332 Advanced Electrophysiology

Credit Hours: 3

The purpose of this course is to provide students with the fundamentals and advanced clinical practice of human electrophysiology as it applies to audiology and hearing science. The course topics will include a review of the neural generators.

Prerequisite(s): SPA 6314
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7346 Cochlear Implants

Credit Hours: 3

Introduction to cochlear implants (CIs) and their use as a treatment for severe-to-profound hearing loss in adults and children. Not restricted to majors or repeatable for credit.

Prerequisite(s): SPA 5303, SPA 5120, SPA 5506
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7415 Neurolinguistic Theories of Language

Credit Hours: 3

Neurolinguistic theories as appropriate to the discipline are presented and discussed in relationship to language development and disorders. Information from linguistics, psycho-linguistics, artificial intelligence, neuroanatomy, and other sciences are applied to Language Science.

Prerequisite(s): SPA 6410, SPA 6232
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7497 Proseminar in Communication Sciences and Disorders

Credit Hours: 1

Professional development seminar. Prepares doctoral students for a successful career in communication sciences and disorders. Topics include developing a research agenda, building a CV, teaching in higher education, balancing career and family, etc.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7802 Critical Analysis of Literature in CSD

Credit Hours: 3

Provides a structure within which students learn to critically evaluate published research papers and begin to explore a research area of

potential interest to them in the field.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7806 Advanced Research Design for the Communication Sciences

Credit Hours: 3

By deconstructing research articles from the field, students learn how various research designs (experimental vs. descriptive research, single-subject vs. group design, and qualitative vs. quantitative methods) apply in the communication sciences.

Prerequisite(s): EDF 6407
Corequisite(s): EDF 7408
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7807 Critical Synthesis of Literature in CSD

Credit Hours: 3

Preparing a systematic literature review based upon the student's research interest. Students will identify and apply scientific criteria to primarily experimental research and prepare a synthesis of literature with a goal of guiding future research.

Prerequisite(s): SPA 7802
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7811 Research Foundations of Speech Science

Credit Hours: 3

This course introduces doctoral students to fundamental topics in the area of speech science. Students will learn about the research foundations of the field directly from seminal research articles and other primary sources.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7812 Research Foundations of Hearing Science

Credit Hours: 3

This course introduces doctoral students to fundamental topics in the area of hearing science. Students will learn about the research foundations of the field directly from seminal research articles and other primary sources.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7826 Research Foundations of Neurocommunicative Science

Credit Hours: 3

This course introduces doctoral students to fundamental topics in the area of neurocommunicative science. Students will learn about the research foundations of the field directly from seminal research articles and other primary sources.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7834 Audiology Doctoral Project Seminar

Credit Hours: 1

A forum for discussion of progress and resolution of problems/questions related to the Audiology Doctoral Project (ADP). Restricted to AuD majors; repeatable for credit.

Prerequisite(s): SPA 6805
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7841 Research Foundations of Language Science

Credit Hours: 3

This course introduces doctoral students to fundamental topics in the area of language science. Students will learn about the research foundations of the field directly from seminal research articles and other primary sources.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7931 Seminar in Communication Sciences and Disorders

Credit Hours: 3

Addresses the central research and clinical issues related to the diagnosis and treatment of communication disorders. Content of seminars varies with instructor's expertise.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPA 7980 Dissertation

Credit Hours: 2-19

PR: Admission to Candidacy. Doctoral Dissertation.

Tampa | College of Behavioral and Community Sciences | Communication Sciences and Disorders

SPB 6116 Sport and Entertainment Finance

Credit Hours: 3

This course provides the opportunity to apply financial concepts, tools, and techniques to the global sport and entertainment industry.

Tampa | Muma College of Business | Marketing

SPB 6406 Sport and Entertainment Law

Credit Hours: 3

Identifies key legal issues in a sport context; provides an overview of areas of law that regulate the sport and entertainment industry including tort, contract, constitutional, criminal, employment, labor, antitrust and agency law.

Tampa | Muma College of Business | Marketing

SPB 6605 Sport and Social Issues

Credit Hours: 3

This course examines the social environment of sport and discusses the various diversity theories, focusing on the application of these theories to organizations in the sport business and entertainment management industry.

Tampa | Muma College of Business | Marketing

SPB 6608 Issues in the American Sport Industry

Credit Hours: 3

Examines professional sport industries with regard to their role in sport as a competitive culmination point and also their role as a form of entertainment. Both of these roles will be examined in the context of the business of professional sport.

Tampa | Muma College of Business | Marketing

SPB 6706 Sport Business Analytics

Credit Hours: 3

Students are introduced to the skills, technologies, applications and practices essential to understanding and evaluating business performance in sport and entertainment.

Prerequisite(s): QMB 6305
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

SPB 6715 Sales and Fundraising in the Sport Industry

Credit Hours: 3

Teaches students about the "art" and "science" of fundraising in the diverse industry of sports. Further, students will learn the competencies and skills essential to succeed in the sales and promotional activities commonly found in the sport industry.

Tampa | Muma College of Business | Marketing

SPB 6719 Sport and Entertainment Marketing Strategy

Credit Hours: 3

Provides an historical overview of sport marketing and examines the application of marketing principles to collegiate and professional sport and sport-related organizations.

Prerequisite(s): MAR 6815
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

SPB 6735 Global Environment of Sport

Credit Hours: 3

This course examines the global economic, social, political, technological, and legal environments of sport, the marketing factors driving globalization, and the challenges of intercultural management in sport organizations.

Tampa | Muma College of Business | Marketing

SPB 6807 Social Media in Sport

Credit Hours: 3

Examines the role of social media in building and enhancing relationships with fans and explores the opportunities and challenges in leveraging a social media strategy to transfer the consumer's use of social media from cyberspace to the real world.

Tampa | Muma College of Business | Marketing

SPB 6816 Contemporary Issues in Sport and Entertainment Management

Credit Hours: 3

Contemporary Issues in Sport and Entertainment Management examines the historical trends, ethical concerns, and current economic, technological, and social issues in the field of sport and entertainment management.

Tampa | Muma College of Business | Marketing

SPB 6818 Economics of Sport

Credit Hours: 3

This course applies the principles of macro and micro economics to global sport organizations, including topics such as industrial organization, public financing, and labor economics.

Tampa | Muma College of Business | Marketing

SPB 6946 Internship in Sport and Entertainment Management

Credit Hours: 3

A supervised field experience, the Internship in Sport and Entertainment Management provides hands-on experience in sport, sport-related, and entertainment organizations.

Prerequisite(s): SPB 6719, SPB 6406, SPB 6816, SPB 6706
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Marketing

SPC 5930 Topics in Discourse

Credit Hours: 3

Variable topics course.

Tampa | College of Arts and Sciences | Communication

SPC 6214 Ethnography of Communication

Credit Hours: 3

Explores ethnography as an approach to conducting research and a means of theorizing about human communication.

Tampa | College of Arts and Sciences | Communication

SPC 6236 Contemporary Rhetorical Theory

Credit Hours: 3

Basic texts in 20th century rhetorical theory. Readings may vary.

Tampa | College of Arts and Sciences | Communication

SPC 6238 Survey of Rhetorical Theory

Credit Hours: 3

Historical development of rhetorical theory from Plato to contemporary theorists with emphasis upon the evolution of trends and concepts in rhetorical theory.

Tampa | College of Arts and Sciences | Communication

SPC 6391 Interpersonal Communication

Credit Hours: 3

Study of theory and research related to interpersonal communication.

Tampa | College of Arts and Sciences | Communication

SPC 6432 Family Communication

Credit Hours: 3

This course examines the family in terms of the patterns of interaction through which meanings are produced. Family communication concepts and theories will be introduced as they relate to diverse family forms and experiences.

Tampa | College of Arts and Sciences | Communication

SPC 6645 Rhetoric in Society

Credit Hours: 3

Examination of ways in which rhetoric reflects and molds social processes, including social integration and/or alienation; social roles and identity construction; institutions and movements; ideology and social change.

Tampa | College of Arts and Sciences | Communication

SPC 6682 Rhetorical Criticism

Credit Hours: 3

The study of theoretical perspectives in rhetorical criticism. The application of criticism to selected rhetorical situations.

Tampa | College of Arts and Sciences | Communication

SPC 6726 Communication in Close Relationships

Credit Hours: 3

Interpersonal and intersubjective processes involved in the development of close personal relationships. Includes studies and personal experiences that cut across historical, therapeutic, spiritual, philosophical, literary, and cinematic perspectives.

Tampa | College of Arts and Sciences | Communication

SPC 6728 Communicating Grief, Loss, and Illness

Credit Hours: 3

How illness and loss disrupt our stories of self and relationships and lead to construction of new stories, also cultural patterns of stories. Topics include critical illness and relationships, dying, bodies, emotions, caregiving, aging, and divorce.

Tampa | College of Arts and Sciences | Communication

SPC 6903 Directed Readings

Credit Hours: 1-4

Tampa | College of Arts and Sciences | Communication

SPC 6913 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Communication

SPC 6934 Selected Topics in Communication

Credit Hours: 1-4

Tampa | College of Arts and Sciences | Communication

SPC 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Communication

SPC 7900 Doctoral Research Tutorial

Credit Hours: 1-3

Advanced directed research.

Tampa | College of Arts and Sciences | Communication

SPC 7930 Seminar in Rhetorical Studies

Credit Hours: 3

Variable topics course.

Tampa | College of Arts and Sciences | Communication

SPC 7980 Dissertation: Doctoral

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Communication

SPN 5525 Modern Spanish American Civilization

Credit Hours: 3

Advanced readings and discussions dealing with Spanish American civilization and culture, including a study of social, artistic and political trends. Text and discussion in Spanish.

Prerequisite(s): SPN 3520
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPN 5567 Modern Spanish Civilization

Credit Hours: 3

Advanced readings and discussions dealing with contemporary Spanish civilization and culture, including a study of recent social, artistic and political trends. Texts and discussions in Spanish.

Prerequisite(s): SPN 3500
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPN 6845 History of the Spanish Language

Credit Hours: 3

Traces the development of Spanish from its Latin origins to the present.

Tampa | College of Arts and Sciences | World Languages

SPN 6846 Spanish Paleography and Textual Criticism

Credit Hours: 3

Analysis of Spanish historical documents, paleography, and textual criticism.

Prerequisite(s): SPN 6845
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPS 6101 Child and Adolescent Behavior Disorders

Credit Hours: 4

Theoretical and empirical identification and understanding of children

and adolescents with behavior disorders. Treatment issues as they relate to school psychological services.

Tampa | College of Education | Educational and Psychological Studies

SPS 6196 Assessment of Child and Adolescent Personality

Credit Hours: 4

Conceptualizations of personality and personality assessment; perspectives of disturbed and disturbing behavior, and personality assessment measures.

Tampa | College of Education | Educational and Psychological Studies

SPS 6197 Psychoeducational Diagnosis and Prescription I

Credit Hours: 4

Content covers comprehensive diagnosis and prescription in school psychology, including critical reviews of relevant research literatures, the professional-client relationship, interviewing, client histories, pluralistic psychoeducational assessment, assessment of educational environments, synthesis and dissemination of diagnostic data, and referral procedures. Appropriate field experiences will be provided. This course must be taken during two consecutive semesters, and the grade will be awarded at the end of the sequence.

Tampa | College of Education | Educational and Psychological Studies

SPS 6198 Psychoeducational Diagnosis and Prescription II

Credit Hours: 4

Content covers comprehensive diagnosis and prescription in school psychology, including critical reviews of relevant research literatures, the professional-client relationship, interviewing, client histories, pluralistic psychoeducational assessment, assessment of educational environments, synthesis and dissemination of diagnostic data, and referral procedures. Appropriate field experiences will be provided. This course must be taken during two consecutive semesters, and the grade will be awarded at the end of the sequence.

Tampa | College of Education | Educational and Psychological Studies

SPS 6700C Psychoeducational Interventions with Children and Adolescents I

Credit Hours: 4

Content covers psychoeducational interventions for school-referred children and adolescents specific to school psychological services. This is an integrated sequence of courses addressing educational and psychological (direct and indirect) interventions with topics also including consultative service delivery, the acceptability of classroom strategies, classroom and behavior management, and the synthesis of assessment data into effective interventions all within the referral context. Appropriate field experiences will be required for Intervention I and Intervention II; therefore, concurrent enrollment in the Intervention Practicum course for these two courses only is required.

Prerequisite(s): None.
Corequisite(s): SPS 6701C
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

SPS 6701C Psychoeducational Interventions with Children and Adolescents II

Credit Hours: 4

Content covers psychoeducational interventions for school-referred children and adolescents specific to school psychological services. This is an integrated sequence of courses addressing educational and psychological (direct and indirect) interventions with topics also including consultative service delivery, the acceptability of classroom strategies, classroom and behavior management, and the synthesis of assessment data into effective interventions all within the referral context. Appropriate field experiences will be required for Intervention I and Intervention II; therefore, concurrent enrollment in the Intervention Practicum course for these two courses only is required.

Prerequisite(s): None.
Corequisite(s): SPS 6700C
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

SPS 6702C Psychoeducational Interventions with Children and Adolescents III

Credit Hours: 4

Content covers psychoeducational interventions for school-referred children and adolescents specific to school psychological services. This is an integrated sequence of courses addressing educational and psychological (direct and indirect) interventions with topics also including consultative service delivery, the acceptability of classroom strategies, classroom and behavior management, and the synthesis of assessment data into effective interventions all within the referral context. Appropriate field experiences will be required for Intervention I and Intervention II; therefore, concurrent enrollment in the Intervention Practicum course for these two courses only is required.

Prerequisite(s): None.
Corequisite(s): SPS 6700C
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

SPS 6936 Graduate Seminar in School Psychology

Credit Hours: 1-3

Seminars to explore current matters of professional concern in school psychology, such as trends, problems, legal and ethical issues, and empirical bases of techniques.

Tampa | College of Education | Educational and Psychological Studies

SPS 6940 Practicum in Psychoeducational Interventions

Credit Hours: 1-4

Course provides practical experiences and implementation of skills discussed and acquired in the intervention courses within settings relevant to school psychology.

Prerequisite(s): None.
Corequisite(s): SPS 6700C or SPS 6701C
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

SPS 6941 Practicum in Psychoeducational Interventions

Credit Hours: 1-4

Course provides practical experiences and implementation of skills discussed and acquired in the intervention courses within settings relevant to school psychology.

Prerequisite(s): None.
Corequisite(s): SPS 6700C or SPS 6701C
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

SPS 6947 Internship

Credit Hours: 1-9

Involves field-based, supervised experience of 1,500 (minimum) clock hours at the Educational Specialist level and 2,000 (minimum) clock hours at the Doctoral level.

Tampa | College of Education | Educational and Psychological Studies

SPS 6971 Thesis: Masters/Educational Specialist

Credit Hours: 2-19

Tampa | College of Education | Educational and Psychological Studies

SPS 7090 Supervision Processes in School Psychology

Credit Hours: 4

Theory, skills, and practice of supervision in school psychology.

Tampa | College of Education | Educational and Psychological Studies

SPS 7205 Advanced Consultation Processes in School Psychology

Credit Hours: 2-4

Advanced topics and techniques in consultation processes for advanced school psychologists.

Prerequisite(s): EDF 6166
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

SPS 7700 Advanced Psychoeducational Interventions

Credit Hours: 2-4

Advanced topics and techniques in psychoeducational interventions for children and adolescents referred for school psychological services.

Prerequisite(s): SPS 6700C, SPS 6701C, SPS 6940, SPS 6941
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

SPS 7701 Advanced Child and Adolescent Psychotherapy

Credit Hours: 2-4

Covers advanced topics and techniques in child and adolescent psychotherapy relevant to school psychological services.

Prerequisite(s): SPS 6702C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Educational and Psychological Studies

SPS 7910 Directed Research in School Psychology

Credit Hours: 1-19

A doctoral research experience supervised by a faculty member.

Tampa | College of Education | Educational and Psychological Studies

SPS 7936 Advanced Seminar in School Psychology

Credit Hours: 1-3

Exploration of current issues and trends in school psychology, as it relates to research and professional practice, and the history and systems of education and psychology.

Tampa | College of Education | Educational and Psychological Studies

SPS 7980 Dissertation

Credit Hours: 2-30

Tampa | College of Education | Educational and Psychological Studies

SPW 5135 Colonial Spanish American Literature

Credit Hours: 3

Introduction to Colonial Spanish American Literature from the discovery through the Romantic Period.

Prerequisite(s): SPW 4131
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPW 5339 Golden Age Drama

Credit Hours: 3

Lope de Vega, Alarcon, Tirso, Calderon, and others.

Prerequisite(s): SPW 4100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPW 5375 Latin American Short Story

Credit Hours: 3

The course examines the state of the Spanish American short story in the 20th Century through reading, analysis and discussion of primary and secondary texts.

Tampa | College of Arts and Sciences | World Languages

SPW 5387 Spanish American Prose

Credit Hours: 3

Emphasis on the gaucho theme and contemporary prose fiction.

Prerequisite(s): SPW 4131
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPW 5405 Medieval Literature

Credit Hours: 3

Course gives an in-depth study of principal works and authors of the period such as El Poema de Mio Cid, Libro de Buen Amor, and La Celestina.

Prerequisite(s): SPW 4100
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPW 5465 19th Century Literature

Credit Hours: 3

An appreciation of the romantic and realist periods in Spanish literature.

Prerequisite(s): SPW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPW 5597 Latin American Culture in Fantastic Literature and Film

Credit Hours: 3

A panoramic view of Spanish American fantastic and science fiction literature and film in order to analyze their relationship to historical, philosophical and cultural trends from the end of the 19th century to the beginning of the 21st century.

Tampa | College of Arts and Sciences | World Languages

SPW 5605 Cervantes

Credit Hours: 3

Cervantes' masterpiece Don Quijote de la Mancha.

Tampa | College of Arts and Sciences | World Languages

SPW 5725 Generation of 1898

Credit Hours: 3

The major figures of the period and their main followers.

Prerequisite(s): SPW 4101
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPW 5934 Selected Topics

Credit Hours: 3

Study of an author, movement, or theme.

Tampa | College of Arts and Sciences | World Languages

SPW 6427 Golden Age Novel

Credit Hours: 3

Realistic prose-fiction of the Renaissance and Golden Age.

Tampa | College of Arts and Sciences | World Languages

SPW 6485 Post Civil War Literature

Credit Hours: 3

The drama and novel since 1936.

Prerequisite(s): SPW 4101
Corequisite(s): None.

Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPW 6775 Caribbean Literature

Credit Hours: 3

Emphasis on contemporary Cuban and Puerto Rican literature.

Prerequisite(s): SPW 4131
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

SPW 6806 Introduction to Hispanic Graduate Studies

Credit Hours: 3

Introduce students to speaking, reading and writing at the graduate level and provide an overview of the MA in Spanish at USF.

Tampa | College of Arts and Sciences | World Languages

SPW 6910 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | World Languages

SPW 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | World Languages

SSE 5331 Foundations, Curriculum & Instruction of Social Science Education

Credit Hours: 3

Social studies curriculum, methods of instruction and social, philosophical and psychological foundations are examined. Students are expected to plan and present instructional plan(s) appropriate to middle and secondary school levels demonstrating command of the course content.

Tampa | College of Education | Teaching and Learning

SSE 5332 Methods and Strategies in Social Science Education

Credit Hours: 3

Social studies methods and strategies are examined with an emphasis on the secondary school environment. The teaching profession, school settings, and current issues are examined. Students are expected to plan and present instructional plan(s) appropriate to senior high school demonstrating command of the course content.

Tampa | College of Education | Teaching and Learning

SSE 5641 Reading and Basic Skills in the Content Area

Credit Hours: 3

Reading skills and the other basic skills as applied to the social studies are examined. Students are expected to plan and present instructional plan(s) appropriate to the social studies classroom demonstrating command of the course content. Fieldwork in a middle school is required.

Tampa | College of Education | Teaching and Learning

SSE 5946 Practicum in Social Science Education

Credit Hours: 3

The course is a practicum course in which pre-service teachers apply the knowledge, skills, and dispositions learned in prerequisite program courses to teach the social studies themes adopted by the National Council for the Social Studies.

Prerequisite(s): SSE 5331
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

SSE 6617 Trends in K-6 Social Science Education

Credit Hours: 3

This course focuses on theoretical foundations and strategies employed by effective social studies teachers in motivating K-6 aged youth to acquire the information, skills, and reasoning unique to the social sciences. Students also conduct research.

Tampa | College of Education | Teaching and Learning

SSE 6636 Trends in Secondary Social Science Education

Credit Hours: 3

This course is designed for graduate students to research the history, theory, practices and current trends of social science education and to develop a personal, academic social science philosophy.

Prerequisite(s): SSE 4333, SSE 4334, SSE 4335
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

SSE 6906 Independent Study in Social Sciences Education

Credit Hours: 1-6

An opportunity for advanced graduate students to examine a specific issue or topic in the field of social science education.

Tampa | College of Education | Teaching and Learning

SSE 6932 Selected Topics in Social Science Education

Credit Hours: 3

Readings and discussions organized around an in-depth examination of selected social studies education topics selected by professors.

Tampa | College of Education | Teaching and Learning

SSE 6947 Internship in Secondary Education for Science

Credit Hours: 6

Students will work with a cooperating teacher and university supervisor to complete their internship requirements in a classroom setting assigned by the university.

Tampa | College of Education | Teaching and Learning

SSE 7700 Social Science Curriculum and Instruction Issues

Credit Hours: 4

This advanced graduate course investigates current trends and new directions in the social science curriculum, leading theories and practices related to instructional methodology, and implications of significant research and developments in the field.

Tampa | College of Education | Teaching and Learning

SSE 7710 Research in Social Science Education

Credit Hours: 4

This course prepares doctoral students in social science education to be active scholars. Students engage in a preliminary research study, examine theoretical, technical, ethical and practical issues related to conduct of research in education.

Tampa | College of Education | Teaching and Learning

SSE 7720 Social Science Education Technological Innovations

Credit Hours: 4

This course examines the use of technology in the social science classroom, barriers to integration, unrealized potential of technology and consequences of technological development on children and youth.

Tampa | College of Education | Teaching and Learning

SSE 7730 Philosophy of Social Science Education

Credit Hours: 4

This advanced graduate course allows students to research the

philosophical and theoretical underpinnings of a social science education and the role of a university as well as to develop a personal, philosophical construct.

Tampa | College of Education | Teaching and Learning

SSE 7740 History of the Social Studies Since 1880

Credit Hours: 4

This course is a historical investigation of the development of the secondary school history/social studies curriculum, including questions related to objectives, content, and methods of instruction.

Tampa | College of Education | Teaching and Learning

SSE 7910 Directed Research in Social Sciences Education

Credit Hours: 1-9

This course permits a doctoral student to conduct advanced research and to pursue specific areas of interest with a faculty member as supervisor. A contract is required with the faculty member. S/U

Tampa | College of Education | Teaching and Learning

SSE 7945 Applied Research in Social Science Education

Credit Hours: 2

This course provides doctoral students in social science education with the opportunity to teach post–secondary courses, engage in sustained research, pursue external funding, and participate in professional activities.

Tampa | College of Education | Teaching and Learning

SSE 7980 Dissertation in Social Science Education

Credit Hours: 2-24

Tampa | College of Education | Teaching and Learning

STA 5166 Statistical Methods I

Credit Hours: 3

Statistical analysis of data by means of statistics package programs. Regression, ANOVA, discriminant analysis, and analysis of categorical data. Emphasis is on inter-relation between statistical theory, numerical methods, and analysis of real life data.

Prerequisite(s): STA 4321
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 5326 Mathematical Statistics I

Credit Hours: 3

Sample distribution theory, point & interval estimation, optimality theory, statistical decision theory, and hypothesis testing.

Prerequisite(s): STA 5446
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 5446 Probability Theory I

Credit Hours: 3

Axioms of probability, random variables in Euclidean spaces, moments and moment generating functions, modes of convergence, limit theory for sums of independent random variables.

Prerequisite(s): STA 4442, MAA 4212
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 5526 Non-Parametric Statistics

Credit Hours: 3

Theory and methods of non-parametric statistics, order statistics, tolerance regions, and their applications.

Prerequisite(s): STA 5326
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 6167 Statistical Methods II

Credit Hours: 3

Design of statistics programs, pivoting and other technology used in stepwise regressions, algorithms in non-linear regression, balanced and unbalanced ANOVA. Iteration methods for numerical solutions of likelihood equations.

Prerequisite(s): STA 5166
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 6206 Stochastic Processes

Credit Hours: 4

Poisson processes, renewal theorems, Markov chains on a countable state space, continuous-time Markov processes with a countable state space, birth and death processes, branching processes, introduction to Brownian motion.

Prerequisite(s): STA 5446
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 6208 Linear Statistical Models

Credit Hours: 3

Distribution theory, estimation, and hypothesis testing for the general linear model. Experimental designs, including randomized block and incomplete block designs. Multiple regression, ANOVA, and ANCOVA.

Prerequisite(s): STA 6167 or STA 5326
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 6447 Probability Theory II

Credit Hours: 3

Characteristic functions, central limit theorem, martingale inequalities and convergence theorems, optional stopping, ergodic theorems and applications.

Prerequisite(s): STA 5446, MAA 5306
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 6746 Multivariate Analysis

Credit Hours: 3

Multivariate normal distribution; its properties and inference; matrix random variables; multiple and partial correlation; discriminant analysis, principle components and factor analysis; multivariate ANOVA; analysis of covariance; applications using computers.

Prerequisite(s): STA 5326
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

STA 6876 Time Series Analysis

Credit Hours: 3

Theory and applications of discrete time series models illustrated with forecasting problems. Filtering, forecasting, modeling, and spectral analysis of time series. Control problems. Applications using a computer.

Prerequisite(s): STA 5326
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Mathematics and Statistics

SYA 6126 Contemporary Sociological Theory

Credit Hours: 3

Emphasizes logical and conceptual dimensions of theory and theory construction.

Prerequisite(s): Undergraduate course in sociological theory
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Sociology

SYA 6205 Social Construction of Reality

Credit Hours: 3

Evolution of the concept of social construction; emphasizes the consequences of understanding lived experiences and discursive representations as social constructions. Topics include depression, child abuse, masculinity/femininity, and sexual harassment.

Tampa | College of Arts and Sciences | Communication

SYA 6305 Methods of Research

Credit Hours: 3

Logic and practice of research; problems of observation and data collection, data processing, and evaluation.

Prerequisite(s): Undergraduate course in sociological research methods
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Sociology

SYA 6315 Qualitative Research Methods

Credit Hours: 3

Designed to introduce students to qualitative research methods, such as participant observation and intensive interviewing that require the researcher to get close to the social situation of interest.

Prerequisite(s): Undergraduate course in sociological research methods
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Sociology

SYA 6316 Ethnography

Credit Hours: 3

Examines the theoretical and practical issues in ethnographic research and various styles of ethnography. Provides hands-on training in ethnographic data collection and qualitative data analysis.

Tampa | College of Arts and Sciences | Sociology

SYA 6405 Sociological Statistics

Credit Hours: 3

Logic and application of parametric and nonparametric statistical analysis for sociological data.

Prerequisite(s): Undergraduate statistics course
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Sociology

SYA 6909 Independent Study

Credit Hours: 1-19

Independent study in which student must have a contract with an instructor.

Tampa | College of Arts and Sciences | Sociology

SYA 6912 Directed Research

Credit Hours: 1-19

Tampa | College of Arts and Sciences | Sociology

SYA 6933 Special Topics-Sociology

Credit Hours: 3

Content varies according to interests of students and instructor.

Tampa | College of Arts and Sciences | Sociology

SYA 6971 Thesis: Master's

Credit Hours: 2-19

Tampa | College of Arts and Sciences | Sociology

SYA 7357 Introduction to Social Network Analysis

Credit Hours: 3

Introduction to the methods by which properties of networks are described, quantified, and analyzed with attention to networks of interest to social scientists (such as, social, knowledge, and semantic networks).

Tampa | College of Arts and Sciences | Sociology

SYA 7939 Selected Topics for Ph.D. Students

Credit Hours: 3

In this course, doctoral students will examine theoretical, methodological and/or substantive scholarship in a variety of areas related to identity, community and sustainability in global context.

Tampa | College of Arts and Sciences | Sociology

SYA 7980 Doctoral Dissertation

Credit Hours: 2-20

The dissertation represents the culmination of the research experience for Sociology doctoral students and will involve the creation of an original book-length study with many interrelated parts. May be repeated for credit.

Tampa | College of Arts and Sciences | Sociology

SYA 7988 Dissertation Proposal

Credit Hours: 1-6

This course will guide Ph.D. students toward the completion of their dissertation proposal under close supervision of their faculty mentors.

Tampa | College of Arts and Sciences | Sociology

SYD 6605 City and Community

Credit Hours: 3

Provides training in the field of urban and community sociology. Focuses on the field's early theoretical foundations, "classic" research, and contemporary debates. Concentrates on the U.S., although some cross-cultural comparisons will be offered.

Tampa | College of Arts and Sciences | Sociology

SYD 6706 Race and Ethnicity

Credit Hours: 3

Introduces historical development of race, social construction of racial and ethnic identities, race-class-gender interrelationships, and various issues of immigration. Exploration of theories used to explain racial and ethnic inequality today.

Tampa | College of Arts and Sciences | Sociology

SYG 6936 Seminar in Teaching Sociology

Credit Hours: 3

Provides a key link for future teaching sociologists, assisting them to make the switch from consumers to educators of the sociological perspective. Places equal emphasis on theoretical and practical issues surrounding teaching sociology.

Tampa | College of Arts and Sciences | Sociology

SYO 6255 Seminar in Sociology of Education

Credit Hours: 3

Sociological analysis of the institution of education. Primary attention directed toward class, race, and gender inequalities and educational transformations.

Tampa | College of Arts and Sciences | Sociology

SYO 7435 Sociology of Disability in Urban Society

Credit Hours: 3

This course critically evaluates current controversies over the utility of a variety of theoretical perspectives and research methods in understanding the lived experience of disability in 21st century urban society.

Tampa | College of Arts and Sciences | Sociology

SYP 6008 Social Problems, Identity, and Community

Credit Hours: 3

An examination of social problems using social constructionist theoretical perspectives. Topics focus on how meaning is created within historically, culturally, and politically situated communities.

Tampa | College of Arts and Sciences | Sociology

SYP 6016 Emotions in Everyday Life

Credit Hours: 3

Explores the role of emotions in the everyday lives of individuals, within the micro-social contexts of identities, interactions, and social relationships.

Tampa | College of Arts and Sciences | Sociology

SYP 6357 Comparative Social Movements

Credit Hours: 3

Provides an overview of the various theoretical perspectives used to explain the emergence, growth, strategies and success of social movements in contemporary America and in other countries.

Tampa | College of Arts and Sciences | Sociology

SYP 6425 Sociology of Consumer Culture

Credit Hours: 3

This course critically examines the key theories and analyses of American consumerism with special attention to inequalities of race, class, and gender.

Tampa | College of Arts and Sciences | Sociology

SYP 6515 Sociology of Deviance

Credit Hours: 3

Develops knowledge of traditional theories of deviance as well as critiques them. Through development of alternative perspectives, challenges constructions of deviance and the mechanisms of power.

Tampa | College of Arts and Sciences | Sociology

ATR 5105C Athletic Training Techniques

Credit Hours: 3

Overview course including basic components of the athletic training profession including the prevention, recognition and evaluation and immediate care of athletic injuries.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5125 Anatomical Basis of Clinical Practice in Sports Medicine

Credit Hours: 3

By way of laboratory prosection of cadavers, this class will provide an opportunity for students to gain an in-depth understanding of human anatomy. This course examines anatomy of the extremities, back, thorax, abdomen, pelvis and perineum.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5217C Physical Examination I

Credit Hours: 4

The study and practice of skills and techniques essential for the evaluation of orthopaedic injuries. Students will learn to formulate an impression of the injury/condition in order to provide the basis for an initial treatment plan and medical referral.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5218C Physical Examination II

Credit Hours: 4

The study and practice of skills and techniques essential for the evaluation of orthopaedic injuries. Students will learn to formulate an impression of the injury/condition in order to provide the basis for an initial treatment plan and medical referral.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5306C Therapeutic Interventions I

Credit Hours: 4

Theoretical and clinical bases for the use of therapeutic modalities, pharmacology in the rehabilitation setting, including basic physics, physiological effects, indications, contraindications, and applications of therapeutic modalities in rehab.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5307C Therapeutic Interventions II

Credit Hours: 4

Theory and application methods of comprehensive therapeutic treatment and rehabilitation programs for injuries commonly sustained by the physically active.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5308C Therapeutic Interventions III

Credit Hours: 1

This course will provide an overview of manual therapy techniques, including myofacial release, joint mobilization, and traction as they are incorporated into a therapeutic rehabilitation program.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5319 Rehabilitation Considerations for Children

Credit Hours: 3

Addresses the principles of rehabilitation for children. This course will entail advanced anatomical, physiological and psychological aspects of sports injury in the youth population.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5346C Health and Wellness Promotion Across the Lifespan I

Credit Hours: 3

Integrates physiological, psychological, and social understanding of humans in relationship to physical activity as a lifelong pursuit. Includes physical fitness, nutrition, stress reduction, socialization, and individual differences in human behavior.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5347C Health and Wellness Promotion Across the Lifespan II

Credit Hours: 1

Techniques in conducting health fitness tests and exercise prescription including cardiorespiratory fitness, flexibility, weight control and nutrition as it relates to a healthy lifestyle.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5348C Health and Wellness Promotion Across the Lifespan III

Credit Hours: 1

This course will introduce concepts of neuromuscular system training, specifically addressing sport specific strength training, exercise selection, and physiological needs analysis.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5435 Medical Conditions

Credit Hours: 3

Pathology, physical examination, referral and treatment related to non-orthopedic conditions in the active population. Specific diagnostic tests and physical examination procedures will also be addressed.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5508 Contemporary Issues in Athletic Training

Credit Hours: 3

Takes a unique look at the current issues facing the profession of athletic training. Historical perspectives, current implications, and futuristic opportunities and threats are discussed.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5515 Administration of Injury Prevention Programs

Credit Hours: 3

Discusses the development and implementation of injury prevention programs for youth sports. Issues such as research, budgeting, marketing, and measuring effectiveness are identified.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5534 Documentation in Athletic Training

Credit Hours: 1

Documentation in Athletic Training is designed to prepare athletic training students with an introduction to the foundation of appropriate terminology, documentation, and communication methods as they relate athletic training and sports medicine.

Prerequisite(s): None.
Corequisite(s): ATR 3202
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5605 Youth Injury Epidemiology

Credit Hours: 3

Key issues in epidemiology, injury etiology, risk factors related to both internal and external variables, and the efficacy and effectiveness of preventive measures in regard to youth sport injury will be analyzed and discussed.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5612 Evidence Based Medicine in Athletic Training

Credit Hours: 3

This class will address evidence based medicine (EBM) and on how it affects clinical practice in athletic training. The importance of applying medical outcomes to clinical practice, components of research and publishing in sports medicine are taught.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5815 Clinical Experience in Athletic Training I

Credit Hours: 1

Performance of basic athletic training skills under the supervision of a clinical instructor at various sties. Students develop competence in introductory athletic training skills. Focus on equipment intensive sports. A weekly seminar also required.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5825 Clinical Experience in Athletic Training II

Credit Hours: 1

Performance of basic athletic training skills under the supervision of a clinical instructor at various sites. Students develop competence in introductory and mid-level athletic training skills. Weekly seminar is also required.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 5835C Clinical Practicum in Athletic Training

Credit Hours: 1-3

Performance of mid-level athletic training skills under the supervision of a preceptor at various sites. Students develop competence in mid-level and advanced athletic training skills.

Prerequisite(s): ATR 5815 with a minimum grade of C, ATR 5825 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6114 Preventing Sudden Death in Sport I

Credit Hours: 2

The purpose of the course is to provide athletic training students an overview of the general concepts and principles related to the causes of sudden death in sport. This course will deal with specific and potentially life-threatening conditions.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6115 Preventing Sudden Death in Sport II

Credit Hours: 2

Provide an overview of the general concepts and principles related to the causes of sudden death in sport. This course will deal with specific and potentially life-threatening conditions.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6116C Preventing Sudden Death in Sports Settings

Credit Hours: 3

This course will familiarize students with the common causes of fatalities in the athletic setting. Key issues in principles of airway management, cardiac events, and other emergency management skills will be discussed.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6226 Advanced Athletic Training

Credit Hours: 3

This course designed to expose the Senior Athletic Training Students to current concepts and techniques in the evaluation and treatment of musculoskeletal conditions. Didactic sessions will be supplemented with physical exam assessment skills.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6235 Motor Development and Skill Acquisition

Credit Hours: 3

Motor Development and Skill Acquisition will familiarize students with the theories and approaches of skill acquisition in young athletes. This course is limited to post-professional athletic training program (M.S. in MS, Athletic Training concentration).

Prerequisite(s): None.
Corequisite(s): ATR 6236
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6236 Pediatric Sports Medicine

Credit Hours: 3

Addresses the unique orthopaedic conditions commonly seen in adolescents. Musculoskeletal issues, such as disease process, genetic abnormalities, infectious disease, mechanism of injury, overuse, protective equipment, immature skeletal disruption,etc.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6446 Medical Conditions of Adolescents

Credit Hours: 3

Focuses on non-orthopedic conditions in children such as review of pharmacology, guidelines for pre-participation examinations, diabetes, exercise induced bronchospasm, sudden cardiac death, concussions, and infectious diseases in the adolescent athlete.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6514 Ethical & Legal Issues in Healthcare

Credit Hours: 1

Designed to develop awareness of ethical & legal issues required for athletic trainers to deliver healthcare. Develops a broad understanding of the ethical & legal issues related to healthcare delivery, emphasizing legal terminology and applicability.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6517 Professional Practice

Credit Hours: 3

The advanced study, writing and discussion of specialized topics and contemporary issues related to professional practice. Emphasis will be on historical perspectives, professional preparation, credentialing, governance, ethics, and scope of practice.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6615 Evidence Based Research and Writing

Credit Hours: 3

A thorough look at the process of utilizing evidence-based medicine to advance healthcare. The importance of applying medical outcomes to clinical practice; recent research; & components of conducting & publishing research in the field of sport medicine.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6616 Research in Athletic Training

Credit Hours: 3

The capstone project is the final cumulative work that exemplifies a body of knowledge that significantly contributes a worthy product to the profession of athletic training and one's own professional endeavors.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6626 Capstone Project 1

Credit Hours: 3

The capstone project is a cumulative work that exemplifies a scientific body of knowledge that contributes to the field of AT. CP-1 focuses on identifying a problem, reviewing literature, & developing a plan to enhance the healthcare of young athletes.

Prerequisite(s): ATR 5508, ATR 5515, ATR 6615
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6627 Capstone Project 2

Credit Hours: 3

Focus on completing a SWOT analysis of the plan & a formal written document. The final project will be used for immediate implementation, submission for publication/presentation & will ultimately result in improvement of healthcare for young athletes.

Prerequisite(s): ATR 6626
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6835 Clinical Experience in Athletic Training III

Credit Hours: 4

Performance of mid-level athletic training skills under the supervision of a clinical instructor at various sites. Experience will also include general medical experience and surgery observation. Weekly seminar also required.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6845 Clinical Experience in Athletic Training IV

Credit Hours: 4

A Capstone experience under the supervision of a preceptor at various sites. Students develop competence in mid and advanced athletic training skills and prepare for the BOC examination.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

ATR 6920 Athletic Training Professional Colloquium

Credit Hours: 3

The Athletic Training Professional Colloquium course is a week-long in-residence course led by leaders in the profession of athletic training. A variety of topics are covered, including national trends, association issues, and professional challenges.

Tampa | Morsani College of Medicine | Orthopaedics and Sports Medicine

TAX 5015 Federal Taxation of Business Entities

Credit Hours: 3

Tax issues encountered by small businesses. Includes tax planning, capital formation and preservation, tax compliance and tax alternatives.

Prerequisite(s): TAX 4001 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

TAX 6005 Advanced Partnership Taxation

Credit Hours: 3

A study of advanced income tax problems involving partnerships, including organization, operation, distributions, liquidations, basis, family partnerships, and sales and exchanges. The planning and business aspects of partnerships are emphasized.

Prerequisite(s): TAX 4001
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

TAX 6065 Contemporary Issues in Taxation

Credit Hours: 3

A study of contemporary issues in taxation with an emphasis on related computer research. Current tax issues in the areas of corporations or partnerships will be explored when appropriate, along with related tax planning techniques

Prerequisite(s): TAX 4001, TAX 5015
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

TAX 6134 Advanced Corporate Taxation

Credit Hours: 3

A study of advanced income tax problems involving corporations, including organization, operation, distributions, liquidations, consolidated corporate tax returns, and taxation of foreign corporations and foreign source income.

Prerequisite(s): TAX 4001, TAX 5015
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

TAX 6445 Estate Planning

Credit Hours: 3

This course covers the basics of estate, gift, and trust taxation and introduces the student to tax planning techniques to minimize the tax-burden on inter-generation transfers of wealth.

Prerequisite(s): TAX 4001
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | Muma College of Business | Accounting

THE 5909 Directed Studies

Credit Hours: 1-6

Independent studies in the various areas of Theatre. Course of study and credits must be assigned prior to registration.

Tampa | College of The Arts | Theatre

THE 5931 Selected Topics in Theatre

Credit Hours: 1-8

The content of the course will be governed by the student demand and instructor interest. May be lecture or class discussion or studio format.

Tampa | College of The Arts | Theatre

THE 6175 New British Theatre and Drama

Credit Hours: 3

A study of contemporary theatrical practice and key dramatic texts in the British Isles. Departmental permit required of majors and non-majors.

Tampa | College of The Arts | Theatre

TSL 5085 ESOL I - Theory and Practice of Teaching English Language Learners

Credit Hours: 3

This course is for undergraduate degree holding, preprofessional (preservice) teachers to learn about appropriate instruction, assessment and learning opportunities for Limited English Proficient (LEP) students in the content areas.

Tampa | College of Education | Teaching and Learning

TSL 5086 ESOL II-Secondary Language & Literacy Acquisition in Children & Adolescents

Credit Hours: 3

This course is designed to provide students with a critical understanding of instructional delivery which caters for the linguistic and literacy needs of minority / heritage communities.

Prerequisite(s): TSL 5085.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

TSL 5242 ESOL III-Language Principles, Acquisition & Assessment for English Language Learners

Credit Hours: 3

This course provides an overview of the components of language, linking them to methods and techniques of providing comprehensible instruction to LEP students.

Prerequisite(s): TSL 5086.
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

TSL 5325 ESOL Strategies for Content Area Teachers

Credit Hours: 3

Course designed for public school teachers working with limited English Proficient (foreign) students in the classroom. The new ESOL requirements specify that this course be offered to content area teachers and to ESOL teachers.

Tampa | College of Education | Teaching and Learning

TSL 5326 L2 Reading for ESOL Students across Content Areas

Credit Hours: 3

This ESOL course will provide students with understanding of the linguistic and literacy needs of minority/heritage students, and will negotiate issues of second language learning, language varieties, as well as critical literacy and reading.

Tampa | College of Education | Teaching and Learning

TSL 5371 Methods of Teaching English as a Second Language

Credit Hours: 3

Analysis of the methods of teaching English pronunciation and structure to speakers of other languages.

Tampa | College of Arts and Sciences | World Languages

TSL 5372 ESOL Curriculum and Instruction

Credit Hours: 3

Analysis of the methods of teaching English pronunciation and structure to speakers of other languages.

Tampa | College of Arts and Sciences | World Languages

TSL 5440 Language Testing

Credit Hours: 3

Lecture course on testing English as a second/foreign language.

Prerequisite(s): TSL 5371
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

TSL 5525 Cross-Cultural Issues in ESL

Credit Hours: 3

Lecture course on cultural issues in Teaching English as a Second/Foreign language.

Prerequisite(s): LIN 5700
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

TSL 5940 ESOL Practicum

Credit Hours: 1-3

This course is restricted to Education majors and will not be repeatable for credit. A structured field experience with Limited English Proficient students.

Prerequisite(s): FLE 5345, FLE 5145
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Education | Teaching and Learning

TSL 6133 Curriculum and Instructional Materials Development

Credit Hours: 3

Develop the knowledge, skills and dispositions necessary for the effective development and modification of instructional curricular, materials and technology appropriate for the delivery of ESOL methods and strategies to enhance instruction to ESOL students.

Tampa | College of Education | Teaching and Learning

TSL 6253 Applied Linguistics for Teaching ESOL

Credit Hours: 3

Course is designed to prepare participants with linguistic concepts & issues relevant to the field of applied linguistics 7 second language teaching. Course will survey sub-fields of linguistics (phonetics, phonology, morphology, semantics, and syntax).

Tampa | College of Education | Teaching and Learning

TSL 6390 Instructional Methods and Strategies for Teaching ESOL

Credit Hours: 3

Effective use of ESOL methods and strategies. Conceptual focus of this course is based on the teacher as self-directed, reflective practitioner and problem solver who is able to facilitate learning and change within diverse populations and environments.

Tampa | College of Education | Teaching and Learning

TSL 6470 Assessment and Progress Management for Teaching ESOL

Credit Hours: 3

Designed to develop knowledge 7 skills necessary to prepare students to select, adapt, design assessment instruments & testing techniques reflective of instructional goals & needs of linguistically & culturally diverse students in ESOL or mainstream class.

Tampa | College of Education | Teaching and Learning

TSL 6700 ESOL for School Psychologists and School Counselors

Credit Hours: 3

Prepare school psychologists & school counselors to provide services for Eng language learners in their schools. Provides them with current research and guidance in the areas of program development, legislative mandates, and learner characteristics.

Tampa | College of Education | Teaching and Learning

TSL 6945 Internship

Credit Hours: 1-6

Required of all candidates for the M.A. degree in TESL. Supervised teaching of English as a second language to non-native speakers at appropriate levels and settings.

Prerequisite(s): TSL 5371, TSL 5372
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | World Languages

TTE 5205 Traffic Systems Engineering

Credit Hours: 3

Traffics models, intersection analysis, capacity analysis, data methods collection, parking studies, volume and speed studies, freeway management, and advanced technologies.

Prerequisite(s): TTE 4004
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 5305 Infrastructure System Management

Credit Hours: 3

This course introduces analytical methods for the management of infrastructure systems over their life, focusing on pavement. Topics covered include data measurement and sampling, performance modeling, and maintenance strategies.

Prerequisite(s): EGN 3443
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 5501 Transportation Planning and Economics

Credit Hours: 3

Fundamentals of urban transportation planning: trip generation, trip distribution, modal split, traffic assignment. Introduction to environmental impact analysis, evaluation an choice of transportation alternatives.

Prerequisite(s): MAC 1105
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 5620 Air Transportation

Credit Hours: 3

This is a course for graduate students in the College of Engineering who are interested in air transportation. It covers topics such as, airport management, air traffic flow management, air transport economics, and etc. No registration restrictions.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6267 Traffic Flow Theory

Credit Hours: 3

A systematic overview of the definition, taxonomy and models of highway traffic flow as well as intelligent transportation systems.

Prerequisite(s): None.
Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6270 Intelligent Transportation Systems

Credit Hours: 3

ITS architecture design and evaluation, simulation and modeling, advanced traffics management systems, traveler information systems, vehicle control systems, commercial vehicle operations, public transportation systems, and telecommunications.

Prerequisite(s): TTE 5205
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6307 Statistical and Econometric Methods I

Credit Hours: 3

Applications of various statistical and econometric model-estimation methods that are used in transportation data analysis and other subject areas that deal with data analysis.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6315 Transportation Safety

Credit Hours: 3

Transportation safety studies, accident data analysis, traffic safety control devices, special population regiment safety, highway conflict studies, accident reconstruction, and tort and liability issues.

Prerequisite(s): TTE 5205
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6501 Statistical and Econometric Methods II

Credit Hours: 3

Advanced and new model estimation techniques in the application of various statistical and econometric analysis.

Prerequisite(s): TTE 6307 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6505 Discrete Choice Models of Travel Behavior

Credit Hours: 3

Theories of travel behavior; multinominal logit and nested logit models of mode choices, destination choice, and car ownership. Theory and application to travel forecasting.

Prerequisite(s): TTE 5501
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6507 Travel Demand Modeling

Credit Hours: 3

Statistical modeling of travel demand forecasting; emphasis on trip generation and trip chaining.

Prerequisite(s): TTE 5501
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6651 Public Transportation

Credit Hours: 3

Planning, design and operation of public transportation systems; costs and productivity of transit; impacts of transit on travel behavior and urban form; ridership forecasting; public transportation policy analysis.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6655 Transportation and Land Use

Credit Hours: 3

Relationships between transportation and land use, coordinated transportation and land use planning, theory of urban development, urban sprawl, integrated transportation and land use models, transportation friendly urban design, and accessibility.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6657 Sustainable Transportation

Credit Hours: 3

Overview & analysis of concepts & designs for sustainable transportation from global-to-local, interdisciplinary perspective, including pedestrians, bicyclists, & public transportation. Addresses economy, environment, and equity. Hands-on design project.

Prerequisite(s): TTE 4004 with a minimum grade of C
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6833 Asphalt and Asphalt Mixes

Credit Hours: 3

This course introduces asphalt binder and asphalt mix types and their use in Civil Engineering structures, focusing on asphalt pavements.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6835 Pavement Design

Credit Hours: 3

Analysis of flexible and rigid pavements, equivalent single wheel loads, pavement material and their properties, pavement evaluation, reliability, flexible and rigid pavement design, overlay design, pavement life-cycle cost analysis.

Prerequisite(s): TTE 4005
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6837 Pavement Management Systems

Credit Hours: 3

Review of flexible and rigid pavement design, overlay design; pavement evaluation, pavement network delineation, condition prediction models, pavement maintenance and rehabilitation, pavement management techniques, life-cycle analysis.

Prerequisite(s): TTE 4005
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Engineering | Civil and Environmental Engineering

TTE 6930 Graduate Transportation Seminar

Credit Hours: 1

Seminars, presentations, and discussions of contemporary transportation issues.

Tampa | College of Engineering | Civil and Environmental Engineering

URP 6056 City and Regional Planning

Credit Hours: 3

A review of goals, objectives, and interrelationships between regional and city planning; intergovernmental and policy issues. Cross-listed with Political Science.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6058 Community Development Planning

Credit Hours: 3

Course explores the process by which human communities emerge, grow, and sometimes decline and disappear. Also provides knowledge necessary to maximize use of communities' assets and minimize damage from natural or man-made features in their environment.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6100 Planning Theory and History

Credit Hours: 3

The course is designed acquaint the student with major trends in the evolution of urban planning thought and practice and introduce the student to fundamental theories of relevance to the field of urban and regional planning.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6115 Planning, policy and politics

Credit Hours: 3

Introduction to politics, government and policy making for planning students. Part of the required core for the URP program.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6126 Zoning and Local Economic Development

Credit Hours: 3

To familiarize students with the evolution and purpose of zoning as an instrument for regulating and controlling land use activities in the US. In addition, the course seeks to acquaint with the implications of zoning for local economic development.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6201 Quantitative Analysis in Urban & Regional Planning

Credit Hours: 3

Focuses on quantitative analysis techniques and their application in urban and regional planning.

Prerequisite(s): URP 6232
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6232 Research Methods for Urban and Research Planning

Credit Hours: 3

The course is designed to introduce students to strategies for designing research and the appropriate methods for collecting urban and regional planning data; familiarize students with social research and evaluation methods used in planning.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6316 Land Use Planning

Credit Hours: 3

The course is designed to acquaint the student with the principles, theory and practice of land use planning. The course constitutes one of the required courses in the MURP degree.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6401 Planning for Resilient Communities

Credit Hours: 3

Provide an overview of the field of resiliency and its planning attributes. The course will be both theoretical and practice driven in nature with a focus on how local governments can become more resilient in the face of climate change.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6406 Urban Environmental Policy

Credit Hours: 3

The purpose of this course is to examine issues related to environmental planning and policy within the context of the urban/humanly-built environment and its relation to surrounding natural environments.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6422 Environmental & Planning Issues in Coastal Communities

Credit Hours: 3

The content of this course will familiarize students with issues in environmental and urban planning unique to coastal communities, and explore the connections – current and potential – between the oceans and coastal urban areas.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6439C Disaster Resilient Community

Credit Hours: 3

The course examines factors to promote effective disaster mitigation with emphasis on involvement of community stakeholders. Attention is given to natural hazards and uses a community-engaged approach in partnership with public/private entities.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6444 Global & Community Food Systems

Credit Hours: 3

Provides a general introduction to the food system, how it relates to planning and public policy, and an overview of the tools, strategies, and approaches public policymakers can utilize to address food system problems and challenges.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6549 Urban & Metropolitan Economic Development Strategies

Credit Hours: 3

The course is designed to provide the student an opportunity for community service and 'real world' learning. Community service learning will be employed as a pedagogical strategy to prepare students for 'real-world' issues in local economic development.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6711 Multimodal Transportation Planning

Credit Hours: 3

This course focuses on multimodal transportation planning, including planning for roadways, public transportation, bicycling, pedestrians, and the movement of freight.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6906 Independent Study

Credit Hours: 1-6

Independent study. Student must have contract with Instructor.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6910 Supervised Research

Credit Hours: 1-6

This course will allow graduate students to earn credits whole working on an independent research project that is focused in Urban and Regional Planning.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6930 Special Topics in Urban and Regional Planning

Credit Hours: 3

Topical issues in the study of Urban and Regional Planning. Content will vary each semester. It is repeatable for credit. There are no limits on the number of times a student can take courses listed under this title.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6940 Internship in Urban and Regional Planning

Credit Hours: 3-6

Students will gain practical experience in planning, working on projects with local planning agencies and firms. Course is restricted to URP masters students, and can be repeated for up to 6 credits.

Tampa | College of Arts and Sciences | School of Public Affairs

URP 6971 Thesis

Credit Hours: 2-19

This course will allow graduate students to earn credits whole working on a thesis that is focused in Urban and Regional Planning.

Tampa | College of Arts and Sciences | School of Public Affairs

VIC 6316 Brand Management

Credit Hours: 3

This course focuses on developing an understanding of brand equity in strategic communication management. It investigates how to build, measure, and manage brand equity, including management of brands over time, geographic boundaries, and market segments.

Tampa | College of Arts and Sciences | Mass Communications

WST 5308 Feminist Spirituality

Credit Hours: 3

Open to non-majors. Focuses on the many voices of contemporary feminist spirituality, emerging from women's experiences in diverse religious, ethnic and cultural traditions, and representing a range of theoretical perspectives from biblical feminism to goddess worship and wicca.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 5934 Selected Topics

Credit Hours: 1-4

Study of current research methods and scholarship on women from a multidisciplinary perspective.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 5940 Internship in Women's Studies

Credit Hours: 3-6

Student placement in an approved intern setting for a minimum of 240 hours of supervised experience. S/U only.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6001 Feminist Research and Methodology

Credit Hours: 3

To develop a more comprehensive understanding of the situation of women in society and to develop a theoretical basis for integrating this knowledge into the student's graduate course of study. Available to non-majors.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6003 Feminist Scholarship and Pedagogy

Credit Hours: 3

Introduces students to techniques of feminist teaching and scholarly writing. Covers issues of professionalism, an overview of contemporary scholarly issues in feminist studies, and basic feminist pedagogy. Department Approval Required.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6005 Women and Policy

Credit Hours: 3

Examination of policy areas such as employment, violence, welfare which have a significant impact on women. The aim is to achieve a deeper understanding of the way in which gender functions as a category of analysis in policy decision, and also examines and critiques the area from which policy is produced.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6107 Transnational Feminisms

Credit Hours: 3

Women, gender, and feminism in transnational perspective, focusing on various theories and movements engendered in diverse contemporary geopolitical contexts. Development, globalization, reproductive politics, and women's health will be examined.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6338 Advanced Feminist Theories of Media and Popular Culture

Credit Hours: 3

This course surveys advanced feminist theoretical approaches to visual regimes, surveillance, scopophilia, encoding, representation, reception, pro-suming, commodification, pranking, and culture jamming.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6406 Women of Color: Activism and Social Change

Credit Hours: 3

Intensive reading and discussion of the participation of women of color in contemporary and reformist activities.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6560 Advanced Feminist Theory

Credit Hours: 3

An in-depth exploration of current issues and debates in Feminist Theories. Topics may include: representation, essentialism, authority structures, subjectivity, identity and difference. Department Approval Required.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6562 Body Politics

Credit Hours: 3

An in-depth feminist exploration of how the body is produced, inscribed, replicated, and often disciplined as a result of various powers at work.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6900 Directed Readings

Credit Hours: 1-3

Supervised program of intensive readings of an interdisciplinary nature focusing on women. Student must have contract with instructor.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6910 Directed Research

Credit Hours: 1-3

Provide graduate students with research experience in areas of specific interest utilizing feminist perspectives and research methods.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6936 Selected Topics in Women's Studies

Credit Hours: 3

Content varies according to scholarship focus of students and instructor. Repeatable-- content and instructor will vary.

Tampa | College of Arts and Sciences | Women's and Gender Studies

WST 6971 Thesis

Credit Hours: 1-9

Content varies according to scholarship focus of students and instructor. Repeatable-- content and instructor will vary.

Tampa | College of Arts and Sciences | Women's and Gender Studies

ZOO 5463C Herpetology

Credit Hours: 4

Major aspects of amphibian and reptilian biology emphasizing fossil history, evolutionary morphology, sensory physiology, life history and reproductive behavior. Lec.-lab. Field trip.

Tampa | College of Arts and Sciences | Biology - Integrative

ZOO 5555C Marine Animal Ecology

Credit Hours: 4

Investigation of energy flow, biogeochemical cycles, and community structure in marine environments. Lec.-lab.

Prerequisite(s): PCB 3043
Corequisite(s): None.
Co-Prerequisite(s): None.

Tampa | College of Arts and Sciences | Biology - Integrative

ZOO 6455 Advances in Ichthyology

Credit Hours: 1

This course discusses current topics in Ichthyology. Readings are taken from the primary literature. The course is restricted to graduate students with a background in Ichthyology.

Tampa | College of Arts and Sciences | Biology - Integrative

EOC 6441C Resilient, Sustainable, and Secure Port Operations and Infrastructure

Credit Hours: 3

The course addresses the primary aspects of resiliency, sustainability, safety, and security in port infrastructure and operations: fundamentals of maritime transportation, natural hazards, climate change, community interactions, and economic development.

Tampa | College of Marine Science | Marine Science