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# UNIVERSITY OF SOUTH FLORIDA

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## GRADUATE CATALOG

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## A UNIVERSITY WHOSE TIME HAS COME

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The University of South Florida is a comprehensive metropolitan university: comprehensive in its student body, in its faculty, in its service to surrounding communities, and particularly in the diversity and range of its academic programs. Prospective USF graduate students have a choice of two specialist programs, 80 master's programs, and 19 doctoral programs.

Higher education has entered an era in which the traditional role of universities is expanding to include students with a variety of goals and objectives and to provide more diverse services to the communities that support them. Many colleges and universities across the country are just beginning to embrace this shift toward a more comprehensive mission. USF, however, was founded in 1956 with precisely this expanded sense of purpose in mind. In a remarkably short time, it has become an intellectual and cultural force of international standing.

### **A Distinct Character and Mission**

USF was founded as a comprehensive university in a major metropolitan setting for a very good reason: by so doing, it finds itself at the heart of an increasingly complex urban society, thereby making its educational resources available to the greatest number of people, while at the same time making available to students and faculty the cultural resources of an educationally fertile urban environment. The resulting give and take has propelled the University to a level of excellence and diversity matched by few — if any — other institutions in so short a time.

The University's goal for the next decade, stated formally, is "to achieve preeminence as a comprehensive metropolitan university dedicated to the pursuit of academic excellence. It will place increasing emphasis upon advanced graduate and professional studies during the next 10 years. Because it serves a densely populated community, USF places particular emphasis upon the instructional, research, and service needs of its several metropolitan areas in planning and implementing its mission."

### **Teaching and Research Go Hand in Hand**

Because USF believes that the best faculty is one composed of men and women who strike a balance between teaching and scholarly research, students in the University are taught by dedicated teachers who also are active in pioneering research in their disciplines. At USF, the two go hand in hand.

A survey of our faculty at any given moment would bring to light an impressive range of professional activity: a member of the Chemistry faculty is measuring the level of pollutants in Florida's air and water; a Sociology professor is testing the effectiveness of radio in teaching new agricultural methods to subsistence farmers in Guatemala; an English professor, aided by a computer, is assembling the definitive Machiavelli bibliography; a pair of Engineering professors are using a computer to model the impact of hurricanes on increasingly densely populated coastal areas; faculty members in several departments are editing professional journals. The list goes on and on. In a typical year, USF's faculty generates more than \$30 million in sponsored research, much of it concerned with problems affecting the nation's environment and quality to

life. Graduate students, of course, are expected to contribute assistance and original research in their areas of interest. The opportunities are as many and varied as the students themselves.

This document was promulgated at an annual cost of \$24,355 or \$2.44 per copy, including preparation, printing and mailing, to provide alumni, faculty and staff donors and friends with news and information about the University. (88-85)

Events, activities, programs and facilities of the University of South Florida are available to all without regard to race, color, sex, religion, national origin, handicap or age as provided by law and in accordance with the University's respect for personal dignity.

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## WHEN DID IT ALL BEGIN?

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The University of South Florida was founded on December 18, 1956, but the first students did not enroll until almost four years later. When USF opened to a charter class of 1,997 students on September 26, 1960, it became the first major state university in America planned and built entirely in this century. Moreover, as Florida's first state university planned for a major metropolitan center, USF represents the first step in a comprehensive expansion of the State University System of Florida. The State University System, directed by the Florida Board of Regents and administered by a Chancellor and staff in Tallahassee, today consists of nine public universities. Together with 28 public junior and community colleges and a number of vocational-technical centers throughout the state, these universities comprise public post-secondary education in Florida.

Multiple campuses of USF were opened in St. Petersburg in 1965, Fort Myers in 1974, and Sarasota in 1975, and a center was opened in Lakeland in 1987.

Dr. John S. Allen, astronomer and educator, served as USF's first president from 1957 to 1970. Dr. Cecil Mackey, economist and lawyer, was president of the University from 1971 to 1976. Dr. John Lott Brown, psychologist and optical scientist, served as our third president from 1978 to 1988. Dr. Francis T. Borkowski, musician and educator, became our fourth president on February 15, 1988. Continuity in administration has been provided by Dr. Harris W. Dean, acting president, 1970; Wm. Reece Smith, Jr., interim president, 1976; Dr. Carl D. Riggs, acting president, 1977.

Now in its twenty-eighth year of instruction, the University has graduated more than 88,000 students, 90 percent of whom reside in Florida. Enrollment in the fall of 1987 totalled more than 29,000. The University's economic impact on the area is equally significant; now exceeding \$277 million annually.

Because of its location and the composition of its student body, USF continues to be inextricably a part of its modern metropolitan environment.

### Programs Offered

A measure of the University's success — one more significant than mere statistics — is the nature of its academic programs. Through them USF seeks to serve an increasingly urban state and nation. These programs are in the Academic Affairs division of the University and, for the most part, are administered in one of 11 colleges: Arts & Letters, Business Administration, Education, Engineering, Fine Arts, Medicine, Natural Sciences, Nursing, Public Health, Social & Behavioral Sciences, and an Honors College, New College of USF on the Sarasota Campus.

Degrees are offered in more than 100 academic areas by the University's colleges. Graduate degrees are offered in more than 80 of these areas. Additionally, a Master of Architecture degree is offered in cooperation with Florida A&M University.

The University's first Ph.D. program in Biology, with emphasis on Marine Biology, was established in 1968. Since then Ph.D. programs have been established in Applied Anthropology, Business Administration, Chemical Engineering, Chemistry, Civil Engineering, Computer Engineering, Education, Electrical Engineering, English, Engineering Science, Industrial Engineering,

Marine Science, Mathematics, Mechanical Engineering, Medical Sciences, Psychology and Public Health. USF also offers the Ed.D. in Education.

The University's teaching and research faculty, numbering more than 1,000, represents all major areas of higher learning, and a majority hold doctoral degrees.

### **Accreditation**

USF was fully accredited in 1965 by the southern Association of Colleges and Schools, the official accrediting agency for educational institutions in the South. A self-study of the University's programs and purposes, periodically required for continued accreditation was reaffirmed in December, 1973. But the University Community continues to reexamine its mission and goals and to ensure that it never loses sight of its only reason for existence: serving you, the student.

# Fields of Graduate Study

## Master's Degree Programs:

### College of Arts & Letters

American Studies — M.S.  
 Classics (Cooperative Program with University of Florida)  
 English — M.A.  
 French — M.A.  
 Liberal Arts — M.A.  
 Linguistics (ESL) — M.A.  
 Mass Communications — M.A.  
 Philosophy — M.A.  
 Religious Studies — M.A.  
 Rhetoric and Composition — M.A.  
 Spanish — M.A.

### College of Business Administration

Accountancy — M.Acc.  
 Business Administration — M.B.A.  
 Executive M.B.A. — M.B.A.  
 Economics — M.A.  
 Management — M.S.

### College of Education

Educational Leadership — M.Ed.  
 Adult & Vocational Education — M.A.  
     Adult Education  
     Business & Office Education  
     Distributive Education  
     Industrial — Technical Education  
 Art Education — M.A.  
 Curriculum & Instruction — M.Ed.  
 Elementary Education — M.A.  
 Exceptional Child Education — M.A.  
     Emotional Disturbance  
     Gifted  
     Motor Disabilities  
     Mental Retardation  
     Specific Learning Disabilities  
 English Education — M.A.  
 Foreign Language — M.A.  
     French  
     German  
     Latin  
     Spanish  
 Guidance & Counseling Education — M.A.  
 Humanities Education — M.A.  
 Junior College Teaching: — M.A.  
     Biology  
     Business  
     Chemistry  
     Economics  
     Engineering  
     English

French  
Geography  
Geology  
History  
Mathematics  
Physics  
Political Science  
Sociology  
Spanish  
Speech Communication

Library, Media and Information Studies — M.A.

Measurement and Evaluation — M.Ed.

Music Education — M.A.

Physical Education — M.A.

Reading Education — M.A.

School Psychology — M.A.

Science Education — M.A.

Biology

Chemistry

Physics

Social Science Education — M.A.

Speech Communication Education — M.A.

### **College of Engineering**

Master of Civil Engineering — M.C.E.

Master of Engineering — M.E.

Master of Science in Chemical Engineering — M.S.C.E.

Master of Science in Civil Engineering — M.S.C.E.

Master of Science in Computer Engineering — M.S.C.S.

Master of Science in Electrical Engineering — M.S.E.E.

Master of Science in Engineering — M.S.E.

Master of Science in Engineering Management — M.S.E.M.

Master of Science in Engineering Science — M.S.E.S.

Master of Science in Industrial Engineering — M.S.I.E.

Master of Science in Mechanical Engineering — M.S.M.E.

### **College of Fine Arts**

Art — M.F.A.

Art History — M.A.

Music — M.M.

### **College of Natural Sciences**

Botany — M.S.

Chemistry — M.A., M.S.

Geology — M.S.

Marine Science — M.S.

Mathematics — M.A.

Microbiology — M.S.

Oceanography — M.S.

Physics — M.S.

Zoology — M.S.

### **College of Nursing**

Nursing — M.S.

**College of Public Health**

Master of Public Health — M.P.H.  
 Environmental Health  
 Epidemiology and Biostatistics  
 Health Policy and Management  
 Industrial Hygiene/Safety Management  
 Maternal and Child Health  
 Public and Community Health Education  
 Master of Science in Public Health — M.S.P.H.

**College of Social & Behavioral Sciences**

Applied Anthropology — M.A.  
 Communicology:  
 Audiology — M.S.  
 Aural Rehabilitation — M.S.  
 Speech Pathology — M.S.  
 Criminal Justice — M.A.  
 Geography — M.A.  
 Gerontology — M.A.  
 History — M.A.  
 Political Science — M.A.  
 Psychology — M.A.  
 Public Administration — M.P.A.  
 Rehabilitation Counseling — M.A.  
 Social Work — M.S.W.  
 Sociology — M.A.

**FAMU/USF Cooperative Architecture Program**

Architecture — M.Arch.

**Intermediate Program****College of Education**

Education Specialist — Ed.S.

**Doctoral Degree Programs****College of Arts & Letters**

English — Ph.D.

**College of Business Administration**

Business Administration — Ph.D.

**College of Education**

Education — Ed.D., Ph.D.

**College of Engineering**

Chemical Engineering — Ph.D.  
 Civil Engineering — Ph.D.  
 Computer Science and Engineering — Ph.D.  
 Electrical Engineering — Ph.D.  
 Engineering Science — Ph.D.  
 Industrial Engineering — Ph.D.  
 Mechanical Engineering — Ph.D.

**College of Medicine**

Medical Sciences — Ph.D.

**College of Natural Sciences**

Biology — Ph.D.

Chemistry — Ph.D.

Marine Science — Ph.D.

Mathematics — Ph.D.

**College of Public Health**

Public Health — Ph.D.

**College of Social & Behavioral Sciences**

Applied Anthropology — Ph.D.

Psychology — Ph.D.

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## ACADEMIC CALENDAR

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### Fall Semester, 1988

<b>April 1, Friday</b>	Last day for international applicants to apply for admission and submit all required credentials and documents.
<b>June 27, Monday</b>	Last day to apply for admission (except international applicants).
<b>June 27, Monday</b>	Former Student Returning Application Deadline
<b>August 29, Monday</b>	Classes begin.
<b>September 2, Friday</b>	Last day to withdraw/drop and receive full refund of registration fees.
<b>September 2, Friday</b>	Last day to add courses.
<b>September 2, Friday</b>	Last day for late registration.
<b>September 2, Friday</b>	Last day to pay fees without \$25.00 late fee.
<b>September 2, Friday</b>	CLAST Registration Day.
<b>September 5, Monday</b>	Labor Day Holiday
<b>September 23, Friday</b>	Graduation Application Deadline.
<b>October 1, Saturday</b>	CLAST Administration Day.
<b>October 21, Friday</b>	Honors Convocation (Classes Cancelled 2:00-5:00 p.m.)
<b>October 28, Friday</b>	Last day to drop or withdraw from courses without Academic Penalty.
<b>November 11, Friday</b>	Veterans' Day Holiday
<b>November 24-25, Thursday-Friday</b>	Thanksgiving Holiday
<b>December 9, Friday</b>	Classes End
<b>December 12-17, Monday-Saturday</b>	Final Examination Week
<b>December 18, Sunday</b>	Commencement

### Spring Semester, 1989

<b>August 1, Monday</b>	Last day for international applicants to apply for admission and submit all required credentials and supporting documents.
<b>November 7, Monday</b>	Last day to apply for admission (except for international applicants).
<b>November 7, Monday</b>	Former Student Returning Application Deadline.
<b>January 9, Monday</b>	Classes begin.



<b>January 13, Friday</b>	Last day to withdraw/drop and receive full refund of registration fees.
<b>January 13, Friday</b>	Last day to add courses.
<b>January 13, Friday</b>	Last day for late registration.
<b>January 13, Friday</b>	Last day to pay fees without \$25.00 late fee.
<b>January 18, Wednesday</b>	Martin Luther King Day
<b>February 3, Friday</b>	Graduation Application Deadline
<b>February 10, Friday</b>	CLAST Registration Deadline.
<b>March 10, Friday</b>	Last day to drop or withdraw from courses without academic penalty.
<b>March 11, Saturday</b>	CLAST Administration Day
<b>March 20-24, Monday-Friday</b>	Spring Semester Break
<b>April 21, Friday</b>	Classes end.
<b>April 24-29, Monday-Saturday</b>	Final Examinations
<b>April 30, Sunday</b>	Commencement

## Summer Term, 1989

### Session A (First Seven Week Session)

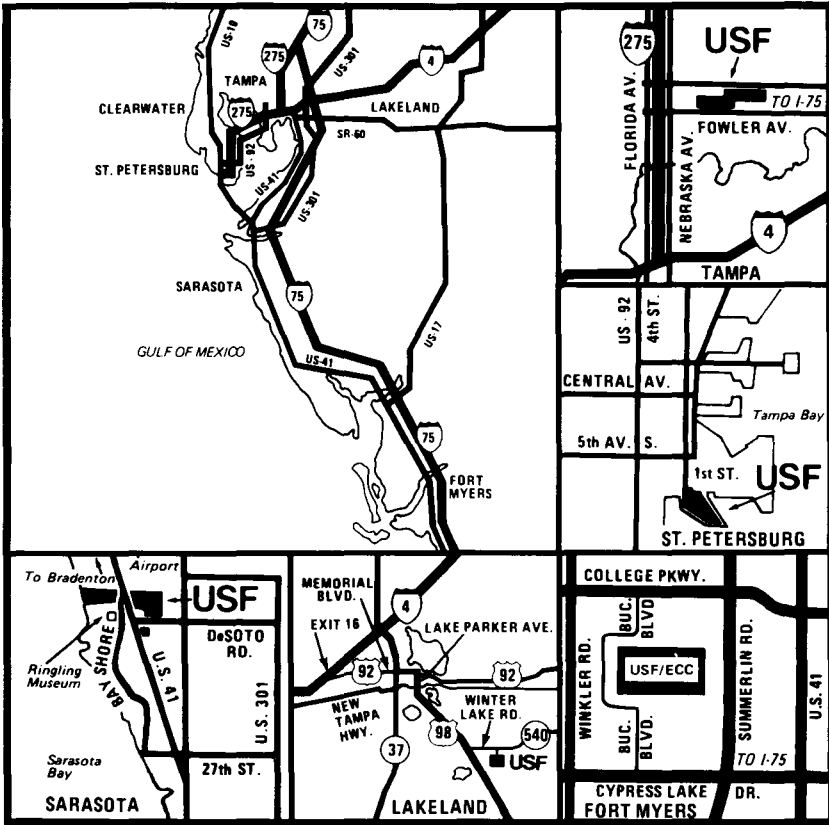
<b>January 2, Monday</b>	Last day for international applicants to apply for admission and submit all required credentials and supporting documents.
<b>March 13, Monday</b>	Last day to apply for admission (except for international applicants).
<b>March 13, Monday</b>	Former Student Returning Application Deadline
<b>May 5, Friday</b>	CLAST Registration Deadline.
<b>May 8, Monday</b>	Classes begin.
<b>May 12, Friday</b>	Last day to withdraw/drop and receive full refund of registration fees.
<b>May 12, Friday</b>	Last day to add classes.
<b>May 12, Friday</b>	Last day for late registration.
<b>May 12, Friday</b>	Last day to pay fees without \$25.00 late fee.
<b>May 26, Friday</b>	Last day to drop or withdraw from courses without Academic Penalty.
<b>May 29, Monday</b>	Memorial Day Holiday
<b>June 2, Friday</b>	Graduation Application Deadline
<b>June 3, Saturday</b>	CLAST Administration Day
<b>June 23, Friday</b>	Last day of classes.

## **Session B (Second Seven Week Session)**

<b>January 2, Monday</b>	Last day for international applicants to apply for admission and submit all required credentials and supporting documents.
<b>March 13, Monday</b>	Former Student Returning Application Deadline
<b>March 13, Monday</b>	Last day to apply for admission (except for international applicants).
<b>June 2, Friday</b>	Graduation Application Deadline
<b>June 26, Monday</b>	Classes begin.
<b>June 30, Friday</b>	Last day to withdraw/drop and receive full refund of registration fees.
<b>June 30, Friday</b>	Last day to add courses.
<b>June 30, Friday</b>	Last day for late registration.
<b>June 30, Friday</b>	Last day to pay fees without \$25.00 late fee
<b>July 4, Tuesday</b>	Independence Day Holiday
<b>July 14, Friday</b>	Last day to drop or withdraw from courses without Academic Penalty.
<b>August 11, Friday</b>	Last day of classes.

## **Session C (Ten Week Session)**

<b>January 2, Monday</b>	Last day for international applicants to apply for admission and submit all required credentials and supporting documents.
<b>March 13, Monday</b>	Last day to apply for admission (except for international applicants).
<b>March 13, Monday</b>	Former Student Returning Application Deadline.
<b>May 5, Friday</b>	CLAST Registration Deadline.
<b>May 8, Monday</b>	Classes begin.
<b>May 12, Friday</b>	Last day to withdraw/drop and receive full refund of registration fees.
<b>May 12, Friday</b>	Last day to add courses.
<b>May 12, Friday</b>	Last day for late registration.
<b>May 12, Friday</b>	Last day to pay fees without \$25.00 late fee.
<b>May 29, Monday</b>	Memorial Day Holiday
<b>June 2, Friday</b>	Graduation Application Deadline.
<b>June 3, Saturday</b>	CLAST Administration Day
<b>June 16, Friday</b>	Last day to drop or withdraw from courses without Academic Penalty.
<b>July 4, Tuesday</b>	Independence Day Holiday
<b>July 14, Friday</b>	Last day of classes.



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## ORGANIZATION AND PERSONNEL

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### Administration of State Universities

#### State Board Of Education

**BOB MARTINEZ**  
*Governor*

**DOYLE E. CONNER**  
*Commissioner of Agriculture*

**GERALD A. LEWIS**  
*Comptroller*

**WILLIAM D. GUNTER**  
*State Treasurer*

**BOB BUTTERWORTH**  
*Attorney General*

**JIM SMITH**  
*Secretary of State*

**BETTY CASTOR**  
*Commissioner of Education*

#### State Board Of Regents

**JOAN DIAL RUFFIER, Chairman**  
**(1990)\***  
*Orlando*

**DUBOSE AUSLEY (1993)\***  
*Tallahassee*

**CECILIA BRYANT (1989)\***  
*Jacksonville*

**ROBERT DRESSLER (1993)\***  
*Fort Lauderdale*

**PAT GRONER (1993)\***  
*Pensacola*

**RAUL P. MASVIDAL (1990)\***  
*Miami*

**EDWIN A. SCLAES, III**  
*Students Regents*

**FRANK P. SCRUGGS, II, Vice**  
**Chairman (1988)\***  
*Miami*

**J. HYATT BROWN (1989)\***  
*Daytona Beach*

**BETTY CASTOR**  
*Tallahassee*

**CHARLES B. EDWARDS (1993)\***  
*Fort Myers*

**CECIL KEENE (1993)\***  
*St. Petersburg*

**T. TERRELL SESSUMS (1998)\***  
*Tampa*

**CHARLES B. REED,**  
*Chancellor*

\* Term Expires

#### Graduate School

##### Dean of the Graduate School and Vice President for the

**Office of Research and Graduate Studies . . . .**George R. Newkome  
Administrative Assistant II . . . . . Rhonda B. Hendrix  
Associate Dean of the Graduate School . . . . . Sara M. Deats  
Assistant Dean of the Graduate School . . . . . James C. Renick  
Academic Administrator . . . . . Christina Whidden  
Director, Sponsored Research . . . . . Frank Lucarelli  
Director, Graduate Scholarships and Fellowships Program,  
and Chair, USF Press Editorial Board . . . . . Silvia R. Fiore  
Manuscript Consultant . . . . . Ingrid Curry

## Graduate Council, 1987-88

### Faculty:

James W. Barnard, Vice Chair  
*College of Education*

Kenneth N. Cissna  
*College of Arts & Letters*

Robert J. Grasso  
*College of Medicine*

Vance S. Jennings, Chair  
*College of Fine Arts*

Minerva I. Applegate  
*College of Nursing*

Carlos A. Smith  
*College of Engineering*

Richard A. Davis, Jr.  
*College of Natural Sciences*

Richard L. Meyer  
*College of Business Administration*

D. Paul Johnson  
*College of Social & Behavioral Sciences*

Thomas N. Chirikos  
*College of Public Health*

### Graduate Students:

David A. Tomasko  
*College of Natural Sciences*

Peter L. Kovacs  
*College of Medical Sciences*

### Ex Officio:

George R. Newkome  
*Vice Provost for the Office of Research and Graduate Studies and Dean of the Graduate School*

Sara M. Deats  
*Associate Dean of the Graduate School*

James C. Renick  
*Assistant Dean of the Graduate School*

### College Graduate Program Coordinators:

College of Arts & Letters  
William J. Heim

College of Education  
L.T. Kams & A.E. Uprichard

College of Fine Arts  
Virginia A. Bridges

College of Natural Sciences  
Stewart L. Swihart

College of Public Health  
Rita G. Bruce

College of Business Administration  
John Hodgson

College of Engineering  
L.A. Scott

College of Medicine  
James B. Polson

College of Nursing  
Judith A. Plawecki

College of Social & Behavioral Sciences  
Edward M. Silbert

# University Of South Florida

## Office of the President

**President** ..... **FRANCIS T. BORKOWSKI**  
 Executive Assistant to the President ..... **BARBARA C. COX**  
 Faculty Assistant to the President ..... **DAVID A. CARTER**

## Office of the Executive Vice President

**Executive Vice President** ..... **ALBERT C. HARTLEY**

## Academic Affairs

**Acting Provost & Vice President** ..... **JAMES M. ANKER**  
 Executive Assistant to the Provost ..... **MARLENE D. REESE**  
 Acting Vice Provost ..... **DAVID P. SCHENCK**  
 Associate Vice President ..... **BERNARD A. MACKEY**  
**Assistant Vice President for Admissions &**  
**Records, University Registrar** ..... **LINDA E. ERICKSON**  
**Assistant Vice President for**  
**Academic Resource-Planning** ..... **CAROL J. ROLF**  
**Special Assistant for Academic Affairs** ..... **WALLACE A. RUSSELL**  
**Director, Academic Budgets** ..... **LYNDA B. HILL**  
**Academic Information Systems Coordinator** ..... **CARRIE SPELL**  
**Director FLORIDA CENTER for**  
**Urban Design & Research** ..... **DAVID A. CRANE**  
**Acting Director, Florida Institute of Oceanography** .... **DEAN MILLIKEN**  
**Director, Graphic Studio** ..... **DONALD A. SAFF**  
**Acting Director, Institute on Black Life** ..... **JUEL H. SMITH**  
**Director, International Affairs Center** ..... **MARK T. ORR**  
**Director, International Exchange**  
**Center of Gerontology** ..... **HAROLD L. SHEPPARD**  
**Director, SUS Extension Library** ..... **VIRGINIA O'HERRON**  
**Acting Director, University Libraries** ..... **ARTHUR L. KETCHERSID**

## College of Arts and Letters

**Dean** ..... **JAMES F. STRANGE**  
**Associate Dean** ..... **WILLIAM J. HEIM**

### Chairpersons:

**American Studies** ..... **JACK MOORE**  
**Classics** ..... **ANNA L. MOTTO**  
**Communication** ..... **ARTHUR P. BOCHNER**  
**English** ..... **WILLIAM T. ROSS**  
**Humanities** ..... **SILVIO GAGGI**  
**Mass Communications** ..... **DONNA L. DICKERSON**  
**Philosophy** ..... **WILLIS H. TRUITT**  
**Religious Studies** ..... **WILLIAM C. TREMMEL**

### Director:

**Division of Language** ..... **RICHARD A. PRETO-RODAS**

## College of Business Administration

**Dean** ..... **JAMES L. PAPPAS**  
**Associate Dean and Director**  
**of Graduate Studies** ..... **JOHN HODGSON**  
**Assistant Director of Graduate**  
**Studies and Director of Admissions** ..... **CAROLYN GAZDAK**

Director of Executive MBA ..... JOHN HODGSON  
Academic Coordinator of Executive MBA ..... STEVEN A. BAUMGARTEN

*Chairpersons:*

Accounting/Business Law ..... ROBERT J. WEST  
Economics ..... DON BELLANTE  
Finance ..... PETER KARES  
Information Systems/Decision Sciences ..... TBA  
Management (Acting) ..... JERRY W. KOEHLER  
Marketing ..... PAUL SOLOMON

*Directors:*

Center of Economic and Management  
Research ..... JOSEPH S. DESALVO  
Small Business Development Center ..... WILLIAM J. MANCK  
Professional Development Center ..... MARYANNE M. ROUSE  
Center for Economic Education ..... DICK J. PUGLISI  
Center for Organizational  
Effectiveness ..... HAROLD M. SCHRODER  
Institute for Banking and Finance ..... TBA  
Development ..... RICHARD T. BOWERS

## College of Education

Dean ..... WILLIAM KATZENMEYER  
Associate Dean for Programs ..... A. EDWARD UPRICHARD  
Associate Dean for Administration ..... H. EDWIN STEINER  
Assistant Dean for Clinical Education and  
Special Projects ..... MARCIA MANN

*Chairpersons:*

Adult and Vocational Education ..... RAYMOND HILL  
Childhood/Language Arts/Reading  
Education ..... MARY OLSON  
Curriculum and Instruction ..... JOHN BULLOCK  
Counselor Education ..... VICTOR DRAPELA  
Educational Leadership ..... DONALD ORLOSKY  
Educational Measurement and  
Research ..... JOSEPH MAZUR  
Instructional Computing ..... JOSEPH MAZUR  
Music Education ..... JACK HELLER  
Physical Education ..... HUBERT HOFFMAN  
Psychological and Social  
Foundations ..... JAMES BARNARD  
Special Education ..... AUGUST MAUSER

*Directors:*

Center for Economic Education ..... DICK PUGLISI  
Children's Center ..... JAMES BARNARD  
Florida Center for Instructional  
Computing ..... JAMES WHITE  
Graduate Studies ..... A. EDWARD UPRICHARD  
Grants and Contracts ..... JUDY WILKERSON  
Institute for Instructional Research  
and Practice ..... CAROLYN LAVELY  
School of Library  
& Information Science ..... ROBERT GROVER

School Management Institute .....	KAROLYN SNYDER
South Florida Educational Planning Council .....	MARCIA MANN
Student Personnel .....	MELVIN G. VILLEME
SunCoast Area Teacher Training Program (SCATT) .....	MARCIA MANN
Teacher Education Center .....	PHILIP PFOST
West Central Regional Management Network .....	MARILYN KATZENMEYER

### College of Engineering

<b>Dean</b> .....	<b>MICHAEL G. KOVAC</b>
Associate Dean .....	L.A. SCOTT
Associate Dean for Research .....	THOMAS E. WADE
Associate Dean for Computing .....	J. ANTHONY LLEWELLYN
Assistant Dean for Special Projects .....	ANDREW J. BARRETT

#### *Chairperson:*

Chemical .....	J. CARLOS BUSOT
Civil Engineering and Mechanics .....	MELVIN W. ANDERSON
Computer Science and Engineering (Acting) .....	R. VARANSI
Electrical Engineering (Acting) .....	RUDOLF E. HENNING
Industrial Engineering .....	PAUL E. GIVENS
Mechanical (Acting) .....	WILLIAM A. SMITH

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Technology .....	DELORES K. GOODING
CEDAR .....	THOMAS E. WADE
STAC .....	MICHELE YOUNG
Coordinator of Advising .....	GEORGE R. CARD

### College of Fine Arts

<b>Dean (Acting)</b> .....	<b>JOHN L. SMITH</b>
Associate Dean for Administration .....	JOHN W. COKER
Associate Dean for Academic Affairs (Acting) .....	VIRGINIA A. BRIDGES
Coordinator of Advising (Acting) .....	DIANE H. ELMER

#### *Chairpersons:*

Art .....	ALAN EAKER
Dance .....	LAWRENCE BERGER
Music .....	JACK HELLER
Theatre (Acting) .....	DAVID WILLIAMS

#### *Directors:*

SYCOM .....	BRADLEY ALBERS
University Galleries .....	MARGARET MILLER

#### *Coordinator:*

Events .....	FRANK HIBRANDT
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### College of Medicine

<b>Acting Dean of the College of Medicine</b> .....	<b>RONALD P. KAUFMAN</b>
Associate Dean — All Children's Hospital .....	JAMES A. HALLOCK
Associate Dean for Admissions .....	JULIAN J. DWORNIK



Associate Dean — Institutional Development . . . . . JANIFER JUDISCH  
Associate Dean for Continuing Medical Education  
and Affirmative Action Affairs . . . . . PIERRE J. BOUIS  
Associate Dean for Research and  
Graduate Affairs . . . . . JAMES B. POLSON  
Associate Dean for Student Affairs . . . . . ALAN I. LEIBOWITZ  
Associate Dean for  
Tampa General Hospital . . . . . THOMAS E. MCKELL  
Associate Dean for V.A. Affairs and  
Chief-of-Staff . . . . . JOHN T. RIGGIN, JR.

Associate Dean for the Bay Pines VAH . . . . . O.M. LILIE

*Chairpersons:*

Anatomy . . . . . JOHANNES A. G. RHODIN  
Biochemistry (Acting) . . . . . LARRY P. SOLOMONSON  
Medical Microbiology and  
Immunology . . . . . HERMAN FRIEDMAN  
Pathology . . . . . DAVID ROWLANDS, JR.  
Pharmacology & Therapeutics . . . . . DIANE H. RUSSELL  
Physiology and Biophysics . . . . . CARLETON H. BAKER

**College of Natural Sciences**

Dean . . . . . LEON MANDELL  
Associate Dean for Graduate Affairs  
and Research . . . . . STEWART L. SWIHART  
Associate Dean for Undergraduate  
Affairs . . . . . ROSEMARY M. MORLEY

*Chairpersons:*

Biology . . . . . CLINTON J. DAWES  
Chemistry . . . . . STEWART W. SCHNELLER  
Geology . . . . . SAM B. UPCHURCH  
Marine Science . . . . . PETER R. BETZER  
Mathematics . . . . . KENNETH L. POTHOVEN  
Physics . . . . . SWAMINATHA SUNDARAM

*Directors:*

Botanical Gardens . . . . . FREDERICK B. ESSIG  
Herbarium . . . . . RICHARD P. WUNDERLIN  
Medical Technology . . . . . EUGENE D. OLSEN  
Planetarium . . . . . JOE A. CARR  
Pre-Medical Advising Committee . . . . . CAROLE F. HENDRY  
ALBERT A. LATINA  
PATRICIA A. MARTINI  
JAMES D. RAY, JR.  
MELVIN JAMES

**College of Nursing**

Dean . . . . . JUDITH A. PLawecki  
Assistant Dean, Academic Affairs . . . . . S. JOAN GREGORY  
Director, Continuing Education . . . . . JEANNETTE SASMOR  
Director, Nursing Learning Resource  
Center . . . . . NINA ENTREKIN

## College of Public Health

**Dean** ..... **PETER J. LEVIN**  
 Assistant Dean for Academics ..... RITA G. BRUCE  
 Assistant Dean for Administration ..... JOHN F. SKINNER

*Chairpersons:*

Community and Family Health ..... STANLEY N. GRAVEN  
 Environmental and Occupational Health ..... STUART M. BROOKS  
 Epidemiology and Biostatistics ..... PAUL E. LEAVERTON  
 Health Policy and Management ..... THOMAS N. CHIRIKOS

## College of Social and Behavioral Sciences

**Dean** ..... **JULIA M. DAVIS**  
 Associate Dean ..... EDWARD M. SILBERT  
 Coordinator of Undergraduate  
 Student Affairs ..... CURTIS WIENKER

*Chairpersons:*

Anthropology ..... MICHAEL ANGROSINO  
 Communicology ..... ELAINE SILLIMAN  
 Criminal Justice (Acting) ..... WILLIAM BLOUNT  
 Economics ..... DONALD BELLANTE  
 Geography ..... TBA  
 Gerontology ..... THOMAS RICH  
 History ..... JAMES M. SWANSON  
 Political Science (Acting) ..... J. EDWIN BENTON  
 Psychology ..... LOUIS A. PENNER  
 Rehabilitation Counseling ..... CALVIN PINKARD  
 Social Work ..... PHILIP SMITH  
 Sociology ..... MICHAEL KLEIMAN

*Division Director:*

Interdisciplinary Social Sciences ..... KOFI GLOVER

*Program Directors:*

African and Afro-American Studies ..... FESTUS OHAEGBULAM  
 Off-Campus Term ..... KEITH LUPTON

International Studies ..... DARRELL SLIDER  
 Women's Studies ..... JUDITH OCHSHORN

*Program Directors:*

Human Resources Institute ..... JULIA M. DAVIS  
 Public Administration ..... DONALD MENZEL

## FAMU/USF Cooperative Master of Architecture Program

**Program Director** ..... **ALEXANDER RATENSKY**

## Florida Mental Health Institute

**Director** ..... **JACK ZUSMAN**  
 Deputy Director, Administration ..... FRANCIS M. PARIS  
 Deputy Director, Programs ..... MAX C. DERTKE

*Chairpersons:*

Department of Aging &  
 Mental Health ..... LARRY W. DUPREE

Department of Child &  
Family Services ..... L. ADLAI BOYD  
Department of Community  
Mental Health ..... MICHAEL D. KNOX  
Department of Crime &  
Delinquency ..... RICHARD M. SWANSON  
Department of Epidemiology &  
Policy Analysis ..... ROBERT M. FRIEDMAN

**Directors:**

Office of Health Services ..... JOSEPH V. GONZALEZ  
Office of Training & Consultation/  
Institute Relations ..... ELLOUISE WILLIAMS

**Office of the General Counsel**

**General Counsel** ..... BRYAN S. BURGESS  
Senior Counsel ..... CARLA JIMENEZ  
Associate General Counsel ..... DEBRA A. KING  
Associate General Counsel ..... JOLINE MICELI-MULLEN  
Assistant General Counsel ..... ENRIQUE ESCARRAZ III

**Administrative Affairs**

**Vice President** ..... RICHARD FENDER

**Student Affairs**

**Vice President** ..... DANIEL R. WALBOLT  
Associate Vice President  
and Dean of Students ..... CHARLES F. HEWITT  
Associate Vice President, Housing  
and Auxiliary Services ..... RAYMOND C. KING  
Associate Dean of Students ..... TROY COLLIER  
Assistant to Vice President ..... WANDA LEWIS-CAMPBELL  
Director, Counseling Center for Human  
Development, Veterans Affairs ..... WILLIAM ANTON  
Director, Student Health Services ..... MARIA ANDERSON  
Director of Financial Aid (Acting) ..... GWYN FRANCIS  
Director, Student Publications ..... WOODROW BOOKS  
Director, University Center ..... PHYLLIS MARSHALL  
Director, Recreation Sports ..... ANDREW HONKER  
Director, Intercollegiate Athletics ..... PAUL GRIFFEN  
Director, Sun Dome ..... MIKE LAPAN  
Director, Golf Course ..... ROBERT H. SHIVER

**University Relations**

**Vice President** ..... BARBARA ANN BLUE

**USF at Fort Myers**

**Dean/Executive Officer** ..... BARBARA R. SHERMAN  
Assistant Dean/Academic Affairs ..... GILBERT R. HUTCHCRAFT  
Director, Administration and  
Finance ..... GLENN E. NITSCHKE  
Director, Student Affairs ..... MADELYN L. ISAACS  
Director, ECC/USF Learning  
Resources ..... CHARLES RITCHIE

Director, University Relations  
and Development ..... JAMES HOF

**USF at Sarasota**

Dean/Director ..... ROBERT V. BARYLSKI  
Associate Dean ..... PAUL E. McCLENDON  
Business Manager ..... BERNADINE LUNDSTROM  
Campus Librarian ..... ALTHEA H. JENKINS  
Director, Bi-County Center  
for Engineering ..... HORACE C. GORDON, JR.  
Director of Physical Plant ..... THOMAS J. PENN  
Director, Public Affairs (Acting) ..... CHRISTIAN EVERSOLE  
Director of Records & Registration ..... NANCY E. FERRARO  
Director of Student Affairs ..... PETER FAZIO  
Director of University Relations  
and Development ..... REBECCA HARRIS

**USF at St. Petersburg**

Campus Dean ..... LOWELL E. DAVIS  
Associate Dean, Academic Affairs ..... WILLIAM GARRETT  
Director, Administration and Finance ..... HERMAN J. BRAMES  
Director, Student Affairs ..... STEPHEN RITCH  
Director, Poynter Library ..... SAMUEL FUSTUKJIAN  
Director, University Relations/  
Development ..... RALPH L. MCKAY

**Lakeland Center**

Director and Executive Officer ..... YVONNE RALSTON  
Academic Administrator/Professor ..... CHARLES ARNADE



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## USF — A MODERN METROPOLITAN ENVIRONMENT

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The University of South Florida serves the higher education needs of the rapidly growing, dynamic metropolitan area along the west coast of Florida. More than three million people in a sixteen-county region live within convenient commuter access to at least one of the five campuses.

The Tampa campus of the University occupies a 1,700-acre tract ten miles northeast of downtown Tampa, the commercial and cultural hub for the one million citizens of Hillsborough County.

The St. Petersburg Campus, situated on a 24-acre waterfront site surrounding Bayboro Harbor in the heart of St. Petersburg, provides substantial university presence for the 800,000 people of Pinellas County.

The Sarasota Campus, adjacent to the respected Ringling Museum and the Asolo Theatre, stretches from a Gulf frontage to US 41 between Sarasota and Bradenton. This campus offers graduate and undergraduate classes for a four-county area with an expanding population of 450,000.

The Fort Myers Campus gives access to university education to the 475,000 population of five counties on Florida's lower west coast on the Gulf. This new campus occupies 55-acres on the College Parkway next to Edison Community College. The Lakeland Center, a campus cooperatively shared with Polk Community College, provides university education for the 590,000 people of Polk, Highlands, and Hardee Counties. During the initial phase of development the University of South Florida at Lakeland will schedule 44 courses on a wooded 130 acres on State Road 50 just east of US 98.

While offering many of the pleasant and positive characteristics of a small college, these campuses of the University of South Florida share access to the impressive resources of a significant major metropolitan university. These campuses will continue to expand to meet the educational needs of the growing population of Florida's West Coast.

### **Academic Programs Of USF Campuses At Lakeland, Fort Myers, Sarasota and St. Petersburg**

The academic programs of these campuses are designed to serve students of junior, senior, and graduate standing. Classes are offered at times adapted to the special needs of these students, most of whom are residents in the campus area and are employed in full- and part-time jobs. Selected courses and programs are offered on the campuses by the Colleges of Arts and Letters, Business Administration, Education, Engineering, Natural Sciences, Nursing, Public Health and Social and Behavioral Sciences.

Students may enroll on a part-time or full-time basis on any one of the campuses, or elect to enroll on more than one USF campus simultaneously. Enrollment on more than one campus may provide students with a schedule both academically flexible and personally convenient.

Resident faculty members and Student Affairs staff provide social, vocational, and academic counseling to students enrolled on all the campuses. The resident staff of each campus is supplemented by professors and other staff

members commuting from other USF campuses, thereby bringing additional scope to academic programs and university services.

The University of South Florida in **Lakeland**, the newest addition to the multi-campus complex, shares the Lakeland Center with Polk Community College. Located on County Road 540 near US Highway 98, the Lakeland Center will provide educational programs to students living in Polk, Highlands, and Hardee counties. Junior, senior, and graduate level courses will be offered in Business Administration, Education, Engineering, and Social and Behavioral Sciences.

The University of South Florida at **Fort Myers** serves students at the junior, senior and graduate levels. Undergraduate and graduate degree programs are offered in the College of Business, the College of Education, the College of Social and Behavioral Sciences, and the College of Nursing. Selected course offerings from other colleges within the University are also available at the Campus. Located on a 55-acre site adjacent to Edison Community College in south Fort Myers, the campus is ideally located within easy reach of I-75.

In addition to serving the traditional student, the University offers educational opportunities for working professionals seeking advanced degrees, and to "non-degree" students wishing to satisfy teacher certification requirements or other professional criteria.

The University of South Florida at **Sarasota** is an educational and cultural center of local, state, and national significance. Its mission embraces two distinct, academic programs: New College of USF and the University Programs. USF's New College is a highly selective and innovative four-year liberal arts college. The University Programs emphasize junior, senior, and graduate courses, offering degrees in Business, Education, Engineering, Social and Behavioral Sciences, Nursing, and Public Health. The University Programs serve full-and part-time commuting students and the continuing educational needs of professionals. The Sarasota Campus also has a significant responsibility for historical and environmental preservation and for the enhancement of the historic Ringling and Caples estates.

USF at Sarasota has 28 buildings, including a student center, classrooms, science laboratories, and student residences. A new \$7 million campus library and a new classroom and conference center, the latter a gift of Sarasota philanthropist Harry Sudakoff, opened in 1985.

The University of South Florida at **St. Petersburg** is the second oldest USF campus, having offered upper level and graduate courses since 1968. From its beginning in facilities acquired from the U.S. Maritime Service, the campus has expanded by adding a new library and a classroom/office building. A new student services building, housing a bookstore, cafeteria, and additional classrooms and faculty offices, was completed in February 1984.

Academic programs in a broad variety of disciplines are available on the St. Petersburg Campus; students also may participate in the U.S. Army ROTC program. A number of "Sunshine City" cultural and recreational facilities are within easy walking distance of the campus.

The St. Petersburg Campus houses facilities for marine science research and training. The USF Department of Marine Science, headquartered on campus, is an interdisciplinary venture involving faculty from several departments, in addition to the 24 full-time Marine Science faculty members responsible for graduate research and teaching. Probably no other marine science program has both such excellent facilities for teaching and research, and access to oceanographic vessels. The location of the campus at the central edge of the great continental shelf of the Florida Gulf Coast and in the midst of the

metropolitan Sun Coast is a unique advantage. The Florida Institute of Oceanography, a special research institute of the State University System, also is located on the St. Petersburg Campus. With these combined facilities, the University is destined to become one of the nation's leading oceanographic centers.

### **Facilities and Atmosphere on Campus**

The more than 200 major buildings comprising the facilities of the University, valued at more than \$300 million, share a contemporary architectural design and all are completely air conditioned.

USF has a wide variety of recreational facilities, including three swimming pools, an excellent gym with weight, training room, many tennis courts, a beautiful golf course, and a well-equipped University Center. Its academic and residential facilities are unexcelled in Florida.

The atmosphere on campus is one of easy informality. Students and faculty dress casually and enjoy an unusually close relationship for so large a school. Some classes are even held outside to take advantage of the extraordinary climate (average annual temperature 72 degrees F). Most buildings have open hallways, which blend colorful interiors with spacious exteriors, symbolically and architecturally suggesting the casual accessibility that has become USF's trademark.

### **Organized for Effectiveness**

The University is organized into seven broad areas: Academic Affairs, Medical Center, Student Affairs, Administrative Affairs, Development and Alumni Affairs, the Florida Mental Institute, and University Relations. The chief administrator in each of these areas, plus the Executive Vice President and the General Counsel, comprise the President's staff; the primary policy-making body of the University. A number of advisory bodies, including committees and organizations representing faculty, staff and students, advise and assist the President in determining policy. At USF, students' views are solicited and given serious consideration. The President is responsible, through the Chancellor, to the Florida Board of Regents for internal policy and procedures of the University. More detailed information on these matters is available in the Special Collections Room, USF Library.

### **Equal Opportunity Complaint Procedure**

A student or employee who believes that a condition, University policy or procedure, or act by someone connected with the University is unfair, unjust, or a hindrance to his/her race, color, creed, sex, age, marital status, national origin, handicap, or Vietnam veteran status, may file an Equal Opportunity Complaint. This includes sexual harassment. The complaint may be filed with the Director of Equal Opportunity Affairs. Additional information about this procedure may be obtained from the Office of Equal Opportunity Affairs, ADM 281, by calling 974-4373 or the 24-hour EO Hotline, 974-3159.

It shall be prohibited for any University employee to discriminate or to take any other retaliatory action against an individual who, in good faith, has opposed an alleged unlawful practice or has made a charge, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing.

### **Grievance Procedure**

In order to assure students the right to redress of grievances, any student may file a question, complaint, or statement of grievance in the Office of a Stu-



dent Affairs, in person or in writing. A member of the staff of the Office of Student Affairs will respond within the week, if possible.

## **Student Health Service**

The University Student Health Service provides comprehensive health care for all students who have paid the Health Fee. Students taking six hours or more per semester on the Tampa Campus are required to pay a Health Fee. All other USF students are eligible to pay the Health Fee on a voluntary basis.

The Health Center is on the fourth floor of the University Center. A walk-in clinic is maintained for outpatient treatment from 7 a.m. to 11 p.m., Monday through Friday. Medical laboratory hours are 8 a.m. to 11 p.m. Pharmacy hours are 9 a.m. to 6 p.m.

## **International Student Services**

The University welcomes qualified students from other countries. International exchange contributes to the enrichment of campus life, intellectual development, research, and understanding, and further exposes students, faculty, and staff to different cultural and national perspectives, experiences, and ideas.

The International Student Center, located in the University Center, meets the special needs of international students, and assists each student in achieving his or her educational objectives. An adviser is available to counsel students on immigration, as well as on financial, social, personal, and academic aspects of student life. The Center, in cooperation with the Intercultural Organization, regularly schedules social and cultural activities. The American Friend Program is designed to help orient international students to American family life.

## **Disabled Student Services**

The University of South Florida has good facilities for persons with disabilities and encourages their enrollment in the University. Owing to the mild climate, relatively flat terrain, modern architecture, and recent modifications, many persons with significant disabilities have been able to function independently and successfully in the University environment.

All academic programs, campus organizations, and activities are available to disabled students. USF attempts to integrate disabled students into the University as completely as possible.

Disabled Student Academic Services counsels disabled students in the academic elements of student life. Special reading services, tutoring, and other assistance can be found in this office.

Disabled Student Social Services assists disabled students in the social aspects of the University. The Coordinator for Social services is available for consultation, works to maintain campus and community awareness, and provides housing information and special orientations for disabled students.

## **Housing**

University residence hall space is limited, but every regularly enrolled single student, graduate or undergraduate, is eligible to apply. No University housing is available for married students.

### **Residence Halls**

The 12 halls within the Division of Housing and Food Service are clustered around two centers of community activity — the Argos and Andros complexes. Each of the complexes provides a core of service for its residents, including a central communications desk, mail delivery, TV and study lounges, and com-

plete cafeteria and snack facilities. Although both Argos and Andros complexes provide the same basic services, they offer different options in campus living.

The Argos Complex of three residence halls represents traditional hall living in attractive double-room accommodations designed for both studying and sleeping. The 40-50 residents occupying a living unit share common bath facilities attended daily by the hall's housekeeping staff. Centrally-located lobby areas, laundry rooms, and snack machines are provided.

The Andros Complex, consisting of nine small halls, offers suites designed to accommodate eight residents — two sharing a bedroom, four sharing a study area, and eight sharing bath facilities. Most rooms are carpeted throughout and all are furnished with a bed, desk, chair, dresser, closet, and bookshelf for each resident. Two swimming pools and numerous tennis, handball, racquetball, and basketball courts offer leisure-time recreation.

The Village student housing complex consists of 30 buildings with 10 two-student efficiency apartments in each building. These facilities are reserved for students who have attained junior, senior, or graduate class standing. Each apartment has its own outside private entrance and is furnished with a bed, desk, wardrobe, bookcases, and refrigerator. Each apartment has complete cooking facilities and bathroom. Village residents have use of a swimming pool and other outdoor recreation facilities. A small convenience store and laundromat are located within the complex.

### **Off-Campus Housing**

The Student Government office, located in the University Center, maintains a list of off-campus housing. Listings are accepted only from householders and landlords who do not discriminate because of race, color, or national origin. Rental arrangements may best be made before the University opens, after personal inspection of facilities and conference with the householder. Fall semester arrangements may be made during the summer.

### **Food Service**

Various food service facilities are available to both resident and off-campus students. Food Service offers a variety of meal options to meet the general and specific needs of the USF community, including residence hall cafeterias, the University Center cafeteria, satellite snack bars throughout the campus, convenience stores, and complete vending facilities. Cash is accepted at all food operations on campus.

Additional information on contract meal plans is available through the office of Food Services: (813) 974-3194.

## **University Center**

The University Center is a focal point of daily activity for students, faculty, administration, alumni, guests, and visitors. Located at the heart of campus, it is the community center of the University, offering a variety of services and programs. The University Center seeks to add another dimension to the educational experience by providing an environment for informal association outside the classroom.

The University Center houses a cafeteria, fast food counters, soda fountain, The Empty Keg, organizational offices, meeting rooms, Craft Shop, Game Room, study lounges, the Campus Bookstore, Student Health Service, and much more. Most of all, the U.C. is the key to USF, and can provide information about the entire campus.

The Information desk, located in the lobby, serves as the coordinating center for services and activities in the Center and the University. Services available through the Information Desk include discount ticket sales, recorded

campus tours, classified ad placement, Tampa area bus schedules, official USF lost and found, sales board, graduation announcements, and current events information. The Ticket Stub at the Information Desk is an official Select-a-Seat outlet. Also located in the lobby is an automatic teller machine.

Conference facilities are available through the Reservations Office on the second floor, and can provide meeting space for up to 280 persons.

The U.C. Underground, on the basement level, houses the Game Room, Craft Shop, Bike Shop, TV room, vending machines, Graphic Studio and Photo Lab. The Game Room has 14 billiard tables, video and pinball games, foosball, table tennis, chess, checkers, card tables, and a photo machine. The Craft Shop provides instruction in leather craft, batik, macrame, tie dye, copper enameling, ceramics and print making. Structured classes are offered on a semester basis. The Craft Shop also maintains the Art Gallery and Photo Lab. The Bike Shop is operated by students and provides bicycle repair, supplies, parts, accessories, and electric wheelchair recharging.

The Student Health Service on the fourth floor is fully equipped with a complete clinic and infirmary. Services provided by the Health Service are out-patient care, psychiatric counseling, a GYN clinic, routine physicals, medications, antigen injections, a wart clinic, and special lab tests.

The University Center Program Office operates the Sundry School, Flea Market, and Camping Equipment Rentals. The University Center Activities Board, composed entirely of students, offers students the opportunity to participate in planning and implementing a variety of programs for the University. The Office of Student Organizations and Activities provides services — mail, duplicating, advising, promotions — to more than 250 student organizations.

## University Bookstores

### Textbook Center

Textbooks and some Reference Books are located in the Textbook Center on West Holly Drive, just West of the USF water tower. Ample parking is available. This facility provides all required and recommended textbooks for USF classes. Very often textbooks are on the shelves and available the week before classes begin. A good supply of used textbooks (at added savings) are available each term. At designated times each semester, the Textbook Center will buy back used textbooks from students. The Textbook Center is open 9:00 a.m.-4:55 p.m. Monday-Friday with extended hours at the beginning of each term. Purchases may be made with cash, check (with proper ID), and Visa/Mastercard.

### USF Bookstore and Campus Shop

Located in the University Center, the UC Bookstore serves the University community by providing numerous goods and services. The main floor contains greeting cards and stationery, posters, electronic items including calculators, computers and accessories, the Greek shop, magazines and other general merchandise. Film developing and college ring ordering services are available. Also located on this floor is the "Green and Gold" Shop which features collegiate clothing, imprinted mugs, glassware, gifts, children's clothing, backpacks, and novelty items.

The General Book Department is located in the lower level of the bookstore and features the very latest in fiction, non-fiction, reference, study aids, and children's books. A copy center and special order services are also located in this area. The lower level also contains all course supplies of art, engineering, and science classes, as well as many hobby and general purpose items. Paints, brushes, art paper, graph paper, drafting supplies, dissecting

kits, and lab notebooks are among the many items in this area. All basic school supplies including notebooks, paper, pens, pencils, and the like are also found in this lower level.

Throughout the year, the UC Bookstore offers promotional events, special sale items, and giveaways for the University community. The UC Bookstore is open 9:00 a.m.-5:55 p.m. Monday-Friday and 9:00 a.m.-1:00 p.m. on Saturday (during the term). Visa/Mastercard accepted.

### **Medical Bookstore**

Located in the Medical Center (MDC 1021), the Medical Bookstore offers medical textbooks, instruments, supplies, and reference books. General goods such as notebooks, school supplies, clothing, greeting cards, and candy are also provided. The Medical Bookstore is open 8:00 a.m.-5:00 p.m. Monday-Friday. Visa/Mastercard accepted.

### **Bay Campus Bookstore**

At the St. Petersburg Campus, the Bay Campus Bookstore (Coquina Hall 101) offers textbooks for St. Petersburg classes, general books, clothing, school supplies, and a variety of general merchandise items. The bookstore is open 9:00 a.m.-6:00 p.m. Monday-Thursday and 9:00 a.m.-5:00 p.m. on Friday with extended hours at the beginning of each term. Visa/Mastercard accepted.

## **Clubs And Other Organizations**

Professional staff members are available to assist individuals forming new organizations and to advise currently registered groups. For complete lists and current information regarding all student organizations, please contact the Office of Student Organizations and Activities.

### **Dance, Music, and Drama Clubs**

The excellent programs in the College of Fine Arts offer many opportunities for student involvement. Theatre Department productions are open to all qualified student actors and backstage personnel. The Music Department welcomes student participation in its instrumental and choral organizations. Dance productions also are open to all qualified students. Contact the office of Dance, Theatre, or Music, as appropriate, for information.

## **Cultural Events**

Each year a variety of outstanding visual and performing artists visit the University of South Florida campus. The Artist Series provides unusual opportunities for enjoying the finest professional talents in dance, music, and theatre. A quality Exhibitions Program brings varied and significant works of art annually to the University's three galleries. The College of Fine Arts arranges a full schedule of concerts, plays, lectures, films, and workshops featuring students, faculty, and visiting artists. These and other programs conducted by the college of Fine Arts contribute significantly to the general vitality of the campus.

Most 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 Department of Fine Arts Management and Events.

## **Religious Organizations**

The University encourages student religious organizations to develop associations and centers. The Episcopal Center was dedicated in the fall of 1962, and the Baptist Center in the spring of 1964. The ecumenical University Chapel Fellowship followed in 1966. The Roman Catholic Center opened in the fall of

1967. Soon to be added is the B'nai B'rith Hillel Foundation, catering to students of all branches of Judaism. The Chabad House also is an active Jewish center.

The following student religious organizations are active on campus: Bahai Club, Baptist Campus Ministry, Campus Advance, Campus Bible Fellowship, Campus Crusade for Christ, Canterbury Club-Episcopal Center, Catholic Student Union, Chabad House, Christian Science Organization, Collegiate Association for Research of Principles, Dianetics, Eckankar, Fellowship of Christian Athletes, Hillel, Inter-Varsity Christian Fellowship, Latter-day Saints Student Association, Lutheran Student Movement, Navigators, Students for Non-Denominational Christianity, Transdenominational Prayer Group, Unitarian Universalist Association for Religious Freedom, University Chapel Fellowship, and The Way Campus Fellowship.

### **Service and Resource**

The many service organizations at USF contribute volunteer services to the University and the Tampa Bay area. The resource organizations cater to students' needs and special interests.

These service and resource organizations are Afro-American Gospel Choir, Alpha Phi Omega, Ambassadors, Association of U.S. Army, Auto Maintenance Club, Bacchus, Bambooché Coutre, Black Student Union, Cause, Circle K, Diamond Dolls, Everywoman's Center, Fourth Forest Recycling Service, FPIRG Local Board, Gay/Lesbian Coalition, Greek Week Committee, Green and Gold Club, The Hunger Project, Off-Campus Term Program, Office of Student Programming, Oracle, Para-professional Counseling Center, Physically Limited University Students II, Progressive Student Union, Raiders, Senior Class Committee, Strategic Studies Group, Student International Meditation Society, Student Organizations Advisory Board, Sun Dolls, University Center Activities Board, University Full Gospel Fellowship, University Disarmament Committee, and the Women's Peer Counseling Center.

### **Professional, Academic and Departmental**

The professional societies at USF include Delta Sigma Pi, Florida Nursing Student Association, Iota Phi Lambda, Minority Graduate/Professional Student Organization, Phi Beta Lambda, Pi Sigma Epsilon, Pre-Law Society, Pre-Med Society, Pre-Veterinary Club, Sigma Delta Chi, and the Student National Medical Association. Academic and departmental organizations are categorized by college. **Arts and Letters:** Advertising Association, American Studies Assembly, Circolo Italiano Culturale, Communications Council, Forensic Union, German Club, Humanities Society, Public Relations Student Society of America, Readers Theatre Guild and the Russian Club. **Business Administration:** American Society of Personnel Administration, Black Business Student Organization, Graduate Business Association, Management Information Systems Society, and the Student Finance Association. **Education:** Association of Childhood Education, Black Organization of Students in Education, Distributive Education Clubs of America, Graduate Library Student Association, Physical Education Association, Student Council for Exceptional Children, Student Guidance Organization, Student Music Educators National Conference, and the Student National Education Association. **Engineering:** American Institute of Aeronautics and Astronautics, American Institute of Chemical Engineers, American Institute of Industrial Engineers, American Society of Civil Engineers, Arnold Air Society Association for Computing Machinery, Florida Engineering Society, IEEE Computer Society, Institute of Electrical and Electronic Engineers, National Society of Black Engineers, Pi Phi Newton, and the Society for the Betterment of Future Engineers. **Fine Arts:**

Dance Club, Fine Arts Forum, North Tampa Community Performing Alliance, Sigma Alpha Iota, and the Student Theatre Productions Board. **Natural Science:** Affiliated Chapter of American Chemical Society, AIME/Geology Club, Association of Medical Science Graduate Students, Society of Physics Students, Society for Women Physics Students, and the Student Microbiology Association. **Social Sciences:** Advocates for Social Work, Anthropology Club, National Student Speech, Language and Hearing Association, Psychology Graduate Student Exchequary, and the Sociology Club.

### **Honor Societies**

Honor societies recognize outstanding students for scholastic or service achievement. Membership in honor organizations usually is by invitation. Honor organizations are Alpha Epsilon Delta, Alpha Epsilon Rho, Alpha Pi Mu, Alumni Scholars Club, Arts and Letters Honor Society, Beta Alpha Psi, Beta Gamma Sigma, Civil Engineering Honor Society, Council of Honor Societies, Financial Management Association Honor Society, Gamma Theta Upsilon, Kappa Delta Pi, Kappa Tau Alpha, Mortar Board, Omicron Delta Kappa, Phi Eta Sigma, Phi Kappa Phi, Phi Sigma, Pi Gamma Mu, Pi Mu Epsilon, Pi Sigma Alpha, Psi Chi, Sigma Pi Sigma, Sigma Iota Epsilon, and Tau Beta Pi.

### **College and Residence Hall Councils**

College and residence hall councils represent student interests to the University and provide an organizational forum for students in each college or residence hall. The college councils are Arts and Letters Council, Business Student Advisory Board, Education Council, Fine Arts Advisory Board, Medicine Council, Natural Science Council, Nursing Student Council, Social and Behavioral Science Council, Co-op Advisory Council, Engineering College Association, and the Off-Campus Term Advisory Council.

### **International and Political/Social Change**

International student organizations at USF are the Arab Student Union, Caribbean Cultural Exchange, Chinese Student Union, Florida High School Model United Nations, Intercultural Organization, Iranian Students Supporting National Council of Resistance, Lebanese Student Union, Model United Nations, Muslim Student Organization, Vietnamese Cultural Club, and the Vietnamese Student Association.

Organizations for political and social change are College Republicans, L-5 Society, Libertarian Alliance, and the Young Democrats.

### **University Police**

The University of South Florida Police Department, located at the intersection of Maple and Fletcher, provides the full range of public safety services to the community twenty-four hours a day, seven days a week. All University Police Officers are commissioned Law Enforcement Officers of the State of Florida. The telephone number for on-campus emergencies (personal injuries, fires, crimes in progress) is 2911. The telephone number for on-campus non-emergencies and business is 2628.

### **Recreational Sports**

The University of South Florida provides a variety of physical and recreational activities. Because a complete education includes a proper balance of work and study with physical activity the University program includes intramural sports competition, sports clubs and other recreational activities, in addition to basic instructional programs in physical education.

The Intramural Sports Program emphasizes activities especially suited to the Florida climate. Competition is scheduled in such individual sports as swimming, tennis, track, golf, cross country, bowling, racquetball, and wrestling, as well as the team sports of soccer, flag football, basketball, volleyball, and softball. Competition also is sponsored by fraternal societies, residence halls, and independent divisions.

The Sports Club program includes groups of students, faculty and staff who have a special interest in a particular sport. They are organized for the purpose of sharpening skills through continuing training and competition. Present clubs include aikido, bicycling, bowling, dance fitness, frisbee, karate, lacrosse, rugby, sailing, scuba, parachute, water skiing, weight lifting, and yoga. More will be added as interest warrants.

### **Intercollegiate Athletics**

The University of South Florida fields intercollegiate teams in both men's and women's sports. The University is a member of the National Collegiate Athletic Association and competes in the University Division I in men's baseball, basketball, cross country, golf, soccer, swimming, tennis and riflery. The women compete in basketball, golf, tennis, softball, volleyball, and swimming. Schedules include competition with regionally and nationally ranked teams. USF became a charter member of the Sun Belt Conference in 1976.

### **Student Publications**

The University of South Florida has encouraged a program of campus communication through three publications. These publications are all-University in approach and coverage. They are staffed by students under the general supervision of the Office of Student Publications.

A tabloid campus newspaper, the Oracle, is published five times weekly Monday through Friday during the fall and spring and three times weekly Monday, Wednesday and Thursday during the summer. Containing 16 to 20 pages in each issue, it provides professional experience for those students interested in print journalism.

Omnibus, a literary magazine, is published annually and contains prose, poetry, photos, and graphics produced by students.

Twentieth Century, USF's official yearbook, is published annually.

Interested students are invited to apply for staff positions on all three publications.

### **Counseling Center for Human Development**

The Counseling Center for Human Development provides direct professional services to USF students in career counseling, personal counseling, psychiatric consultation, and reading/study skills. Special services are provided by the State Division of Vocational Rehabilitation, which maintains an office in the Counseling Center.

The Counseling Psychology Service helps students to develop realistic career goals and learn the means of achieving them through testing, counseling, career information, and the exploration of alternative educational and/or career achievements. Emphasis is on developing skills for solving educational and career problems. A computerized career information and guidance system (CHOICES) and a comprehensive Career Information Library are available for student use.

The Clinical Psychology Service provides a range of services aimed at the early detection and prevention of student mental health problems and the

development of skill-enhancing programs. The following direct services are offered to USF students: intake evaluation, psychiatric consultation, time-limited psychotherapy and behavior therapy, group therapy, skill-enhancing programs and workshops, anxiety management, paraprofessional programs, and referral services. Professional psychologists also assist students in career guidance, particularly those with identity, motivational, and related personal problems. The Psychiatric Service assists students when psychiatric evaluation, medication, or hospitalization are needed.

The Counseling Center Outreach Program sponsors workshops and structured groups in a variety of career and personal growth areas. Although most of these programs are regularly scheduled, they are often organized at the request of special student or staff organizations. Outreach also is instrumental in informing students of available services.

Three paraprofessional programs operate out of the Counseling Center. These programs are staffed by volunteer students under the leadership of trained and experienced graduate and undergraduate students. Professional staff provide training and supervision.

Application for any of these services may be made by an USF student by appearing at the Counseling Center and requesting assistance.

### **Offices of Veterans Affairs**

An Office of Veterans Affairs (OVA) is maintained at each of the campuses of the University of South Florida. Veteran advisors work closely with the staff of the Veterans Administration (VA) in St. Petersburg to provide special services to all veterans, eligible dependents, active duty personnel, and members of the Selective Reserve. The OVA staff actively encourages persons who have a desire to start, continue, or resume higher education course work to visit the Office of Veterans Affairs. Applications for veterans benefits are completed in the OVA, processed through the Certifications Section of the University Registrar's Office, and sent directly to the Veterans Administration.

Services are available to help solve financial problems experienced by veteran students as follows: Registration and tuition fee deferment, advance payment, and part-time work opportunities through the VA Work-Study program. The VA Tutorial Program offers tutoring opportunities for veteran students in subject areas when needed. The VA will reimburse all tutorial costs. Developmental course work can be accomplished through cooperative efforts with local community colleges. Guidance and referral services are provided with student financial assistance, job placement, student housing, personal and family counseling, career planning, academic advising, military service school credit, and discharge review.

The University of South Florida is a Servicemembers Opportunity College (SOC) and actively encourages active duty personnel to attend the University. For more information on "Project Ahead", degree completion, and tuition assistance, in-service students should first check with their installations' education officer.





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# ACADEMIC POLICIES AND PROCEDURES, PROGRAMS AND SERVICES

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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 with general questions concerning academic policies and procedures pertaining to 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.

The University of South Florida and all its colleges, departments, and programs 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. Advisers, 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. If at the end of a student's course of study, requirements for graduation have not been satisfied, the degree will not be granted. For this reason it is imperative that all students acquaint themselves with all regulations, remain currently informed throughout their college careers, and make themselves responsible for completing requirements. Courses, programs, 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 Florida Board of Regents.

## General Academic Regulations and Information

### Semester System

The University of South Florida operates on a semester system. Semesters begin in August and January, with summer sessions beginning in May and June.

In the fall of 1981, the University of South Florida, as well as the other institutions in the State University System of Florida, converted from a quarter system to a semester system. During the history of the University of South Florida, the institution operated under semester and trimester credit systems from the institution's inception in 1960 until fall, 1967, after which it was under the quarter system until the fall of 1981.

### Catalog

A Student is entitled to one USF Graduate Catalog per issue. Students wanting additional copies may purchase them from the University Bookstore.

Prospective students may obtain general University information concerning admissions, fees, and degree programs by requesting the graduate brochure from the Admissions Office.

### Availability of Courses

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

## **Course Attendance at First Class Meeting**

### **Policy, Purpose and Intent**

To allow the University of South Florida to use classroom space effectively and to ensure all students the opportunity to enroll in classes in which demand exceeds availability of seats, the following policy has been promulgated.

### **Statement of Policy**

Students are required to attend the first class meeting of all classes for which they have registered in order to ensure their enrollment in those classes. Students not in attendance at the first class meeting will be dropped from the course. Students who are unable to attend the first class meeting because of extenuating circumstances beyond their control must inform the college or department, preferably in writing, that they will be in attendance at subsequent meetings.

### **Adds**

After students have completed their registration on the date assigned, they may add courses until the add deadline specified in the Academic Calendar. See the appropriate semester's University Class Schedule for detailed instructions and dates.

### **Drops**

A student may drop a course(s) during the Drop/Add period (first five days of classes). No entry of the course(s) will appear on any records and a full refund of fees is due for a course(s) dropped within this period.

A student also may drop a course(s) between the second and ninth week of the semester (except for summer sessions — see University Class Schedule for dates). Registration fees must be paid for the course(s) and the academic record will reflect a "W" grade for the dropped course(s). Courses dropped after the ninth week (see Academic Calendar for deadline) will result in an automatic "F" grade.

### **Auditing Privilege**

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, nor will any grades or credit be given. The student's status for that class is an audit and her/his presence in the classroom is as a listener.

A student must register to audit courses during the late registration period. (No audit registrations are processed during regular registration periods.) Fees for audit are the same as for full enrollment for credit, except that out-of-state tuition is not charges. See University Class Schedule for detailed instructions and dates.

### **Cancellation Before First Class Day**

Students may cancel their registration by notifying the Office of the Registrar in writing prior to the first day of classes. If fees already have been paid, students may request a full refund of fees from the Office of Finance & Accounting.

### **Withdrawal**

Students may withdraw from the University without academic penalty during the first nine weeks of any term (except for summer sessions — see

Class Schedule for date). They must submit a completed Withdrawal Form to the Office of the Registrar. No entry is made on the academic record for withdrawals submitted during the first week of the term. All subsequent withdrawals are posted on the academic record with a grade of "W". A grade of "F" will be assigned automatically for all course work from which a student withdraws after the end of the ninth week of the term.

Students who withdraw during the Drop/Add period as stated in the Academic Calendar may receive a full refund of fees paid by the student.

All refunds must be requested in writing from the Office of Finance and Accounting. No refund is allowed after this period, except for specified reasons. See "Refund of Fees" under Financial Information for complete details.

### **Transcript Information**

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 be released only upon authorization by the student. Students requesting transcripts may do so in person or by writing to the Office of the Registrar. Include full name, Social Security number, and date of birth, and indicate names and addresses to whom, transcripts are to be sent. If grades for the current term are needed, clearly indicate that the transcript request is to be held for grades. There is no charge for transcripts.

## **Grades, Scholarship Requirements, and Review Procedures**

### **Graduate Grading System**

A student's measure of academic achievement is based on the following grading system:

- A — Superior performance
- B — Average performance
- C — Below Average performance
- D, F — Failure
- I — Incomplete
- N — Audit
- S — Satisfactory
- U — Unsatisfactory
- W — Drop or Withdrawal from courses without penalty
- Z — Indicates continuing registration in Thesis/Dissertation courses

### **Grade Point Average**

The University uses a four-point system of grading to compute grade point averages ("A"=4 quality points, "B"=3, "C"=2, "D"=1, "F"=0). The grade point average (abbreviated GPA throughout this Catalog) is computed by dividing the total number of quality points by the total hours attempted at the University of South Florida. 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. Grades of "S", "U", "I", "IU", and "Z", are subtracted from the total hours attempted.

## **S/U Grade System**

Graduate students may not take courses in their majors on an S/U basis unless courses are specifically designated S/U in the Catalog. Graduate students may take courses outside of their majors on a S/U basis with the prior approval of the course professor, the major professor, and the dean of the college in which the degree is offered. The student may apply a maximum of 4 hours of such credit (excluding those courses for which S/U is designated in the Catalog) toward a master's degree.

Directed Research (master's and doctoral level) and Thesis (Master's, 6971) and Dissertation (Doctoral, 7980) courses are designated as credit varies and are awarded credit on an S/U basis only. Before a student undertakes 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.

## **"I" Grade Policy**

An "I" grade indicates incomplete course work and, until removed, is not computed in the grade point average. The time limit for removing the "I" is to be set by the instructor of the course. Students are not required to re-register for courses in which they are only completing previous course requirements to change an "I" grade. However, if a student wants to audit a course for review in order to complete course requirements, full fees must be paid.

## **"Z" Grade**

The "Z" grade shall be used to indicate continuing registration in thesis/dissertation courses. Upon satisfactory completion of the thesis/dissertation course, the final grade assigned will be an "S".

# **University Graduate Policies and Procedures**

## **Graduate Council**

The Graduate Council develops University policies and principles for graduate work. The Council also exercises the right of inquiry and review to insure that high scholarly standards are maintained, and it is responsible for the establishment of University standards and regulations for graduate students and faculty. The Council reviews all new graduate courses, new degree programs, and modifications of existing courses and programs. The membership of the Graduate Council includes ten faculty members, two graduate students, and three ex-officio members: the Dean of the Graduate School, the Associate Dean of the Graduate School, and the Assistant Dean of the Graduate School. The Council's chairperson and vice-chairperson are elected from among the ten faculty members.

## **Major Professor**

Upon a mutual recommendation from the student and professor concerned, an adviser or major professor will be appointed by the program director/departmental chairperson and approved by the Dean of the Graduate School. The appointment will generally be made during the student's first term.

## **The Graduate Faculty**

Members of the Graduate Faculty at the University of South Florida achieve that distinction by being recommended by the faculty and chairs of their respective departments and by the credentialing committees and deans

of their respective colleges. Recommendation by these individuals and groups is based on University-wide criteria often supplemented by additional criteria of the department and/or college. Final approval of appointment to the Graduate Faculty is made by the Dean of the Graduate School.

The criteria used include holding the appropriate terminal degree, active performance in research and published scholarship and/or appropriate forms of creativity, and experience and/or demonstrated interest in teaching at the graduate level and fostering and guiding the academic progress and research of graduate students.

### **Academic Standards**

Graduate students must maintain an overall average of 3.0 ("B") in all courses. No grade below "C" will be accepted toward a graduate degree, but all grades will be counted in computing the overall average.

Any graduate student who is not in good standing at the end of semester or summer term shall be on probation. Notification of probation shall be made to the student in writing by his/her major professor, with a copy to the college dean. At the end of the probationary semester, the major professor shall recommend to the college dean, in writing, one of three alternatives; (1) removal of probation; (2) continued probation; (3) dismissal from degree program. Concerted effort will be made during the probationary period to aid the student in reestablishing his/her standing. If the student is unable to reestablish this standing, the student may be dismissed from a degree-seeking status after one semester of probation by the Dean of the Graduate School, upon recommendation by the dean of the student's college. If the student wishes to reapply to the Graduate School within three semesters after dismissal, the student should secure a Former Student Returning application from the Office of the Registrar. If the student wishes to reapply to the Graduate School after two years, the student must reapply to the Office of Admissions by the appropriate deadline.

### **University Regulations**

A student taking 9 or more hours toward the degree in a semester will be classified as a full-time student. The normal graduate load is 9-12 credit hours.

A student who has completed the required course work and continues to occupy space and to receive faculty supervision, but who has not submitted a thesis/dissertation, shall register for a minimum of 2 hours of Thesis/Dissertation per term. The exact number of hours will be determined by the individual program/department and will be predicated on the staff and facilities needed to support the student. Although minimum and maximum hours required for Thesis/Dissertation will be decided by the individual program/department, many students find it necessary to take more than the required minimum hours.

Graduate students who have completed all requirements except the comprehensive exams or completion of "I" grades will be allowed use of University Library facilities for one semester, with written approval from the Dean of the Graduate School. During the term in which graduate students take the comprehensive exams, they must enroll for a minimum of 2 hours of graduate credit in their disciplines. If all course work has been completed, students should enroll in Independent Study.

### **Transfer Credit**

Transfer of credit from another regionally accredited school is limited to 8 semester hours or 3 courses. All transferred credit must (1) be approved by the program or college concerned, and (2) have been completed with grades of "B" or better. These credits should be evaluated and transferred by the time of enrollment.

## Appeals

Graduate students may appeal actions regarding their academic status:

1. In actions based on departmental requirements, the student may appeal first to the department through his/her major professor, then to the college dean or representative, and then to the Graduate Dean, if necessary.
2. In actions based on the University minimum requirements, appeal shall be made directly to the Graduate Council.

Reports of actions and appeals will be maintained in the student's permanent file.

## Change of Graduate Degree Program

Students who wish to change from one advanced degree program to another at the same level must obtain a Graduate Change of Program Application from the Office of the Registrar of the College Advising Office. The Change of Program is complete upon acceptance of the student by the new department and approval by the dean of the college and Dean of the Graduate School. The new department may elect to accept all, some, or none of the graduate courses previously taken by the student. Courses accepted from the earlier graduate program must be listed by the new program on the Graduate Change of Program Application. If no courses are listed, it is assumed that no courses are accepted from the earlier program. For changes in level (i.e., from master's to Ed.S., Ed.D., or Ph.D.), the applicant must submit a new application to the Admissions Office.

## Student's Choice of Catalog

In order to graduate from the University of South Florida, students must meet all of the graduation requirements specified in the USF Catalog of their choice. Students may choose any USF catalog published during their continuous enrollment. Students who have transferred from one Florida public institution to another are affected by the following Board of Regents policy:

**Graduation requirements** in effect at the receiving SUS institution at the time a student enrolls at a Florida public institution of higher learning shall apply to that student in the same manner that graduation requirements apply to its native students, provided the student has had continuous enrollment as defined in the SUS institution's catalog.

At the University of South Florida, continuous enrollment is defined as completing a minimum of two terms per year at USF, with grades assigned for courses taken, through time of graduation. Graduate students who are continuously enrolled may select any Catalog within five years of their graduation or completion date. Therefore, students cannot choose a USF Catalog published prior to or during an academic year in which they did not complete at least two terms.

Each Catalog is considered to be published during the academic year printed on the title page.

If the student cannot meet all of the graduation requirements specified in the Catalog of choice as a result of decisions and changes by the University in policy matters, course offerings, etc., appropriate substitutions will be determined by the chairperson of the department or program of the student's major.

University policies are subject to change and apply to all students regardless of their choice of Catalog. If the student's graduation requirements are affected by changes in University policies, appropriate arrangements will be made to ensure that the student is not penalized.

## Application for Degree

Each student who plans to complete requirements for his/her degree by the end of a term must submit an Application for Degree to the Office of the Registrar by the deadline noted in the Academic Calendar for the term in which he/she expects to graduate. The application form is available in the Office of the Registrar. (Inquiries regarding approval or denial should be directed to the colleges.)

A fee equivalent to two semester hours is charged if the student is not enrolled. Note special enrollment procedures for student submitting theses/dissertations in sections on "Master's Degree" and "Ph.D. Degree".

## Commencement Participation

Graduate students will not participate in commencement exercises until all requirements for the degree sought have been fulfilled.

## Exclusions

Members or former members of the faculty who hold or have held the rank of Assistant Professor, Associate Professor, or Professor are not eligible to be granted degrees from the University of South Florida, except upon prior authorization of the Graduate Council.

In cases in which a member of the immediate family of a faculty member is enrolled in a graduate degree program, 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.

# Graduate Degree Programs

## Master's Degree

### Program and Course Requirements

During the first term of study, in consultation with his/her major professor, the student should plan a program of work which, when completed, will satisfy the degree requirements specified. A copy of this program signed by the student and professor should be maintained in the student's department file.

A minimum of 30 semester hours is required for a master's degree, at least 16 hours of which must be at the 6000 level. At least 20 hours must be in formal, regularly scheduled course work, 10 of which must be at the 6000 level. Courses at the 5000 level are acceptable for credit toward the master's degree when taken as a part of a planned degree program.

Up to 6 hours of 4000-level courses may be taken as part of a planned degree program. Additional graduate credit may be earned in 4000-level courses only if specifically approved by the appropriate dean and by the Graduate Council. Students enrolled in undergraduate courses as part of a planned degree program will be expected to demonstrate a superior level of performance.

Graduate students may not enroll for more than 18 hours in any semester without written permission from the college dean.

### Supervisory Committee

Students working toward a thesis degree will have the benefit of a supervisory committee of credentialed members of the graduate faculty, appointed by the program director/chairperson and approved by the Dean of the Graduate School. The committee, consisting of the major professor and at least



two other members of the department or area in which the degree is sought, will be recommended by the appropriate chairperson upon request from the student and his/her major professor. The director of a thesis must be a USF graduate faculty member with an advanced degree, or equivalent professional qualifications appropriate to the required level of supervision, and must be credentialed for thesis direction. Notification of the committee appointment will be sent to the dean of the college and to the Dean of the Graduate School. The committee will approve the course of study for the student, supervise the research, and accept the thesis.

### **Time Limitations**

1. All work applicable to master's degree requirements must be completed within seven years from the time a student is admitted into the program.
2. Graduate students who receive financial support from the University, other than fellowship recipients, will hold their appointments for no more than four semesters (excluding Summer Term) while working toward the master's degree (five semesters for the Master of Fine Arts) and for no more than six additional semesters while working toward the Ph.D.

### **Final Comprehensive Examination**

Prior to clearance for the degree, candidates must perform satisfactorily on a comprehensive examination in their major fields. When graduate students take their comprehensive examinations, they must be enrolled for a minimum of two (2) hours of graduate credit in their disciplines. If all course work has been completed, students should enroll in Independent Study.

### **Thesis**

When a thesis is required, the thesis must conform to the guidelines in the Handbook for Graduate Theses and Dissertations available in the University Bookstore. An abstract must accompany the thesis. The thesis must be submitted to the Dean of the Graduate School at least three weeks before the end of the semester in which the student is to receive the degree. The Graduate School will not accept a thesis after the first day of the semester unless the candidate is enrolled in the proper thesis course (6971) for at least 2 hours. If the student elects to submit the final draft of the thesis by the first day of the semester, the student will not be required to register for 2 hours of thesis but must reapply for graduation. In addition, the student must have been enrolled the preceding semester for at least 2 hours of thesis. Only after the thesis has been approved for filing in the University Library can the student be certified for the degree. A binding fee will be charged the student at the time the thesis is submitted.

### **Second Master's Degree**

A student may wish to pursue two master's degrees simultaneously. Upon approval by the Graduate Council, credit for core courses required for one degree may be applied to another degree that requires the same core courses, without repetition or alternative courses.

### **Ed.S. Degree and Ed.D. Degree**

The Education Specialist Degree (Ed.S.) and Doctor of Education Degree (Ed.D.) are offered only by the College of Education.

### **Ph.D. Degree**

The degree of Doctor of Philosophy 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. The length of residency and the requirements suggested below are minimums; departments/programs 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 minimum of 90 semester hours beyond the bachelor's degree is required.

### **Student Committees**

An Advisory Committee will be appointed by the chairperson of the appropriate department or program for each student during his/her first semester of residency at the University of South Florida. This Committee will advise the student on indicated subject matter deficiencies and assist in choice of a major professor and an area of research. As soon as an area of research is determined and a major professor is chosen, a Dissertation Committee will be approved for the student by the Dean of the Graduate School upon recommendation from the chairperson of the department of the Dissertation Committee will be sent by the chairperson to the dean of the college and the Dean of the Graduate School immediately after the appointment is made. The Dissertation Committee will approve the student's course of study and plan for research, supervise the research and the written comprehensive qualifying examination, read and approve the dissertation, and conduct the dissertation defense examination. The Dissertation Committee will consist of at least five members, at least three of whom must come from the academic area in which the major work for the degree will be done.

### **Tools of Research**

Before a student becomes eligible to take the comprehensive qualifying examination, he/she must normally have completed two of the "tools of research" requirements designated by the department/college for a given degree program (e.g., two foreign languages and statistics). Courses used to fulfill "tools of research" requirements earn no graduate credit toward the degree. The choice of "tools of research" will be the prerogative of the student's dissertation committee.

All foreign language requirements offered as a "tool of research" must be completed before students are admitted to candidacy. The foreign language requirement may be satisfied in one of the following ways. The criteria stated below will be considered a minimum requirement; departments may elect to establish more rigorous requirements.

1. Students who elect to be tested in French, German, Russian, and/or Spanish may, with departmental approval, elect one of the following three options:
  - a) The student may take appropriate courses in the Division of Language or Classics Program. 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 "B" or better in the language courses. Courses taken to fulfill the foreign language requirement will not count toward the 90 hours

- necessary for graduation and the grades in these courses will not be computed in the student's graduate GPA.
- b) Students may elect to take the GSFLT (Graduate School Foreign Language Test). The student must achieve a score of 450 or better on the test in order to fulfill the foreign language requirement.
  - c) 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 the Division of Language or the Classics Program, in consultation with individual departments; exams must administered and graded by language professors from either of these two units.
2. Students who elect to be tested in foreign languages other than French, German, Russian, and/or Spanish may, with departmental approval, adopt one of the two following options:
- a) The student may take appropriate courses in the Division of Language or Classics Program. All requirements stated in paragraph 1.a above apply.
  - b) Students may take a proficiency exam in which they translate, from a foreign language into English, materials relevant to their particular disciplines. See paragraph 1.b above.

### **Residency**

The minimum requirement will be three academic years of work beyond the bachelor's degree. At least one academic year of residence must be on a campus of the University of South Florida. An academic year's residency will be defined as a minimum of 9 hours of graduate work per term. Deviations from this rule must be recommended by the chairperson of the student's supervisory committee and approved by the Dean of the Graduate School.

### **Time Limitations**

1. Any graduate work counted toward the fulfillment of the requirement for the Ph.D. degree after admission to candidacy must be completed within seven calendar years.
2. Doctoral students who receive financial support from the University, other than fellowship recipients, will hold their appointments for no more than six semesters beyond receipt of a master's degree while working toward the Ph.D.

### **Comprehensive Qualifying Examination**

As soon as all required course work is completed, the student must pass a written comprehensive qualifying examination covering the subject matter in the major and related fields. This examination may be supplemented by an oral examination. If the degree is not conferred within five calendar years of the comprehensive examination, a second different examination must be taken.

### **Admission to Candidacy**

Students may not enroll in Dissertation until they have been admitted to candidacy. Students may not be admitted to candidacy until a Dissertation Committee has been appointed, and the Committee has certified that the student has successfully completed the comprehensive qualifying examination and has demonstrated the qualifications necessary to successfully complete requirements for the degree. Following the completion of the Admission to Candidacy form, the student may enroll in Dissertation: Doctoral (7980). The

Admission to Candidacy form will be approved by the dean of the college and forwarded to the Dean of the Graduate School for final approval.

### **Final Oral Examination**

When the Dissertation Committee has carefully read the final draft of the dissertation and finds it suitable for presentation, the Committee will complete a form requesting the scheduling and announcement of the dissertation defense examination. The request form, along with a draft copy of the dissertation, will be submitted via the appropriate department chairperson to the college dean and the Dean of the Graduate School for approval. The announcement must be received in the Graduate School Office at least two weeks prior to the scheduled oral examination. The dissertation defense examination must be held at least three weeks before the end of the semester in which the student is to be awarded the degree; therefore, the request for defense of the dissertation must be received in the Graduate School at least five weeks before the end of the semester in which the degree is to be granted.

The chairperson of the dissertation defense committee will be appointed by the dean of the college and approved by the Dean of the Graduate School, and will not be a member of the student's dissertation committee, or of the department or program in which the degree is sought.

### **Dissertation**

Students in the Ph.D. programs must take an appropriate number of credits for dissertation, the exact number to be determined by the department and/or individual requirements.

At least two weeks before the end of the semester in which the student is to receive the degree, a candidate must submit to the Dean of the Graduate School a completed dissertation signed by his committee. The dissertation must conform to the guidelines in the Handbook for Graduate Theses and Dissertations available in the University Bookstore. An abstract also is required. The Graduate School will not accept a dissertation after the first day of the semester, unless the candidate is enrolled in the proper dissertation course for at least 2 credit hours. Students who submit the dissertation by the first day of the semester will not be required to register for 2 hours of dissertation but must reapply for graduation. In addition, the student must have been enrolled for at least 2 hours of dissertation during the preceding semester. Prior to college certification for the degree, the dissertation must be approved by the Dean of the Graduate School. The two copies of the dissertation will then be deposited in the University Library. Each dissertation will be microfilmed, with the student being assessed a fee for this service. A binding fee will be charged the student at the time the dissertation is submitted.

## **Academic Services and Support**

### **University Library**

It is important that a library consider not only the books on its shelves but also the people it serves. This point of view is central in the philosophy of the University of South Florida Library. The University expects students to become familiar with the University Library book collection, to master the techniques of using it, and to achieve a familiarity with books that will continue into later life.

The University Library building was completed in March 1975. The seven floor building with its open stacks, adjoining study areas and many individual carrels, has been designed to facilitate study, research, and reading. When fully

occupied, it will provide space for 2,500 readers and accommodate over 800,000 volumes.

The present library collection consists of about 700,000 volumes and is constantly growing in order to serve the University community's need for materials for instruction and research, as well as for personal knowledge and cultural advancement. Information about the volumes in the collection can be found by searching the on line catalog by author, title, or subject. The catalog also contains records for the volumes in all the campus libraries, the Medical Center library, the Florida Mental Health Institute library, and the University Media Center. Terminals are located on the first floor.

### **Division of Sponsored Research**

Research is an essential aspect of the educational programs of the University of South Florida. All faculty members are encouraged to pursue research activities, and many students are afforded the opportunity to participate in research and training projects supported by public and private granting agencies.

The Division of Sponsored Research is the central coordinating unit for research and other sponsored educational activities on all the University's campuses. It provides information about granting agencies to faculty and students and serves as a consultation center for faculty who desire to submit proposals for funding. All proposals for which outside support is sought must be transmitted through this office.

From the beginning, USF faculty and staff have been active in the search for new knowledge and have consistently demonstrated their social concern. With the support of private and public agencies, they have contributed to our knowledge about men and women and the world in which they live, and have applied their discoveries and skills to the solution of many contemporary problems. Since 1960, the rate of growth in external funding has been phenomenal. During the past ten years, USF faculty have received in excess of \$155 million dollars from external sources to pursue research and other sponsored fund activities. Many of their contributions were basic research; others were practical applications of new knowledge; still other projects made the specialized training and knowledge of USF faculty available to public officials, organizations working for social betterment, religious and educational institutions, and business and manufacturing organizations. Through their sponsored activities, USF faculty have made significant contributions to the University's instructional programs.

### **Division of Educational Resources**

The Division of Educational Resources offers the following services to USF faculty, staff, and students:

**Audio-Visual Services** provides equipment such as 16mm projectors, film strip projectors, slide projectors, TV Receiver/Monitors, TV Projectors, video equipment, etc., for classroom use, University events and other functions. AV materials, such as microphones, patch cords, projection lamps, overhead transparencies, surge projectors, audio and video cassettes, splicing tapes, and more, are available for purchase. Audio-Visual Services also provides simple and complex public address systems, recording and dubbing services, satellite teleconferencing, as well as maintenance of audio and video equipment.

The **Film Library** houses more than 4,500 films, which are available at no charge for use in scheduled USF courses, for rental to external agencies or

non-academic internal use, and for preview in the Film Library on the Tampa campus.

The **Instructional Video Service (ITFS)** productions are credit courses taught before a class and disseminated live via microwave to any designated location within a 25-mile radius of the downtown Tampa area. The classes are also video taped for use in the he Florida Engineering Education Development System (FEEDS) and distributed throughout the state.

The **Photography Department** provides a wide variety of professional services to students, staff, and faculty, from black and white printing and color slide processing to passport photos and University ID's for all campuses.

The **Graphic Design Department** provides creative design, illustration, typesetting, and finished camera-ready art for most printing requirements. Services provided cover three major areas; classroom/research support, University publications, and television/radio.

Graphic Design and Photographic Services are available to students, faculty, and staff for classroom use, University events, and other functions.

**Media Design and Production** produces multi-image slide shows and video presentations for faculty, staff, and student organizations. Creative services offered include script writing, photography, visual design, soundtrack production, and all stages leading to the final product. Creative and technical consultation is available for any audio-visual communications need.

**ID's** — Legal identification must be shown to obtain an ID. ID service is available throughout registration and the first week of classes each semester. During the balance of the semester, ID's are made on Monday from 4:00-6:00 p.m., Wednesday from 2:00-3:00 p.m., and on Thursday from 9:00-11:00 a.m. There is no charge for the original ID or to replace a damaged ID, providing the damaged card is presented. All other replacements are \$5 each.

The **University Media Center (UMC)** is a resource center for instructional materials and non-book media. Adult non-print materials and print materials for grades K-12 may be checked out on loan with a valid University I.D. A Production Room provides graphics and photography facilities, duplicating equipment, and a laminator for use by all USF personnel.

The **University Media Center Lab (UMC Lab)** provides assorted audio-visual study aids for USF students. Faculty members may convert portions of their classroom teaching to media for use in the Lab. This facility is available certain evenings each week for evening students, as well as during scheduled daytime classroom hours.

**WUSF-TV (Channel 16)** is a non-commercial educational television station serving the communities of the nine surrounding counties as an important outreach arm of the University. It provides high quality educational, instructional, informational, cultural, and public affairs television programming and services to viewers in the Tampa-St. Petersburg-Sarasota area, including USF faculty, staff, students, and other educational agencies.

**WSFP-TV (Channel 30, Fort Myers)** is also a non-commercial educational television station providing high quality cultural, informational, entertainment, public affairs, educational, and instructional public television programming and services to the people of the Greater Fort Myers-Naples area of Southwest Florida, including the University of South Florida at Fort Myers and other educational agencies.

**WUSF (FM) 89.7 MHZ and WSFP-FM 90.1 mhz** are listener-supported radio stations serving the University, its multi-campus, and surrounding communities within an 18-county area with 24 hours a day of fine arts, public affairs, and educational programming. They are members of National Public Radio (NPR), American Public Radio, and Florida Public Radio.

**The WUSF and WSFP Radio Reading Service** broadcasts daily newspapers, magazines, and other materials from Tampa and Fort Myers for the "print handicapped" throughout Southwest Florida. A special receiver is loaned to qualified listeners, who hear over 200 volunteers read all programming in this 24 hours a day service. It airs on sub-carrier frequencies of WUSF and WSFP.

**Engineering** operates and maintains the four broadcast stations and provides the planning and design for their expansion and modification; provides the planning and design for the expansion of the ITFS system and other communications systems on the campus; and prepares and maintains FCC and FAA permits for all the transmission facilities operated by the Division.

**O.U. (Open University)** provides opportunities for everyone regardless of previous education to earn college credit via television and radio (WUSF-FM and/or WUSF-TV, WSFP-FM and/or WSFP-TV). Courses are approved by the Department of Education for teacher certification or recertification. Course offerings are announced prior to each semester.

### **University Computing Services**

The University of South Florida is the host institution for the Central Florida Regional Data Center. This facility operates as a computing utility within the State University System and provides administrative, instructional, and research computing support for the University and numerous other agencies. Charges are made at published rates on a "pay for services rendered" basis.

The University Computing Services professional staff includes instruction and research consultants who assist student and faculty users working on qualified projects. In the data systems area, services to University administrative units are delivered by project teams composed of systems coordinators, systems analysts, and programmers. The staff also consists of data entry, data control, and computer operations personnel and systems (software) technical specialists. Computing projects are established through UCS Financial Services.

Central site computing equipment located in the Student Services Building on the Tampa campus includes IBM 3081D and 3033 N systems with tape and disk storage subsystems, printers, and plotters. Remote batch job entry and on line keyboard terminals operate at various locations on campus. Remote access units and terminals are located at the St. Petersburg, Sarasota, Fort Myers, and Lakeland campuses. Terminals and other associated equipment are also maintained in "open use" areas to give students, faculty, and staff access to central site processing support. These remote open use areas may vary in scheduled hours of operation, but each provides significant access, often seven days a week.

### **Florida Mental Health Institute**

The Florida Mental Health Institute (FMHI) is a multidisciplinary training, research, education, and service facility at the USF Tampa campus. The mission of FMHI is to improve mental health services in the State of Florida. FMHI offers training programs, clinical experience, educational information, general and technical publications, and audio visual presentations to professionals in mental health and related areas, undergraduate and graduate students, and members of the general public. FMHI also provides training and community oriented programs in locales throughout the state.

The Institute's programs are conducted by five departments: Aging and Mental Health, Child and Family Studies, Crime and Delinquency, Community Mental Health, and Epidemiology and Policy Analysis.

Direct service programs function as sites for clinical demonstration and research and are designed as models for state and community agencies. FMHI provides residential treatment to approximately 62 persons of all ages who have severe mental or behavioral difficulties. Through its training and research projects, the Institute also offers day treatment to 120 persons, and out-patient and community adjustment services to approximately 200 persons. In cooperation with the Hillsborough County Public Schools, day treatment services are provided to 80 severely emotionally disabled youngsters attending the Colleen Lunsford Bevis School at the Institute.

The Institute's training programs emphasize practical clinical techniques and the application of theory to applied settings. Similarly, FMHI research focuses on finding the most effective, least costly, and highest quality means of delivering mental health services.

FMHI offers undergraduate and graduate students field placements, internships, research assistantships, and volunteer and part-time employment opportunities. Students may earn academic credit for clinical placements, internships, tutorials, or independent research participation performed at the Institute in conjunction with USF courses. The Institute cooperates and collaborates with other State University System units, and FMHI faculty teach undergraduate and graduate courses at the request of USF departments.

FMHI's library, media center, and publications program provide access to information relevant to mental health for students, faculty, mental health professionals, and the public.

The Institute is located in a complex of buildings at the northwest corner of the USF Tampa campus.





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## GRADUATE ADMISSIONS & RELATED MATTERS

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The Graduate School is administered by a Dean, assisted by an Associate Dean and an Assistant Dean, who coordinates the admission of graduate students to the University and the Graduate School, advises on the budgetary request and internal allocation of state funds for the support of graduate training, administers graduate fellowships, allocates graduate tuition, waiver scholarships, and presides with the President over the conferring of degrees.

### Admission to Graduate Study

Application forms for graduate study may be obtained from the Graduate Admissions Office. Because the University accepts applications as much as one year in advance, prospective graduate students are advised to apply early. Applicants whose credentials are not received by the deadline for a given program will not be considered for that semester. Some departments have earlier deadlines than those listed in the Academic Calendar. Students should check the requirements for the specific programs in which they are interested. A \$15 non-refundable application fee must accompany the application unless the student has been previously enrolled as a degree-seeking student and has paid the fee at the University.

Students who seek admission to a graduate degree program in the State University System as first-time or transfer graduate students shall be required to meet minimum system-wide requirements. Programs may impose more restrictive requirements if they so desire. These requirements are listed in the appropriate sections in this Catalog.

In order to be considered for admission, a first-time graduate student or a student transferring from a graduate program at another university must have a bachelor's degree or equivalent from a regionally accredited university, must take the Graduate Record Examination or an equivalent measure approved by the Board of Regents, and must meet at least one of the following criteria:

1. Shall have earned a "B" average or better in all work attempted while registered as an upper division student working for a baccalaureate degree, or
2. Shall have a total quantitative-verbal Graduate Record Examination General Test score of 1000 or higher, or an equivalent measure approved by the Board of Regents, or
3. Shall have earned a graduate degree from a regionally accredited institution.

Each student who seeks admission as a first-time or transfer graduate student will be required to present his or her score on the General Test of the Graduate Record Examination, or an equivalent score on an equivalent measure approved by the Board of Regents, to support the application for admission. The GRE may be waived in individual cases by the Dean of the Graduate School.

Applicants denied admission will be given timely notice in writing, including the reason for their rejection. Applicants denied admission who meet the minimum system-wide standards may write to the Director of Admissions within 30 days of the date of denial to request reconsideration by the department, col-

lege, and Dean of the Graduate School. The request will explain why, in the applicant's view, reconsideration is warranted.

Applicants from non-regionally accredited U.S. institutions may apply for special consideration for admission on an individual basis if they score at least 1000 on the quantitative-verbal portion of the GRE General Test, or 500 on the Graduate Management Admission Test (GMAT), and have a "B" average or better on all work attempted while registered as an upper division student working for a baccalaureate degree.

Evaluation of applicants for the College of Business Administration (except Economics) is based on a combination of indicators, including the Graduate Management Admission Test (GMAT).

Test scores are required of all applicants and must be received before the student will be considered for admission given five times a year and the GMAT four times at a multitude of centers in the U.S. and in many foreign countries. Candidates must register for this examination at least four weeks in advance of the test date and should allow six weeks for the receipt of their test scores.

Up to 10 percent of the graduate students admitted for a given academic year may be admitted as exceptions to the above criteria. Students admitted as exceptions need not meet any of the criteria listed above except the presentation of test scores, but should meet other criteria devised by the University, such as excellent letters of recommendation from trusted educators, satisfactory performance in a specified number of graduate courses taken as post-bachelor students, or practical professional experience in the discipline for a specific period of time.

Students with bachelor's degrees or equivalent who do not meet the system-wide criteria and who wish to enroll in courses, but not in degree programs, at the post-bachelor's level may enroll under the classification of non-degree seeking students. Colleges wishing to admit non-degree seeking student to graduate degree programs after the students have satisfactorily completed a certain number of credits may do so, provided that the number so admitted is included as part of the 10 percent exception.

If, on completion of one graduate degree, a student wishes to begin work on another advance degree at USF, the student must reapply through the Office of Admissions.

## **Procedure for Applying**

1. Applicants must submit a USF Application for Admission to Graduate Study and a \$15 non-refundable fee to the Office of Admission, Tampa Campus, prior to the University or program application deadline, whichever is earlier.
2. Two official transcripts from every institution of higher learning attended must be forwarded directly from the issuing institution to the Office of Admissions.
3. Admissions test results are required of every applicant. These must be sent directly from the testing agency to the Office of Admissions.
  - a. Graduate Record Examination General Test. All applicants, except those applying to Business Administration (see below), must submit scores from the GRE General Test taken within five years preceding application.
  - b. Graduate Management Admission Test (GMAT). All applicants to Business Administration, except those applying to Economics, must submit scores from the GMAT taken within five years

preceding application. Those applying to Economics must submit either the GMAT or the GRE General Test scores (see above).

4. Letters of recommendation may be required by the programs. (See the individual college section for particulars.)
5. All credentials must be received in the Admissions Office before the student will be allowed to register.
6. A student's acceptance to graduate standing is granted for the semester and the particular program specified in the official acceptance notification. The student must validate that acceptance by enrolling for that semester. If admission has not been granted because of a late application or missing credentials, or if the student does not enroll for that specific semester, the student must request that the Office of Admissions update the application for a future semester and specify the new enrollment date. This request must be made in writing within 12 months of the initial requested entry date. If a request for change of semester is not received in the specified time, a new application and fee must be submitted. Request for change in entry date must be received no later than the program or University deadline for the semester desired, whichever is earlier.

An applicant will be permitted to request change of entry date twice without fee. After the second request, a new application and another fee will be required.

### **International Applicants**

International applicants must have earned, in an institution of higher learning, a degree equivalent to a bachelor's degree from a regionally accredited university in the United States.

For all international applicants, the following items are required as part of the formal application and should be received by USF at least six months prior to the desired entry date. Submission of an application does not guarantee admission:

1. A completed USF International Student Application.
2. A \$15 non-refundable fee submitted with the application.
3. A letter of recommendation to the Director of Admissions from the last institution attended.
4. Three letters of recommendation sent directly to the program to which the student is applying, attesting academic performance and ability.
5. A certificate of financial ability showing proof of financial resources sufficient to cover tuition, fees, room and board, and other expenses for the full academic year. Travel costs must be assumed by the student. Students who have signed a statement indicating sufficient financial resources cannot expect the University to assume responsibility if their funds prove inadequate.
6. Applicants whose native language is not English are required to submit scores from the Test of English as a Foreign Language (TOEFL). A minimum of score of 550 is required for all colleges and programs. Applicants are responsible for making arrangements with the Office of Educational Testing Service to take the examination and to have their scores sent directly from the testing service to the Office of Admissions. Student copies are not acceptable.
7. All applicants to graduate programs (except those applying to the College of Business Administration) must submit scores from the Graduate

Management Admission Test (GMAT). Applicants for the program in Economics must submit scores from the GRE.

Application and information for the required tests may be obtained from the addresses listed below:

- a. For information and to obtain an application for the **Test of English as a Foreign Language:**

Test of English as a Foreign Language  
Educational Testing Service  
Box 899  
Princeton, New Jersey 08540, U.S.A.

- b. For information and to obtain an application for the **Graduate Management Admission Test:**

Graduate Management Admission Test  
Educational Testing Service  
Box 966  
Princeton, New Jersey 08540, U.S.A.

8. International applicants must request all schools attended to submit directly to the Office of Admissions transcripts of all work attempted. Transcripts and all other documents in a language other than English must be accompanied by a certified English translation signed and sealed by an authorized government or school official. Applicants must submit certificates, diplomas, and transcripts showing subjects and grades from the first year of university work to the time of application. Documents submitted will not be returned to the applicant or forwarded to another institution.
9. International applicants must complete a Pre-Entrance Medical History Form and return it directly to the USF Health Service.

### **Non-Degree Seeking Students**

Those interested in enrolling as non-degree seeking students are urged to contact the Coordinator of Graduate Studies in the college offering the courses for a description of requirements and procedures. The College of Business Administration has special procedures for non-degree seeking student registration; please refer to the College of Business Administration section of the Catalog for further information.

Those interested in enrolling as non-degree seeking students are urged to contact the Coordinator of Graduate Studies in the college offering the courses for a description of requirements and procedures. The College of Business Administration has special procedures for non-degree seeking student registration; please refer to the College of Business Administration section of the Catalog for further information.

### **Graduate Readmission (Former Student Returning)**

Degree-seeking graduate students who have not been in attendance at the University during the three semesters immediately preceding the semester that enrollment is desired should secure a Former Student Returning application from the Office of the Registrar. Any graduate degree-seeking student who has not been in attendance at the University for two years must reapply through the Office of Admissions by the appropriate deadline.

## **The Traveling Scholar Program**

The State University System's Traveling Scholar program enables a graduate student to take advantage of special resources available on another campus, but not on his/her own campus.

A Traveling Scholar is a graduate student who, 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 Traveling Scholar must be recommended by his/her graduate adviser, who will initiate a visiting arrangement with the appropriate faculty member of the host institution.

After agreement by the Dean of the Graduate School at the University of South Florida and the student's adviser and the faculty member at the host institution, deans at the other institution will be fully informed by the adviser and have authority to approve or disapprove the academic arrangement.

### **Course Registration for Admitted Students**

Course registration is conducted in person by appointment during both the regular registration and continuing registration periods each semester. Appointment times and registration instructions are published each semester in the University Class Schedule. Students are encouraged to register early to allow time for schedule adjustments by the colleges.

Students who register during continuing registration may make schedule adjustments by the colleges.

Students who register during continuing registration may make schedule adjustments during the drop/add period. (Deadline information is available in the Academic Calendar.)

Students who do not register for classes by the close of the regular registration period may register during late registration — the first week of classes. A \$25 late registration fee is charged for this privilege. (See the section on fees for additional information and the appropriate semester's University Class Schedule for dates.) Fees must be paid for all courses registered for at the end of the regular Drop/Add period (see Academic Calendar for dates).

## **Financial Aid**

### **Graduate Assistantships, Fellowships, and Out-of-State Waivers**

- (1) To be eligible to obtain a graduate assistantship or associateship, a student must be degree-seeking and be registered each semester for a minimum of 9 credit hours toward degree requirements.
- (2) Although normally only degree-seeking students registered for a minimum of 9 credit hours are eligible for appointment as graduate research assistants or associates, in special cases a research assistant or associate may be non-degree seeking for one semester only.

Graduate Assistantships and Associateships are awarded by the individual programs/departments. To be eligible, all beginning graduate assistants or associates must have a GRE score of 1000 or better and a GPA of 3.0 or better, unless granted special approval by the Dean of the Graduate School. All continuing graduate assistants and associates must maintain a graduate GPA of 3.0 or better.

The Graduate Council of the University of South Florida awards fellowships for graduate students. Graduate Council Fellowships provide stipends to outstanding beginning and advanced graduate students. A limited number are awarded each year on a competitive basis. Contact the Graduate School for information and application forms.

Graduate Registration Fellowships provide financial awards for beginning graduate students. Awards are made by the Graduate School on the basis of recommendations by program chairs. Contact the department or college for information.

The Florida Legislature provides funds for graduate tuition waiver scholarships to attract outstanding students. The details concerning these scholarships are available through the Graduate School.

The Federal Tax Reform Act of 1986 has substantially limited the extent to which scholarships/grants/fellowships and tuition waiver scholarships may be excluded from the recipients' income. Only those amounts received by degree seeking students, which are actually used in accordance with the conditions of the grant for course-related expenses, may be excluded from gross income, unless such amounts (including tuition reductions) represent payment for services rendered. Students who receive scholarships/grants/fellowships or tuition waiver scholarships are responsible for record keeping, filing, and for the payment of any income tax that may be due on such amounts.

## **External Graduate Scholarships and Fellowships Program**

The Graduate Scholarships and Fellowships Program advises USF current and prospective graduate students in identifying scholarship and fellowship opportunities not generated within USF. It assists students in applying for external awards to support graduate study at USF or at other universities in the United States and abroad. Some of the prestigious awards administered by this program include the Fulbright, Rhodes, the American Scandinavian Society, the German Academic Exchange Service, the Committee on Scholarly Communication with the People's Republic of China, Woodrow Wilson, American Association of University Women, Robert Bosch Foundation, Rockefeller Foundation, among many others.

Once an appropriate source of external funding is matched to a student's needs, qualifications, and background the Graduate Scholarships and Fellowships Program will assist at every stage of the application procedure, from counseling the student in completing the application, through campus screening, to submitting the application to the granting agency. Many graduate external awards include full tuition, a living stipend, travel and book expenses for a full year of study or research.

Normally, campus deadlines for submission of application for foreign study fellowships occur around the end of September, while deadlines for domestic awards vary but usually occur from October to December.

The Program maintains a current library of all announcements and applications for external domestic and foreign awards, as well as a computer search for helping students find awards. Students interested in identifying and applying for external graduate study awards should contact the Director of the Program, Dr. Silvia Ruffo-Fiore, or Information Specialist Cheryl Black, FAO 126 (mailbox), (FAO 148 — physical location), 974-2846.

## **University of South Florida Press**

The University of South Florida Press publishes quality works that reflect original scholarship, research and thought in the areas of fine art, natural science, social science, and liberal arts. Topics of local and regional interest and relevance are also published. Wide critical acclaim has greeted the increasing number of publications the USF Press has garnered, and these books have also enjoyed broad commercial appeal with many entering second or third printings.

The USF Press is governed by an editorial board which meets throughout the academic year and consists of distinguished professors from each of the colleges whose expertise encompasses a diverse, eclectic background. University of South Florida authors are encouraged to submit manuscripts and may obtain further information by contacting Dr. Silvia Ruffo-Fiore, Chairperson, USF Press Editorial Board, or Cheryl Black, Information Specialist, The Graduate School, FAO 126, Tampa (813) 974-2846.

## **Off-Campus Courses and Programs**

Graduate courses and programs at locations other than the Tampa, Fort Myers, Sarasota, St. Petersburg, and Lakeland campuses. The Academic Calendar for courses scheduled off-campus credit programs. Classes generally are scheduled once a week.

Both degree and non-degree seeking students may participate in off-campus programs. Degree-seeking students must, however, apply for admission to the University on a degree-seeking basis (see requirements for admission) at an early date, so that courses taken may be considered or inclusion in a program of studies (see appropriate college program).

Information on the availability of off-campus courses and programs and the procedure to be followed for enrollment should be obtained from the office of the dean of the college in which the courses or programs are offered.





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## FINANCIAL INFORMATION

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### Florida Residency for Tuition Purposes

This notice summarizes the provisions of 240.1205 Florida Statutes, BOR rule 6C-7.05 and University Policy/Procedure concerning Florida Residency for tuition purposes.

The law basically requires that an independent U.S. Citizen/permanent resident alien student or a dependent student's parent/legal guardian have established and maintained a LEGAL Florida Residency for at least 12 months before the first day of classes of the term for which Florida status is sought.

The University of South Florida is required to obtain documentation of 12 months legal residence before a student is classified as a Florida resident for tuition purposes. A student is required to request Florida residency in writing and submit supporting documents no later than the fifth day of classes in the term for which classification is sought.

The following is acceptable, non-conclusive evidence of the establishment of a legal residence in Florida. At least one such document must be dated/issued at least 12 months before the first day of classes of the term for which Florida residency is sought.

1. Proof of purchase of permanent home in Florida.
2. Declaration of Domicile.
3. Florida driver's license.
4. Florida voter's registration.
5. Florida vehicle registration.
6. Florida title.
7. Professional/occupational license in Florida.
8. Florida incorporation or other evidence of legal residence in Florida.

**PLEASE NOTE:** Rent receipts, leases, employment records, tax returns, school/college records are **NOT** evidence of establishing a legal Florida residence.

In rare cases, the law allows some students (e.g.: military, public school teachers, etc.) who do not meet the basic requirements to be classified as Florida residents for tuition purposes. Students who are dependent on out-of-state parents or who come to Florida for educational purposes are generally ineligible for reclassification to Florida status. For more information about exceptional categories, contact the Admissions Office, the Office of the Registrar, or the Office of the General Counsel.

### State University System Immunization Requirement

As of the Fall Semester 1986, the State University System of Florida requires all students to present acceptable proof of immunity to measles and rubella or to secure an approved medical or religious exemption as a condition of registration. All students born after December 31, 1956 must submit documented proof of immunity to measles. All students, regardless of age, must present documented proof of immunity to rubella. Acceptable proof of

immunity must be received prior to a student's being permitted to register. Students may present the document proof of immunization to:

**CAMPUS**

**ADDRESS**

**USF-Tampa**

Student Health Services  
University of South Florida  
CTR 321  
Tampa, FL 33620

**USF-St.Petersburg**

Records Office  
University of South Florida  
Bayboro Hall 126  
140 Seventh Avenue South  
St. Petersburg, FL 33701

**USF-Sarasota**

Office of Student Affairs  
University of South Florida/  
New College at Sarasota  
5700 N. Tamiami Trail  
Sarasota, FL 33580

**USF-Fort Myers**

Office of Admissions and Records  
University of South Florida  
at Fort Myers  
Royal Palm Hall  
8111 College Parkway S.W.  
Fort Myers, FL 33907

**USF-Lakeland**

State Road 540  
Lakeland, FL 33803

The required Immunization Form to be completed by students may also be obtained at the above locations.

Students registering only for off-campus courses in the following categories are temporarily exempt from the immunization requirement: Bachelor of Independent Studies (BIS), Open University (TV), FEEDS Program, Off Campus Term (OCT), Cooperative Education Work Assignments and Continuing Education and special workshop courses that meet off campus.

Medical questions or questions about acceptable proof may be directed to the Student Health Services, University of South Florida, CTR 321, Tampa, FL 33620 (813/974-2331).

**Fees**

The following fee schedule applies to all University of South Florida graduate students.

All fees are subject to change by action of the State Legislature, without prior notice. The University will make every effort to advertise any such changes if they occur.

- 1. **Initial Application Fee**  
(Each application — not refundable) ..... **\$15**

- 2. **Registration and Tuition Fee**  
Students will receive a schedule and bill at the time they register and each time they drop or add during the Drop/Add period. This bill must be presented when payment is made! The student is responsible for paying fees in full by the appropriate due date stated in the particular semester's "Schedule of Classes". Failure to do so will result in the student being assessed the \$25 late payment fee.

**A. Fee Structure (Approximated)**

Fees are assessed by course level — not student classification.

	<u>0-2999</u>	<u>3000-4999</u>	<u>5000-Up</u>	<u>THESIS</u>
Tampa In-State	\$40.00	\$40.00	\$70.00	\$70.00
Tampa Out-of-State	\$130.00	\$130.00	\$200.00	\$200.00
(Constant Health Fee 6 hours or greater all levels, TAMPA ONLY, \$34.00.)				
Sarasota In-State	\$40.00	\$40.00	\$70.00	\$70.00
Sarasota Out-of-State	\$130.00	\$130.00	\$200.00	\$200.00
(Sarasota includes \$1 per hour health fee charge.)				
St. Pete In-State	\$40.00	\$40.00	\$70.00	\$70.00
St. Pete Out-of-State	\$130.00	\$130.00	\$200.00	\$200.00
Fort Myers In-State	\$40.00	\$40.00	\$70.00	\$70.00
Fort Myers Out-of-State	\$130.00	\$130.00	\$200.00	\$200.00
Lakeland In-State	\$40.00	\$40.00	\$70.00	\$70.00
Lakeland Out-of-State	\$130.00	\$130.00	\$200.00	\$200.00

\*See "Resident Status" above.

**NOTE:**

- (1) There is no ceiling (maximum) on the amount that a student may be assessed for a single semester.
- (2) In addition to the above, each student who enrolls for six or more credit hours on the Tampa Campus must pay a \$34.00 student health fee for the semester. A student enrolling for five or fewer credit hours on the Tampa Campus may voluntarily pay the health fee by the end of the first week of classes.
- (3) Students who register only for a co-op assignment must pay a minimum of one (1) hour at the level of the co-op assignment.
- (4) *Cashier's Office Hours* —  
Regular Registration — See regular registration dates and times in University Class Schedule.  
Remainder of Semester — Monday through Friday, 9:00 a.m. through 3:00 p.m.
- (5) *Registration fee payment should be mailed to:*  
Division of Finance and Accounting  
University of South Florida  
4202 Fowler Avenue  
Tampa, Florida 33620
- (6) *I.D. Card Validation*  
Regular Registration— See regular registration dates and times in University Class Schedule for appropriate semester.  
Remainder of Semester — Monday through Friday, Cashier's Office, ADM 131, 9:00 a.m. through 3:00 p.m.; Accounts Receivable, ADM 176, 3:00 p.m. through 5:00 p.m.; Information Desk, University Center, 5:00 p.m. through 10:00 p.m.

**B. Off Campus Courses**

Students taking off-campus courses will be assessed the same fees as stated in "A" above, except for the Health Fee.

**C. Florida Public Interest Research Group Fee**

The Florida Public Interest Research Group (FPIRG) is a non-profit, non-partisan research and advocacy organization controlled and funded by Florida's college students. FPIRG conducts independent, policy-oriented research, monitors governmental and corporate actions affecting Florida residents, and advocates reforms that benefit the general public interest. FPIRG also provides students with the opportunity to combine their university education with meaningful public interest work.

The FPIRG fee was established through a petition drive in which a majority of students at the Tampa, New College and St. Petersburg campuses requested the assessment of a new fee to support such work. This fee of \$2.50 is assessed to all fee-paying students each semester on the Tampa, New College, or St. Petersburg campuses. However, any student may refuse to pay the fee if that student does not support the work of the organization. To refuse the fee, the student should initial the appropriate box on the registration form. Any student paying the fee can later request a refund from the FPIRG Office (Room 208 in the Andros Building) by appointment during the course of the semester.

**3. Late Registration Fee**

All students who initiate (i.e., those students who have not enrolled for any courses during early or regular registration) their registration during the late registration period will be automatically assessed a \$25 late registration fee. This is separate from the late payment fee.

**4. Financial Aid Payments**

Financial aid warrants are available, after registering during the first week of classes, in the Administration Building. Warrants must be picked up and fees paid by the end of the first week of classes. Any recipient not responding by the end of the first week of classes will be subject to a \$25 late payment fee, unless prior arrangements are made with the Loans and Scholarships Office.

**5. Late Payment Fee**

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 University Class Schedule printed each semester, or a late payment fee will be assessed. A \$25 late payment will be assessed to students whose registration checks are returned and not cleared by the specified payment deadline. The University can charge a maximum of \$25 in total late fees for a single semester.

**6. Cancellation for Non-Payment of Fees**

Students not on an authorized deferred payment plan and who have not paid their registration fees in full by the published deadline may have their registration for that semester cancelled. This means, specifically, that a student will receive no credit for any courses taken during that semester. Students who are allowed to register in error may have their registration cancelled. Any fees paid by that student will be refunded to the student or credited against other charges due the University.

**7. Intern Certificate of Participation**

Students who present Intern Certificates for payment of their registration fees will be required to pay \$3.76 per hour for all credit hours taken during the semester. By paying \$3.76 per credit hour and presenting an Intern Certificate, a student will be allowed to register for an unlimited number of credit hours during a given semester. These students will not be charged a Student Health Fee.

**8. Staff/State Employee Waivers**

Career Service employees of any state agency wishing to enroll in tuition-free courses should obtain a state waiver from their agency and complete it prior to registering. After registering during the state employee registration period, the state waiver and registration form should be brought to the Cashier's Office, ADM 131, during the first week of classes or a late fee of \$25 will be charged. Payment for thesis, dissertation, and directed individual study courses cannot be waived. All hours in excess of six must be paid for at the regular rate. State employees registering under this rule for 7 or more credit hours also shall pay the Student Health Fee.

**9. 60-Day Deferment for VA Students**

Students receiving VA benefits who have applied in writing no later than the specified date for the 60-day deferment of fees from the Office of Veteran's Affairs have until a date specified in the University Class Schedule to pay registration fees in full.

**10. Room Rent**

Room rent is paid in accordance with information in the Housing Contract:

Andros Per Semester <sup>1</sup> .....	\$595.00
Argos Per Semester <sup>1</sup> .....	\$560.00
Village Per Semester <sup>1</sup> .....	\$630.00

**11. Food Service**

The following food service plan options are available to all students:

15 Meal Plan per Semester <sup>1</sup> .....	\$665.00
20 Meal Plan per Semester <sup>1</sup> .....	\$715.00

<sup>1</sup>Subject to rate change.

**Refund of Fees**

Registration fees will be refunded under certain conditions upon presentation to the Division of Finance and Accounting of an authorization issued by the Office of the Registrar.

**1. Issuance**

The processing of a registration refund will be delayed for a two-week period immediately following the last day to pay fees without a late fee.

**2. Withdrawals/Drops**

A. When officially requested by a student, registration fees will be refunded in full if a student withdraws from the University or drops classes on or before the final day of the regular Drop/Add period.

B. Registration fees will not be refunded if the student withdraws/drops after the final day of the Drop/Add period, except in the following cases:

- (1) University action beyond the student's control (i.e., cancellation of course(s), course prerequisites not met, misadvisement, administrative error, etc.) with supporting explanatory statement on University letterhead from the

appropriate official. All course fees will be refunded, but requests must be made by the end of the term immediately following the term in which the errors/action occurred.

- (2) Withdrawals for non-exceptional circumstances from all classes after the end of the Drop/Add period, but prior to the end of the fourth week of classes. In these cases, the refund is partial and is calculated as follows: (Total Course Fees minus the Health Fee, Late Fee, and \$3.76 per credit hour) x 25% = Refund. Students must complete a Refund Request Form in the Office of Finance and Accounting for this category of refunds.
- (3) Drops or withdrawals from courses for exceptional circumstances during the second week of classes. A detailed explanatory statement and documentation must be attached to a Fee Adjustment Form and must be submitted to the Office of the Registrar by the end of the second week of classes. These exceptional circumstances must be acknowledged by the University as being well beyond the control of the student. In these cases the refund, if approved, is partial and is calculated as follows: (Total Course Fees minus the Health Fee, Late Fee, and \$3.76 per credit hour) x 80% = Refund.
- (4) Drops or withdrawals from courses for exceptional circumstances after the end of the second week of classes, but prior to the end of the eighth week of classes. A detailed explanatory statement and documentation must be attached to the Fee Adjustment Form and the request must be submitted to the Office of the Registrar during the third week through the eighth week of classes. These circumstances must also be acknowledged by the University as being well beyond the control of the student. In these cases the refund, if approved, is partial and is calculated as follows: (Total Course Fees minus the Health Fee, Late Fee, and \$3.76 per credit hour) x 50 = refund.

In no case will a fee adjustment be made for exceptional circumstances after the end of the eighth week of classes.

### 3. Cancellations

- A. A student who at any time has his/her registration cancelled by the University because she/he was allowed to register in error is entitled to a full refund of his/her registration fees.
- B. A student may be cancelled by the University when registration and tuition fees are not paid in full by the last day of the regular Drop/Add period (first week of classes), except when a deferment is granted by the University.

### 4. Reduction of Class Load

A student must officially drop a course within the Drop/Add period in order to be eligible for a refund. A "Registration Refund Request" form must be completed and presented to the Division of Finance and Accounting before any refunds will be initiated. The refund will be the amount paid, less proper charges per hour for each hour continued.

### 5. Late Fees

Late registration fees are not refundable.

## 6. Refund Monies Used to Clear University Debts

Unpaid accounts due the University will be deducted from authorized refunds.

### Payment of Accounts Due the University

Charges against students for loss or breakage of University equipment or books, fines, and other charges are due immediately. Delinquent accounts may be considered sufficient cause for cancellation of registration. University regulations prohibit registration or release of transcript for any student whose account with the University is delinquent. Payments should be brought to the Cashier's Office in the Administration Building. Payments may be mailed to Finance and Accounting, University of South Florida, Tampa, 33620.

### Financial Aids

Information on student loans and the College Work Study program are available directly from the Financial Aids Office.

Information on external financial support for graduate study is available from the Graduate Scholarships and Fellowships Program Office, FAO 126.

### Vehicle Regulations and Fees

#### Motor Vehicles

Students may use properly registered motor vehicles on any University campus. Parking facilities are provided for resident and commuter students. All motor vehicles and bicycles used on campus must be registered with the campus Parking Services Department, Division of Public Safety. This applies to full time or part-time, day or evening students. To register a vehicle a valid staff, student, or employee identification card (which forms the basis for the type of tag to be issued) will be required. State vehicle registration, indicating owner of vehicle, must be shown to the clerk of the Parking Services Department on request. A booklet entitled "USF Traffic and Parking Regulations" will be issued to each student on registering a motor vehicle. Registration fees (unless changed by State statute) for three or four-wheeled motor vehicles will be \$40.00 for an academic year.

Yearly fees for students registering after the first semester will be adjusted proportionally. Students may park in remote areas for a lesser fee. All decals expire on 30 August of the academic year.

#### Motorcycles

The fee for motorcycles and mopeds will be \$7.00 per year no matter what time of year they are registered.

#### Bicycles

There is no fee for registering bicycles. A booklet entitled "USF Bicycle Traffic and Parking Regulations" will be issued to each student registering a bicycle.

#### Handicapped

All staff/students with physical disabilities which impede walking may apply to the Parking Services Department of the local campus for a numbered handicapped sticker. Persons will receive vehicle registration decals free of charge if they are wheelchair-bound, legally blind, hold a current State of Florida H.C. Parking Permit, or have military disability of 50% or greater with V.A. certificate or letter. Other disabled registrants will pay the regular fee. Wheelchair-bound registrants are entitled to an exclusively numbered H.C.



parking space. Other H.C. registrants shall share spaces marked Reserved Handicapped OMNI.

### **Evening Students**

Vehicle registration requirements and fees apply to evening students as well as day students.

## **Special Services**

### **Veterans Administration Benefits**

The University of South Florida is approved for the education of veterans, service members, and certain dependents of veterans, service members, and certain dependents of veterans who are eligible for benefits under public laws now in effect. All degree programs currently offered at USF are approved by the State Approving Agency.

Students who may be eligible for benefits are urged to contact the Office of Veterans Affairs for information, procedures, and forms as early as possible. To initiate, change, or renew benefits at USF, a request must be submitted through that office.

To be eligible for full-time VA benefits at USF, non-degree seeking students must enroll for 12 or more semester hours, and degree-seeking graduate students must enroll for 9 or more semester hours each regular academic semester.

VA regulations require that students take only courses that are applicable to their degree programs or other approved program, that they attend classes, and that they make satisfactory progress toward their degrees. There are many other VA rules and regulations of which students should be aware, including those regarding the following: double major, double degree, major/minor programs, Cooperative Education program, dual enrollment at two institutions, non-degree seeking student enrollment, courses/programs offered off campus, graduate student enrolled in undergraduate courses, independent study courses, open circuit television courses, courses taken by audit (no benefits), and non-punitive grades ("W", "U/U", "I" — unless removed within a calendar year). It is the student's responsibility to inquire concerning all VA rules and regulations and to report any change in status that affects his/her benefits. Additionally, VA benefits will be terminated for students who are dismissed for academic or disciplinary reasons and can only be reinstated after counseling, and approval by the VA.

Veterans with a service-connected disability requesting benefits under Chapter 31 must present a VA Authorization form for the effective period of enrollment at USF. Those students may contact the Office of Loans and Scholarships no earlier than the respective semester's regular registration date for a book slip and ID card validation.

Other VA benefits include additional amounts of compensation and pension, which may be payable to eligible veterans and widows or widowers of veterans for the enrollment of dependent children. The students, parents, or guardians are responsible for notifying the VA Regional Office (where the veteran's records are located) directly of enrollment and termination of enrollment.

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## STUDENT SERVICES & STUDENT AFFAIRS

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The University of South Florida is committed to the concept of total student development — intellectual, social, physical, and moral. The curricular, co-curricular, and extracurricular programs of the University are designed to achieve this end and to offer USF students a wide variety of beliefs, opinions, and ideas in an atmosphere of openness and candor. The programs and activities developed and implemented by the Student Affairs staff at the University of South Florida are intended to improve the quality of life at the University and to meet the University's goal of total student development. The programs of the University are presented according to guidelines established by the Florida Board of Regents (Section 6-c, Administrative Code of Florida).

Students who attend the University of South Florida are admitted to the University under the Regents' guidelines, as well as under the policies and procedures of the University. University officials, particularly the Vice President for Student Affairs and his staff, are charged with interpreting the policies of the Board of Regents to students, their families, and others in the University community.

### Division of Students Affairs

The Vice President for Student Affairs and the Student Affairs staff strive to provide a campus environment that is conducive to learning and that enhances the quality of life for students at the University. The Student Affairs staff also offers services to students to help them cope more effectively with the many facets of college life that can affect students' academic work: financial aids, health service, individual and/or group counseling, alcohol/drug education, child care, career planning, bookstore, procedures for redressing grievances, standards for students' conduct, due process in the event of disciplinary action, and advice and/or assistance in time of trouble. A variety of programs and activities are offered by the Student Affairs staff to provide students opportunities to become involved in campus life outside the classroom: orientation for new students, residence halls, student organizations and University Center programs and activities, student publications, intramural and recreational sports, intercollegiate athletics, the Sun Dome, and events of special interest.

The Office of the Vice President for Student Affairs is responsible for notifying all involved parties in the event of the death of a student.

### Standards and Discipline

Just as the University maintains high standards of academic performance, the 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 community.

Self-discipline and sensitivity to the rights of others are the principal elements of University discipline. The University 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 his/her responsibility in an acceptable manner or commits an offense as outlined in the Student Handbook. University disciplinary procedures afford

students the opportunity to discuss alleged infractions and to defend themselves, to seek counsel in their own best interest, and to exercise the right of appeal. Students are entitled to participate in the development of standards of conduct supporting their interests and the purposes of the University. University disciplinary procedures are described in the Student Handbook.

Students often have asked for advice on standards of dress and personal appearance. The University does not have a formal dress code, but campus attire is expected to be appropriate for the activities in which the individual is engaged.

## **Student Government**

All regularly enrolled students are voting members of the Student Government of the University of South Florida. They elect Student Government officers and student representatives to the S.G. Senate and college councils. Student Government is an agency representing student interests in programs, plans, policies, and procedure of the University, and in securing student representation to University governance. The Student Government office oversees the Activity and Service Fee Fund, offers free legal referral assistance by a staff or attorneys, and aids students with off-campus housing (apartment listings, roommate service, etc.) To receive an off-campus housing list, mail a self-addressed, stamped envelope to the Student Government office. Other areas, such as academic grievances, minority problems, health and accident insurance, refrigerator rental, and programming productions, also are managed in the Student Government office.

## **Academic Dishonesty and Disruption of Academic Process**

Students attending the University of South Florida are awarded degrees in recognition of successful completion of course work in their chosen fields of study. Each individual is expected to earn his or her degree on the basis of personal effort. Consequently, any form of cheating on examinations or plagiarism on assigned papers constitutes unacceptable deceit and dishonesty. Disruption of the classroom or teaching environment is also unacceptable. This cannot be tolerated in the University community and will be punishable, according to the seriousness of the offense, in conformity with established rules and procedures.

### **I. PLAGIARISM**

Plagiarism is defined as "literary theft" and consists of the unattributed quotation of the exact words of a published text, or the unattributed borrowing of original ideas by paraphrase from a published text. On written papers for which the student employs information gathered from books, articles, or oral sources, each direct quotation, as well as ideas and facts that are not generally known to the public at large, or the form, structure, style of a secondary source must be attributed to its author by means of the appropriate citation procedure. Only widely known facts and thoughts and observations original to the student do not require citations. Citations may be made in footnotes or within the body of the text. Plagiarism also consists of passing off as one's own any portion of another person's work.

#### **Punishment:**

The student who submitted the plagiarized item shall receive an "F" with a numerical value of zero on the item(s) submitted, and the "F" shall be used to determine the final course grade. The instructor has the option to fail the student in the course.

## II. CHEATING

Cheating is defined as: (1) the unauthorized granting or receiving of aid during the prescribed period of a course-graded exercise: students may not consult written materials (notes or books), may not look at the paper of another student, nor consult orally with any other student taking the same test; (2) asking another person to take an examination in his or her place; (3) taking an examination in behalf of another student; (4) stealing visual concepts and presenting them as one's own (e.g. drawings, sketches, diagrams, musical programs and scores, graphs, maps, etc.); (5) stealing, borrowing, buying, and/or disseminating tests, answer keys, and/or other examination material except as officially authorized, research papers, creative papers, speeches, etc. (6) Stealing (copying) of computer programs and presenting them as one's own. Such stealing includes the use of another student's program, as obtained from the magnetic media (or interactive terminals) or from cards, print-out paper, etc.

### **Punishments:**

- 1) Communicating or exchanging test information with other students during the course of a classroom test. Punishment: The students who receive or give such information shall receive an "F" with a numerical value of zero on the test(s), and the "F" shall be used to determine the final course grade. The instructor has the option to fail the student in the course.
- 2) The use of any prohibited device (such as a cheat sheet, recording, calculator if forbidden on exam, etc.) during the course of a classroom test to assist the student or other students. Normal punishment: "F" in the course.
- 3) The use of another student (a stand-in) to take an examination for the enrolled student. Normal punishment: "F" in the course and suspension from school for one year for the enrolled student. The stand-in, if a University student, shall also be suspended from school for one year.
- 4) The stealing, borrowing, or buying of research papers, creative works/papers, speeches and/or tests and other exam materials, or the receipt of or dissemination of such materials, or the manipulation of recorded grades in a grade book or other class records. Normal punishment: "F" in the course (if enrolled) and expulsion from the University.
- 5) Stealing of computer programs. Punishment: Students who receive or give such programs shall receive an "F" with a numerical value of zero on the program(s), and the "F" shall be used to determine the final course grade. The instructor has the option to fail the student in the course.

The University drop/withdrawal policies and/or forgiveness policy shall be suspended for a student accused of plagiarism and/or cheating.

## III. DISRUPTION OF ACADEMIC PROCESS

Disruption of Academic Process is defined as the act(s) or word(s) of a student in a classroom or teaching environment that in the reasonable estimation of a faculty member direct attention from the academic matters at hand (e.g., noisy distractions; persistent, disrespectful or abusive interruptions of lecture, exam or academic discussions) or present a

danger to the health, safety, or well being of the faculty member or students.

**Punishment:**

Punishment will depend on the seriousness of the disruption and will range from a private verbal reprimand to dismissal from class with a final grade of "W" shown on the student record, if the student is passing the course. If the student is not passing, a grade of "F" will be shown on the student record.

**Student Violations Involving Alleged Academic Dishonesty/And Disruption of Academic Process**

Alleged violations of academic honesty or alleged disruptions of academic process will be handled initially by the instructor, who will discuss the incident with the student: It must not be noted that the Faculty Senate considers the traditional relationship between student and faculty member as the primary means of settling disputes that may arise. If the instructor observes the alleged dishonesty during an examination, he/she should, with discretion, notify the student of the fact before the student leaves the examination. In all cases, the instructor must attempt to schedule a meeting with the student to discuss the alleged dishonesty and advise the student in writing of the procedures involved. (If the student fails to keep the appointment, the instructor shall file a report outlining the incident with the chairperson of the department responsible for the course.)

If the student and instructor agree on a solution to the problem, the instructor shall file a statement with the chairperson of the department responsible for the course, outlining the facts of the incident and the mutually accepted solution, the statement shall be signed by both the instructor and the student. A copy of this statement shall be given to the student. If no solution is reached, both the student and the instructor must file separate statements with the dean of the college that offers the course, with copies to the appropriate chairperson and each other. (If a student fails to file such a statement within a reasonable time, the instructor will initiate the implementation of the proper punishment.) A meeting of the instructor, the student, and the chairperson shall be arranged. If this meeting fails to bring about a satisfactory solution, the student shall ask for a meeting with the dean, with the instructor present. If no solution is reached, the dean shall appoint a student/faculty committee consisting of an equal number of students and faculty to hear the two sides of the incident and to advise the dean regarding the disposition of the case.

**Academic Committee Pre-Hearing Procedure:** Within a reasonable time following the failure of the student/instructor/dean meetings to bring about a solution, and in no event later than three (3) months after such failure, the dean shall cause formal charges to be filed with the appointed academic committee. The charged student shall be provided with a written notice of charges, in sufficient detail to prepare for the hearing, no less than three (3) days before the hearing, except in cases of emergency.

**Emergency Hearings:** An expedited emergency hearing may be held before an academic administrator appointed by the dean or by the appointed academic committee in cases which involve the safety, health or welfare of any student or staff member.

**Non-Emergency Hearings before the Academic Committee — General Principles:**

- a) **Burden of Proof:** The burden of proof shall be on the complainant. The standard of proof for decision shall be "substantial evidence," that is,

whether it is reasonable to conclude from the evidence submitted that the student did commit the violations for which he/she has been charged and shall not be the strict criminal law standard of proof "beyond a reasonable doubt" .

- b) Record: The proceedings of all hearings shall be recorded.
- c) Inspection of Evidence: The student may inspect the evidence that will be presented against him/her.
- d) Present Evidence: The student may present evidence on his/her own behalf.
- e) Question Witnesses: The student may hear and question adverse witnesses.
- f) Self-Incrimination: The student will not be forced to present testimony that would be self-incriminating.
- g) Advisor: The student may have an advisor of his choice present.
- h) Decision Based on Evidence: The decision of the academic committee or appointed academic administrator shall be based solely on the evidence presented at the hearing.
- i) Decision in Writing: The decision of the academic committee or appointed academic administrator, including findings of fact and a determination of penalty or sanction if any, shall be presented to the student in writing within a reasonable period of time following the hearing.
- j) Enrollment Status: The student's enrollment status will remain unchanged pending final decision, except in cases of emergency, as described above. If the issue remains open at the end of the semester, the instructor shall give the student an "I" grade in the course until all issues are resolved.
- k) Closed Hearings: All hearings shall be close unless specifically requested otherwise in writing by the charged student prior to hearing.
- l) Failure to Appear: If a student against whom charges have been made fails to appear, the academic committee or academic administrator may proceed in his/her absence.
- m) Hearing on Appeal: The charged student may appeal the decision of the academic committee or appointed academic administrator within thirty (30) working days of decision to the Dean of the Graduate School. The record of the initial hearing may be considered on appeal and the student is entitled to access to the record when appealing. The decision of the Dean of the Graduate School is final.

### **Limited Access Student Records**

Student records in University custody are generally held confidential and are released only to those persons and under those circumstances authorized by law.

### **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 the University of South Florida (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, full and part-time

status, 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 members of the public, as well as to other students and members of the faculty and staff.

Students must inform the USF Office of Records & Registration in writing (on forms available for that purpose), if they wish Directory information to be withheld. Such requests will be effective until notice to the contrary is received by the Office of Records & Registration.

Notification to the University of refusal to permit release of "directory information" must be received no later than the end of the first week of classes in the Fall Semester.

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## COLLEGE OF ARTS & LETTERS

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The College of Arts and Letters studies culture in the broadest meaning of the word. The College offers students a sense of themselves and their world, chiefly through courses and programs involving human expression and communication. Students not only receive a liberal education, but also explore vocational interests as they develop both the breadth of knowledge and precision of mind necessary for responsible leadership in our society.

More specifically, the College seeks:

1. To help students investigate new subjects, thereby generating fresh ideas and developing talents enriching to life.
2. To enable students to experiment in several fields as a means of determining the best vocational choice.
3. To foster sufficient development within certain vocational fields to enable students to advance in their chosen careers upon graduation.
4. To join with the other colleges of the University in providing liberal arts courses to augment required training in professional schools.
5. To cultivate independent thinking, creative imagination, and value commitment, so that students may become constructive leaders in their chosen fields.

Accordingly, the College is concerned with arts and letters, both as instruments and as ends in themselves. Language, literature, philosophy, the forms of communication, interdisciplinary studies, and other humanistic subjects are studied not merely for their utility, but also for their intrinsic merit and for what they tell us about what is permanently and universally significant to mankind.

## Graduate Degree Programs

### Master's Degree Programs

The College of Arts and Letters offers graduate programs leading to the master's degree in:

- American Studies (AMS)
- Classics (Cooperative, University of Florida)
- Communication (SPE)
- English (ENG)
- French (FRE)
- Liberal Arts (MLA)
- Linguistics-English as a Second Language (ESL)
- Mass Communications (COM)
- Philosophy (PHI)
- Religious Studies (REL)
- Rhetoric and Composition (ENG)
- Spanish (SPA)

The University requirements for graduate work at the master's level apply. Department requirements are listed under the appropriate program descriptions.



## Doctor of Philosophy

The Department of English offers a program leading to the degree of Doctor of Philosophy. The University requirements for graduate work at the doctoral level apply. Specific requirements for the degree are listed under the Department of English.

## Program Descriptions

### American Studies (AMS)

#### Requirements for Admission

An applicant must (1) meet the general admission requirements of the University; (2) have an academic average of "B" or better in all work attempted during the junior and senior years, or a total score of 1000 or better on the GRE General Test; (3) demonstrate (to the American Studies Graduate Committee) a satisfactory knowledge of United States history, literature, and government. In some cases, students may be required to take extra undergraduate courses before admission.

Students desiring to do graduate work in American Studies must interview with a departmental adviser.

#### Requirements for the M.A. Degree

**Course Work and Thesis: Total required hours . . . . . (33):**

1. 9 hours: AMS 6254, AMS 6805, AMS 6938.
2. 18 hours: To be selected from 5000 or 6000 level courses in related departments, such as: History, Philosophy, English, Sociology, and Humanities. No more than 6 hours from any one department may be credited toward the degree. Work in AMS 6901, AMS 6915, AMS 6934 may be included.
3. 6 hours: Thesis 6971.

**Other Requirements:** During the last semester of course work, each candidate must take a written examination on selected topics, illustrating major aspects of civilization in the U.S.A. from colonial times to the present. Upon completion of the thesis, the subject of which must be determined in consultation with the Graduate Adviser, the student must take an oral examination which may include relationships between thesis and material covered on the written examination.

### Classics (CLA)

USF's Department of Classics is associated with the Classics Department at the University of Florida in a Cooperative Masters Program leading to the master's degree. For a full description of this arrangement, contact the department.

### Communication (SPE)

The Department of Communication is committed to a broad and integrated view of communication studies that embraces the traditions of the humanities, the convergence of rhetorical and communication theory, and the relations among aesthetic, humanistic, and scientific approaches to inquiry. Students are encouraged to examine the pragmatics of rhetorical and communication theory in such settings as business and industry, government,

education, medicine and health care, media, the arts, and the family. The department offers course work leading to the Master of Arts degree.

**Requirements for Admission**

Admission requirements for degree-seeking students shall include all University, college, and department requirements. Candidates who meet the admission requirements may be admitted upon recommendation of the Graduate Committee of the department. An applicant must have the following:

1. A baccalaureate degree in Communication or related field from an accredited college or university;
2. A minimum 3.2 grade point average in all work attempted while registered as an upper division student working for a baccalaureate degree, or a minimum quantitative/verbal score of 1000 on the GRE General Test. Applicants are advised that 3.2 GPA and the 1000 GRE score do not guarantee admission to the program. Applicants not meeting the minimum GPA or GRE requirements may petition the Graduate Committee for an exception. All candidates must take the GRE, regardless of GPA;
3. Two letters of reference from undergraduate professors with whom the candidate has studied during the last two years of the B.A. program;
4. A substantive undergraduate research paper (or other evidence of writing ability) focusing on a topic appropriate to the rubric of communication;
5. A letter of application.

No more than 6 hours may be transferred from another institution.

**Requirements for the M.A. Degree**

- I. Core Requirements . . . . . (12 hours):**
  - COM 6001 Introduction to Graduate Study in Communication . (3)
  - SPC 6231 Rhetorical Theory . . . . . (3)
  - SPC 6400 Communication Theory . . . . . (3)
  - ORI 6930 Communication Aesthetics . . . . . (3)

COM 6001 must be taken the first time it is offered after the student is admitted to the graduate program. Remaining core courses must be completed within the first three semesters of admission, summer semester excepted.

**II. Program Plans**

- A. Thesis Program . . . . . (30 hours total)  
In addition to the 12 hours of core requirements specified above, each student will complete 15 hours of elective course work, 6 hours of which may consist of a course or courses from other departments within this or other universities, and must have adviser approval. Each thesis student must complete at least 3 hours of thesis credit and submit an approved thesis.
- B. Non-Thesis Program . . . . . (36 hours total)  
In addition to the 12 hours of core requirements specified above, each student will complete 24 hours of elective course work, 9 hours of which may be taken as a cognate area of study pending adviser approval and an approved plan of study.

**Grades and Grading.** Students must achieve a 3.1 GPA or higher by the conclusion of their first 18 hours of courses. Students with cumulative GPAs of less than 3.1 within the first 18 hours of courses will be placed on probationary status within the program. To be eligible for graduation from the program, the

student must achieve an overall GPA of 3.2 or higher within the total minimum hours required for the degree program. No grade below "C" will be acceptable toward a graduate degree, but all grades received will be included in computing the overall GPA. Students may not graduate with more than two "C" grades within their program.

**Comprehensive Examinations.** All students must pass both written and oral comprehensive examinations.

## English (ENG)

### Requirements for the M.A. Degree

The M.A. in English is designed primarily to train college teachers. The program requires study of both literature and composition.

### Requirements for Admission

Admission to the English Master's Degree Program is dependent upon the applicant's previous academic performance, GRE scores, recommendations of former instructors, and the approval of the departmental graduate committee. To be considered for fall admission, application must be made by June 1; for spring (January) admission, by November 1; for summer admission, by March 1.

A successful applicant will normally be expected to meet the following minimum requirements:

1. An overall GPA of 3.0 for the last two years of college work.
2. An undergraduate English major completed with a GPA of at least 3.3.
3. A GRE General Test score of at least 1000.

In addition, an applicant must have three letters of recommendation from former literature instructors sent to The Director of Graduate Studies, Department of English, University of South Florida 33620.

### Course Requirements:

1. ENG 6009 ..... (3)  
(this must be taken early in the sequence).
2. 30 additional credit hours, which must include:
  - a) LAE 6375 ..... (3)
  - b) One of these:
    - ENL 6206 ..... (3)
    - ENL 6227 ..... (3)
    - ENL 6216 ..... (3)
    - ENL 6228 ..... (3)
  - c) One of these:
    - ENL 6236 ..... (3)
    - ENL 6256 ..... (3)
    - ENL 6246 ..... (3)
  - d) One of these:
    - AML 6017 ..... (3)
    - AML 6018 ..... (3)
  - e) LIT 6934 ..... (3)
  - f) ENG 6018 ..... (3)
  - g) ENG 6971 (Thesis) ..... (3)

**Options.** A student may transfer from another university up to 6 hours of graduate credit. He/she may take up to 6 hours of credit in another department

(the courses to be approved in advance by the Department of English Graduate Committee).

A student receiving one grade of "C" or lower in a graduate course will be placed on academic probation. A student receiving two grades of "C" or lower will be eliminated from the program, subject to a review by the student's graduate advisory committee.

**Comprehensive Examination.** There will be a comprehensive examination. The student will be asked to write on three of the following five areas:

1. British literature before Shakespeare.
2. British literature from Shakespeare to 1740.
3. British literature from 1740 to 1900.
4. American literature before 1900.
5. Twentieth Century American and British literature.

Students who wish to be recommended for admission to the Ph.D. program must take a later examination on the other two areas.

### **Requirements for the M.A. in English with a Specialization in Rhetoric and Composition**

The specialization in rhetoric and composition allows students to do half their M.A. work in this area. The program is designed to train college teachers.

### **Requirements for Admission**

See M.A. Program above.

### **Course Requirements**

1. ENG 6009 ..... (3)  
(this course must be taken early in sequence)
2. LAE 6375 ..... (3)
3. ENC 6336 ..... (3)
4. Two of the following:
  - ENC 6300 ..... (3)
  - ENC 6700 ..... (3)
  - ENC 6720 ..... (3)
  - ENC 6017 ..... (3)
5. LIT 6934 ..... (3)
6. One of the following:
  - AML 6017 ..... (3)
  - AML 6018 ..... (3)
7. One of the following:
  - ENL 6206 ..... (3)
  - ENL 6216 ..... (3)
  - ENL 6227 ..... (3)
  - ENL 6228 ..... (3)
8. One of the following:
  - ENL 6236 ..... (3)
  - ENL 6246 ..... (3)
  - ENL 6256 ..... (3)
9. One elective in American or British literature.
10. ENG 6971 Thesis ..... (3)  
(on a Rhetoric and Composition Subject)

**Options.** A student may transfer from another university up to 6 hours of graduate credit. He/she may take up to 6 hours of credit in another department (the courses to be approved in advance by the Department of English Graduate Committee.)

A student receiving one grade of "C" or lower in a graduate course will be placed on academic probation. A student receiving two grades of "C" or lower will be eliminated from the program, subject to a review by the student's graduate advisory committee.

**Comprehensive Examination.** Students in this program must pass a comprehensive examination on which half the questions concern rhetoric and composition and half concern literature.

### **Requirements for the Ph.D. Degree**

The goal of this program is to produce teacher-scholars who have a good general knowledge of English and a special knowledge in their fields of concentration. Each student in the program must take courses in teaching college English; these courses include actual teaching experience.

**Requirements for Admission** to the program are dependent upon the applicant's previous academic performance, GRE General Test scores, recommendations of former instructors, and the approval of the departmental graduate committee. To be considered for fall admission, application must be made by June 1; for spring (January) admission, by November 1.

A successful applicant normally will be expected to possess the following minimum qualifications:

1. A GRE General Test score of at least 1000.
2. One of the following:
  - a. A USF M.A. in English with a grade of 1 or 2 on the English M.A. final exam and a graduate GPA of 3.5;
  - b. An M.A. in English from another university (with a graduate GPA of 3.5), in which case the student may be asked to pass a preliminary qualifying exam;
  - c. An M.A. in another discipline, in which case the student will be required to take supplementary graduate work and pass a preliminary comprehensive exam before being officially admitted to the program.

In addition, an applicant must have three letters of recommendation sent to the Director of Graduate Studies, Department of English, University of South Florida, 33620. At least two of these letters should be from instructors who have taught the applicant at the graduate level.

### **Program Requirements**

The Ph.D. in English involves a minimum of 30 hours of course work beyond the M.A. degree, exclusive of credits devoted to the doctoral dissertation. Included in these hours must be ENG 6009 (Bibliography) or its equivalent (if not taken on the master's level), LAE 7376 (Problems in Advanced English Instruction and Scholarly Research), ENG 6018 (Scholarship and Criticism) and ENG 7939 (Doctoral Seminar), which must be taken twice. A minimum of 90 semester hours beyond the bachelor's degree is required for completion of the Ph.D. In addition, each student must fulfill the University's Graduate School foreign language/tools-of-research requirements. A dissertation is required.

After completing the necessary course work (which will be selected after consulting with his or her advisory committee), a student must take a nine-hour written doctoral comprehensive exam. Students passing this exam and fulfilling the foreign language/tools-of-research requirements are admitted to

doctoral candidacy. Students failing this exam more than once are removed from the program.

After completion of an approved dissertation, the student will defend this dissertation in a two-hour oral examination and may be examined as well on his/her major field. The doctoral degree is awarded after successful completion of the dissertation and the dissertation defense.

A student may transfer from another university no more than 6 hours of graduate credit. No more than 8 hours of credit may be taken in another department (the courses must be approved in advance by the Department of English Graduate Committee).

A student receiving one grade of "C" or lower in a graduate course will be placed on academic probation. A student receiving two grades of "C" or lower will be eliminated from the program, subject to a review by the student's graduate advisory committee.

## **Foreign Languages (FRE/SPA)**

### **Requirements for Admission**

General University requirements for graduate work apply. Students who do not have an undergraduate major in French or in Spanish may be required to take additional undergraduate courses before being admitted to the M.A. program. The student must have a 3.0 ("B") grade point average for the last two years of undergraduate work attempted, or a total score of 1000 on the GRE General Test. All applications must be approved by the Division of Language.

### **Requirements for the M.A. Degree**

For a Master's degree in French or Spanish, the following are required:

1. Reading proficiency in a second foreign language.
2. Satisfactory completion of a written comprehensive examination on French language and literature, or Spanish and Spanish-American language and literature, based on, but not restricted to, a reading list.
3. A thesis written under the direction of a director and two additional readers.
4. Course work following one of the plans listed below:

#### **Plan A**

27 hours in one language, plus 6 hours of FRE 6971 or SPW 6971 (thesis).

#### **Plan B**

A total of 27 hours, consisting of 18-21 hours of course work in one language, plus 6-9 hours in a second language or in another department (the courses to be approved in advance by the Director of the Division of Language), plus 6 hours of FRE 6971 or SPW 6971 (thesis).

The Division of Language also sponsors a special 3-summer M.A. track for teachers, with a non-thesis option.

## **Special Academic Programs in France and Spain**

The Division of Language, in cooperation with the Center for International Affairs, offers several study options in France, Italy, and Costa Rica. An additional program in Spain is under consideration. In France and in the proposed program in Spain, students may choose a summer study/travel program or a full academic semester (Semester I only). The programs in Italy and Costa Rica are limited to summer study. For complete details, contact the program advisers or the Center for International Affairs.

## Humanities (HUM)

The Humanities Program is an interdisciplinary curriculum that studies the visual arts, music, literature and the culture from which they emerge. Secondary sources are used sparingly; students are encouraged to make a vigorous, personal response to specific works of art, literature, and music.

## Master of Liberal Arts (MLA)

The Master of Liberal Arts program is designed to offer students an opportunity to study from an interdisciplinary perspective the ideas and works that have shaped world culture. Two program options are available: the Liberal Studies sequence is broadly interdisciplinary; the Humanities sequence is somewhat more focused, requiring a concentration in the Department of Humanities.

### Requirements for Admission

Applicants must (1) meet the general admission requirements of the University; (2) hold a baccalaureate degree in any undergraduate discipline from an accredited institution; (3) have a "B" average for the last two years of undergraduate work, or a score of at least a 1000 on the GRE General Test.

#### I. Liberal Studies option

**Total required hours:** ..... 33

**Courses:** 30 hours in courses from an approved course list.

**Thesis:** ..... 3 hours

At least 9 but no more than 12 hours must be taken in a single department.

At least 20 hours must be at the 6000 level; 4 hours may be at the 4000 level.

#### II. Humanities option

**Total required hours:** ..... 33

**Courses:** 30 hours from an approved list. 21 hours must be in Humanities courses and 9 in approved outside electives. At least 15 hours must be at the 6000 level; 4 hours may be at the 4000 level.

**Thesis:** ..... 3 hours

Both options require the student to work closely with an assigned adviser, who will assist in program planning and who must approve each term's course selection. Students must pass a written comprehensive examination and thesis committees.

## Linguistics (LIN/ESL)

Linguistics is primarily an upper-level and graduate discipline with strong interdisciplinary concerns.

### Requirements for the M.A. Degree

Students interested in graduate study in Linguistics are urged to acquire a language background in their undergraduate programs, regardless of their major field of study. The minor in Linguistics also is strongly advised; undergraduate course work equivalent to the material covered in LIN 3010, LIN 4040, and LIN 4377 is a prerequisite to graduate study. Prospective graduate students who have not completed these courses or their equivalents must remedy the deficiency by enrolling in LIN 6407 during their first term as graduate students. Credits earned in the courses LIN 3010, LIN 4040, LIN 4377, may not be counted toward the requirements for the M.A. degree.

## Requirements for Admission

The Linguistics Program offers two graduate tracks: The Master of Arts in Linguistics (thesis), and The Master of Arts in Applied Linguistics (Teaching English as a Second Language — non-thesis). In addition to the general requirements of the University, an applicant must (1) have a baccalaureate degree from an approved college or university, (2) have a 3.0 ("B") undergraduate average or better on all work attempted during the last two years of undergraduate enrollment, (3) submit a score of 1000 on the GRE General Test, distributed as follows: a minimum of 500 on the Verbal portion, plus a minimum of 500 on either the Quantitative or the Analytic portion of the test; and (4) receive approval of the Programs Graduate Committee. Students who meet all other requirements, but who have not taken the GRE at the time of application, may enroll in courses as a special student pending receipt of acceptable scores. In the case of students whose native language is not English, the Programs Graduate Committee may elect to waive the GRE minimum score requirement. All students whose native language is not English will be required to take the Test of English as a Foreign Language (TOEFL) exam, upon which a minimum score of 560 is required for admission. In any case, all students will be required to take the GRE exam.

## Requirements for the M.A. Degree in Linguistics (Thesis)

- I. **Core Requirements** ..... (15 hours)
  - Introduction to Graduate Study in Linguistics ..... (3)
  - Syntactic Description ..... (3)
  - Phonological Description ..... (3)
  - Language Acquisition ..... (3)
  - Sociolinguistics ..... (3)
- II. **Additional Requirements** ..... (18 hours)
  - A. 12 hours of approved electives.
  - B. A thesis and 6 hours of thesis credit.

## Requirements for the M.A. Degree — Applied Linguistics (TESL)

### Track (non-thesis)

- I. **Core Requirement** ..... (18 hours)
  - Introduction to Graduate Study in Linguistics ..... (3)
  - Applied Linguistics ..... (3)
  - Studies in a Specific Language ..... (3)
  - Language Acquisition ..... (3)
  - Sociolinguistics ..... (3)
- II. **Additional Requirements** ..... (21 hours)
  - A. **Methods of TESL 1** ..... (3)
  - Methods of TESL 2** ..... (3)
  - ESL Testing** ..... (3)
  - B. 6 hours of approved electives
  - C. 6 hours of internship through enrollment in TSL 6945

A written and oral comprehensive examination is required for all M.A. degree tracks in the program.



## **Philosophy (PHI)**

### **Requirements for Admission**

Students must have a "B" average in the last two years of undergraduate work or a score of at least 1000 (composite) on the GRE General Test. Credit toward the M.A. taken outside the department or transferred from another institution must be approved by the Graduate Coordinator and the department chairperson.

### **Requirements for the M.A. in Philosophy**

The following comprise the degree requirements in Philosophy, in addition to the general University requirements for graduate work.

1. Reading knowledge of a foreign language approved by the student's adviser.
2. 30 credit hours, including 21 hours of classroom instruction.
3. A written or oral comprehensive examination.
4. A thesis written under the direction of an adviser assigned by the Graduate Coordinator, and approved after an oral defense by a three-person supervisory committee.

## **Mass Communications (COM)**

### **Requirements for the M.A. Degree**

The M.A. degree program in Mass Communications is designed for students who are seeking advanced studies in preparation for professional and academic careers in communication with an emphasis on mass communication.

The program offers one degree, the Master of Arts in Mass Communications. Students may choose to pursue studies in either Mass Communications Studies program emphasizes the study of mass media emphasizes the processes, theories, and methods of public communication by institutions.

The Mass Communications Studies program requires 36 hours of course work, including a thesis. Twenty-four hours (including 6 hours of thesis) are taken in the Department of Mass Communications. The remaining 12 hours are taken in graduate-level courses offered in other departments of the University.

The Public Relations program requires 36 hours of course work. Students who choose to complete a thesis are required to take 30 hours of course work plus six hours of thesis. Students who choose to complete a non-thesis project are required to take 33 hours of course work plus three hours of project.

### **Requirements for Admission**

To be admitted to either the Mass Communications Studies or Public Relations program, an applicant must: (1) have a baccalaureate degree from a regionally accredited institution and present a "B" or better average in undergraduate work; (2) score 1000 or above on the GRE General Test; and (3) submit three letters of recommendation and a written statement of reasons for pursuing a graduate degree in mass communications.

## **Religious Studies (REL)**

In Religious Studies, students are afforded the opportunity to study the phenomenon of religion in all its diversity. Students are asked to explore, through a variety of methodologies, the meanings and values attributed to life by the world's religions and to understand the mutual interaction between religions and cultures in a variety of social and historical contexts.

The M.A. degree in Religious Studies at the University of South Florida is designed to provide graduate education to public and junior college teachers, counselors, community workers and clergy. It also is open to persons who have no professional aim, but who wish to enlarge their personal and/or professional horizons. This degree also is of use to those who plan to pursue a Ph.D. in Religious Studies or related areas. A special program in religion and public policy may be of particular interest to those who are planning careers in the church and society, journalism, or government, as well as college teaching.

### **Requirements for Admission**

Applicants must have an academic average of "B" or better in all work attempted while registered as an upper division student working for a baccalaureate, or a combined score of 1000 on the GRE General Test (minimum 600 on verbal). Any undergraduate major is acceptable, but applicants judged weak in preparation for graduate study in Religious Studies may be required to make up deficiencies for no graduate credit.

### **Requirements for the M.A. Degree**

Candidates will take 36 hours in Religious Studies, including optional thesis and approved courses from other departments. All candidates are required to take a core of four seminars (ProSeminar in Theory and Method, Religion and Culture of the East, Religion and Culture of the West, and Religion and Modernization), for a total of 12 hours. Also required is 3 credit hours of participation in the departmental Colloquium (1 hour per semester). The remaining 21 credit hours may be taken in elective courses.

Students opting for the special program in religion and public policy will be required to take three tutorials (Religion, Ethics, and Public Policy; Buddhism and Politics in Contemporary Asia; and Religion in America: 3 credit hours each) out of these remaining 21 credits. They also will be required to take a political science seminar on public policy (PUP 6007) and at least two other courses in related areas of the social sciences and/or philosophy.

The comprehensive examination for the master's degree in Religious Studies will be based on the core and the electives that form the candidate's program. One may elect either a thesis or non-thesis option. Candidates who intend to go on to doctoral studies are expected to elect the thesis option with an oral defense. Students will be expected to gain competence in whatever languages are required for their research; those intending to go on to doctoral studies are expected to demonstrate competence in at least one foreign language.



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## COLLEGE OF BUSINESS ADMINISTRATION

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The College of Business Administration offers the following graduate programs: The Master of Business Administration, Executive M.B.A., Master of Accountancy, Master of Arts in Economics, Master of Science in Management, and a Ph.D. in Business Administration.

Graduate programs are designed to:

1. Make graduate level professional education available to qualified men and women who seek managerial and professional positions in business, government, or education.
2. Support the research activity so vitally necessary to maintain a quality graduate faculty and program.
3. Foster the independent, innovative thinking and action appropriate to a professional individual.

Applicants to graduate programs in the College of Business Administration should apply directly to the University Graduate Admissions Office and must meet the University requirements for admission. General inquiries should be directed to the Office of Graduate Studies, College of Business Administration, University of South Florida, Tampa, Florida 33620.

### **Accreditation**

The M.B.A. (including the Executive M.B.A. program), MS in Management and Master of Accountancy programs in the College of Business Administration are accredited by the American Assembly of Collegiate Schools of Business (AACSB). The College also is a member of the Graduate Management Admission Council (GMAC).

### **Admissions**

Admission to the graduate programs in the College of Business Administration is open to qualified men and women holding undergraduate degrees in arts, letters, science, humanities, engineering, or business from accredited institutions in the United States or from a recognized academic institution in a foreign country. In making admission decisions, the college does not favor any particular academic discipline, nor does it make any distinction between applicants with experience and those coming directly from an academic program. The important factors, besides the Graduate Management Admission Test (GMAT) and grade point average (GPA), are the applicant's motivation in undertaking graduate work and the degree of focus in the applicant's career plans. Students are admitted for either the fall or spring semesters, but the fall term is the preferred entrance date for the student who requires all or approximately all of the Common Body of Knowledge courses. Ordinarily, new students will not be accepted in the M.B.A. or M.S. in Management programs for the summer term.

### **Application Deadline**

Applicants for masters' level programs in the College of Business Administration should have all necessary materials, including test scores, in the University Graduate Admissions Office by the following deadlines:

M.B.A., M.Acc. and M.S. in Management programs:

<b>Fall Semester</b>	<b>May 15</b>
<b>Spring Semester</b>	<b>October 15</b>

M.A. in Economics programs:

**See Academic Calendar**

Executive M.B.A. program:

<b>Fall Semester</b>	<b>July 15</b>
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Ordinarily, new students will not be accepted for the M.B.A. program for the summer term. The M.S. in Management and the Executive M.B.A. programs will accept students only for the fall term of each year. See University application deadlines for summer term for M.Acc. or M.A. in Economics.

Specific Admission Criteria by program follow:

**Non-Degree Seeking Students.** The College of Business Administration will approve non-degree seeking student status only for transient students (degree-seeking students at another accredited institution) or for students with valid reasons to register in this status and who meet all admission requirements.

**Academic Standing.** All master's candidates are expected to maintain a cumulative grade point average of 3.0 ("B") throughout the program. Failure to maintain the "B" average places the student on academic probation. A student on academic probation for two consecutive semesters is subject to dismissal. The student on academic probation must bring his/her GPA to a cumulative 3.0 ("B") in the next two semesters enrolled or be subject to dismissal.

### **Contact Persons**

Students interested in specific programs within the college should contact the appropriate graduate studies adviser:

Ph.D., M.B.A., Executive M.B.A. — Associate Dean  
John Hodgson — Director of Graduate Studies  
M.Acc. — Robert M. Keith  
M.A. degree in Economics — Mark Herander  
M.S. degree in Management — Edy Hargis

## **Graduate Degree Programs**

### **Master's Degree Programs**

The College of Business Administration offers graduate programs leading to the master's degree in:

- Accounting (M.Acc.)
- Business Administration (M.B.A.)
- Economics (M.A.)
- Management (M.S.)

The University requirements for graduate work at the master's level apply. Department requirements are listed under the appropriate program descriptions.

## Doctoral Programs

### Doctor of Philosophy In Business Administration (Ph.D.)

The Ph.D. program offered by the College of Business Administration provides its graduates with high quality preparation for careers as college and university professors and as research and staff personnel in industry and government. The doctoral 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. The program offers majors in the following fields: Accounting, Finance, Information Systems Management, Management, and Marketing. Secondary fields are offered in these fields, as well as in Economics.

#### Admission Requirements

A bachelor's degree from an accredited college or university is required for admission to the program. Applicants must also have an acceptable score on the Graduate Management Admission Test (GMAT). In addition, all students must meet the entrance requirements of and be accepted by: (1) the Graduate School of the University of South Florida, (2) the graduate program of the College of Business Administration, and (3) the department housing the applicant's major field.

Courses offered in the Ph.D. program are designed with the assumption that the student is proficient in statistics (through multiple regression), college algebra, matrix algebra, differential calculus, and a computer language (such as BASIC, FORTRAN, COBOL, Assembler). Proficiency must be demonstrated by either passing a proficiency exam or showing evidence of completion of appropriate courses with grades of B or better.

#### Program Requirements

A student will normally take 69 hours of coursework plus 21 hours of dissertation in the doctoral program. A student will be permitted to substitute up to 24 hours of previous graduate level work for courses in the Ph.D. program that cover essentially the same material. However, the student must have passed the course in question with a grade of "B" or better and the waiver must be approved. A minimum of 45 hours of the coursework must be completed at the University of South Florida.

#### Foundation Courses

These courses are designed to provide a broad background in business topics. The student will be required to complete all of the following courses:

GEB 6705	Financial Accounting for Managers
GEB 6706	Managerial Accounting
GEB 6716	Microeconomic Analysis
GEB 6717	Macroeconomic Analysis
GEB 6725	Financial Management
GEB 6745	Marketing Management
GEB 6757	Quantitative Methods for Operations Management
GEB 6775	Information Systems for Management
GEB 6836	The Management Process

### Core Courses

The core courses are designed to provide a strong background in Economics and to develop the student's quantitative and research skills. These courses are required of all students in the program. The College may waive a course only if the student has passed the same or an equivalent course with a grade of "B" or better within the preceding five years. In such cases, the student must still take the preliminary examination covering the entire course area.

The core courses include the following:

QMB 7931	.....	Research Methods I
QMB 7932	.....	Research Methods II
ECO 5424	.....	Econometrics I
ECO 6115	.....	Microeconomics
ECO 6206	.....	Aggregate Economics

Also, students are required to take an additional research elective approved by their advisory committee.

### Major Field

All students will take at least five courses at the 6000 or 7000 level in an area designated as the student's major. The specific courses must be approved by the student's advisory committee. The following fields are offered as majors: Accounting, Finance, Information Systems Management, Management, and Marketing. Courses taken as part of the Foundation or Core sections may not be counted as part of the 15 hours required for a major field.

### Secondary Field

The secondary field will ordinarily consist of three courses from one of the other fields listed under the major fields, plus Economics. Courses within the secondary field can be selected to complement the major field, and, in special cases, may include courses outside the College of Business. The nature and number of the secondary field courses will be determined by the student's advisory committee. Courses taken as part of the Foundation or Core courses may not be counted as part of the 9 hours required for secondary fields.

### Examinations

#### 1. Preliminary Exams

All students must pass a written preliminary examination covering material contained in and relevant to the core courses. The preliminary examination will consist of two parts, one covering research methods, and one covering economics. This examination should be taken as soon as the core courses are completed. A student who fails the preliminary exam on the first attempt may retake it within one year. A student who fails the preliminary exam on the second attempt will be disqualified from continuing in the program.

#### 2. Field Exams

Upon completion of all course work, students must pass a comprehensive written examination in each of the major and secondary fields. 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 may not sit for the field examinations until the preliminary has been passed. A student who fails one or both of the field exams may retake it (or them) within one year. A second failure disqualified the student from continuing the Ph.D. program. Students passing the field examinations are advanced to candidacy for the Ph.D. program.

### 3. Dissertation

After advancement to candidacy, a student must write and defend a dissertation that reflects original and significant research in his or her chosen field. The dissertation must meet high standards of scholarship and contribute to the body of knowledge in that field.

### 4. Residency Requirement

Ph.D. students are required to take a minimum of six hours of graduate work per term during at least one academic year. Ph.D. students in the College of Business Administration are required to complete a minimum of fifteen semester hours per academic year.

### The Master of Business Administration (M.B.A.) Degree

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. The program is designed to meet the needs of the qualified men and women with degrees in the liberal arts, engineering, the sciences, and humanities, as well as those with prior preparation in business administration. The college makes no distinction in the selection process between applicants with experience and those coming directly from academic life. However, experience is a meaningful background and will permit the student to better understand the subject matter to be mastered.

The faculty uses various delivery systems in the classroom: the traditional lecture/discussion, case method, simulation, model building and laboratory techniques. These methods emphasize an analytical, conceptual, and theoretical balance throughout the program, which helps sharpen students' resourcefulness in sorting complex problems and selecting optimal courses of action. Students are given many opportunities to demonstrate their writing and verbal competency and to improve interpersonal communication.

### Admission Requirements

The admission decision normally is based on the following:

1. GPA in last two years of undergraduate work of 3.0 or better.
2. Acceptable scores on the Graduate Management Admissions Test (GMAT) — approximately 500 or higher. The two quantitative measures above may be considered in combination when one factor is low and the other is high.
3. Interviews generally are not required but may be desirable in some instances.
4. Foreign students: acceptable TOEFL score of 550 or higher.

### Program Requirements

**The M.B.A.** The M.B.A. degree is a 60 semester hour program. The full-time student without course waivers will require two years (four semesters) to complete the program. Part-time students can complete all work within a reasonable time — approximately three years without course waivers. Part-time students are encouraged to take two courses per semester and must complete four courses per calendar year to remain in active status as a degree-seeking student. Students who have completed undergraduate or graduate courses in business and economics may receive course waivers and reduce their course loads from the maximum requirement. All M.B.A. candidates must complete all degree requirements within five years of beginning the program. Courses are



scheduled to accommodate both full-time and part-time students. All courses are at the graduate level. Students entering the program are expected to have sufficient competency in mathematics (College Algebra, Linear Programming, and Elementary Calculus), skills, written and verbal, or to take courses.

The curriculum consists of:

**The Common Body of Knowledge** courses, known as the "Core". These courses are designed to provide basic background in the several functional areas in order to prepare for more advanced studies. The courses assume little or no prior knowledge in the field. Students having adequate previous preparation in any of these courses, except for Business Policy (GEB 6895), may seek a waiver, subject to standards set by the faculty. The conditions for waivers are explained more fully below.

**Other Required Courses:** These courses are extensions of certain core courses, adding depth and breadth.

**Elective Courses:** Breadth is achieved within this cluster of courses, which also allows the student to develop one or more areas of concentration. "Breadth" means that the student must take at least 15 semester hours or equivalent of work beyond the Common Body of Knowledge outside of his/her field of concentration.

**Integrative Course:** All students are required to take GEB 6895-Business Policy and Strategy. The course is taken in the last sequence of courses in order to permit the student to integrate the subject matter of earlier courses by studying administrative processes under conditions of uncertainty, including integrating analysis and policy determination at the overall management level.

### **M.B.A. Program**

**Common Body of Knowledge Courses:**

GEB 6705 Financial Accounting for Managers .....	(3)
GEB 6716 Microeconomic Analysis .....	(3)
GEB 6725 Financial Management .....	(3)
GEB 6735 Social, Legal, Political Environment of Business ...	(3)
GEB 6745 Marketing Management .....	(3)
GEB 6756 Statistical Methods for Management .....	(3)
GEB 6757 Quantitative Methods for Operations Management .	(3)
GEB 6775 Information Systems for Management .....	(3)
GEB 6836 The Management Process .....	(3)
GEB 6895 Business Policy and Strategy .....	(3)
<b>Sub-Total .....</b>	<b>30</b>
<b>Other Required:</b>	
GEB 6706 Management Accounting and Control .....	(3)
GEB 6717 Macroeconomic Analysis .....	(3)
<b>Sub-Total .....</b>	<b>6</b>
<b>Electives .....</b>	<b>24</b>
<b>Total Semester Hours .....</b>	<b>60</b>

**Constraints**

1. Maximum program — 60 semester hours.
2. To insure breadth within the program, each student must take at least 15 semester hours or equivalent beyond that in the Common Body of Knowledge and in two or more disciplines outside the field of concentration.
3. At least one international course must be included within the program.

4. Student must take at least one course within the program in each of the academic departments.
5. Students with an undergraduate degree in Accounting may not take GEB 6705 or GEB 6706 for graduate credit.
6. Student may complete no more than 6 semester hours of Independent Study/Directed Research for degree credit.

### **Waiver Policy**

A reduction of the 60 semester credit hour program may be accomplished by waivers of the Common Body of Knowledge courses, except for GEB 6895 (Business Policy).

Waiver usually is based on transcript analysis if the student has completed a minimum of 6 semester hours (departments may require additional hours) in the basic disciplines with a grade of "B" or better from an AACSB accredited school within the last three years.

Waivers based on coursework completed which is over three years old is accomplished by exam only. Waiver exams must be completed before the first registration as a graduate student.

The waiver of either GEB 6706 (Management Accounting and Control) or GEB 6717 (Macroeconomic Analysis) requires the substitution of another course as an elective. GEB 6757 (Quantitative Methods) is waived by exam only.

This policy became effective for students entering the M.B.A. program January 1987.

### **International Business**

Students are required to take at least one international business course in their programs. The student may also obtain a concentration in the field by taking international courses offered by the various departments.

### **Concentrations**

Students may include an area of concentration in their overall graduate programs. Concentrations are available in Accounting, Economics, Finance, International Business, Information Systems, Management, and Marketing. The selection of a concentration usually takes place after the student has completed the Common Body of Knowledge.

### **Thesis**

Students may elect a 6 credit hour thesis in any of the areas of concentration of the college, subject to departmental approval.

### **M.B.A. with Concentration in Finance**

Students seeking a graduate education with a concentration in the field of Finance should enroll in the Master of Business Administration Program. In addition to the M.B.A. Core, students would choose a minimum of 9 elective hours in Finance. Topics of interest in the Finance program include corporate and managerial finance, banking and financial institutions, money and capital markets, investments, international finance, and finance theory. A thesis can serve as part of the elective course work, but a thesis is not required. Students electing the M.B.A. with concentration in Finance should meet with the chairperson of the Finance Department before electing this option.

## **M.B.A. with Concentration in Management Information Systems (MIS)**

Students enrolled in the M.B.A. program can take a concentration in MIS. The concentration requires a minimum of 9 graduate MIS hours in addition to GEB 6775, which is a required course in the M.B.A. program.

For an MIS concentration, the student must take ISM 6123 (for which GEB 6775 is a prerequisite), plus two approved graduate electives in MIS. Students electing the M.B.A. with a concentration in MIS should meet with the chairperson of the Department of Information Systems and Decision Sciences before electing this option.

## **M.B.A. with Concentration in Marketing**

Students seeking a master's degree with a concentration in Marketing should enroll in the M.B.A. program. A concentration in Marketing requires a minimum of 9 elective hours, in addition to the Marketing Management foundation course.

Course topics include: marketing research, sales management, promotional management, logistics and physical distribution management, international marketing and marketing strategy. A thesis (6 credit hours) can serve as part of the elective course work, but no thesis is required. Candidates considering a Ph.D. in marketing are particularly encouraged to consider the thesis option. Students electing the M.B.A. with a concentration in Marketing should meet with the chairperson of the Marketing Department before electing this option.

## **The Master of Accountancy (M.Acc.) Degree**

The objective of the M.Acc. program is to provide candidates with greater breadth and depth in accountancy than is possible in the baccalaureate program.

The Master of Accountancy program is designed to meet the increasing needs of business and government, as well as public accounting, for persons who have in-depth professional training in accounting and a background in the areas of quantitative methodology, economic analysis, management science, etc. Students completing the requirements for the M.Acc. degree have met the requirements to sit for the Uniform CPA Examination in Florida.

### **Admission Requirements**

1. A score of 475 or higher on the GMAT, and
2. Cumulative 3.0 grade point average ("B") in all work while registered as an upper division student working for a baccalaureate degree.
3. Cumulative 3.0 grade point ("B") in all upper level accounting courses taken as an undergraduate.
4. Students who do not have the equivalent of an undergraduate degree in accounting at USF, including an accounting information systems course, may be required to take additional courses. The number of additional courses deemed necessary will depend on the academic background of the individual student. Upper-level accounting courses must be completed at a four-year regionally accredited institution. Special consideration may be given to applicants who have exceptionally high GMAT scores or grade point averages.

## Program Requirements

All students are required to complete the Common Body of Knowledge outlined for the M.B.A. program. The academic adviser will determine the specific courses and number of hours required.

For the student who has the equivalent of an undergraduate major in accounting at USF (i.e., 23 hours of accounting coursework, excluding Financial and Managerial Accounting I and II), the program consists of 36 semester hours. A minimum of 15 semester hours of the program is devoted to the study of professional accounting. Another 15 semester hours consists of study in the related areas of financial management, economics, management science, quantitative decision models, the social, legal, and political environment of business, and business policy. The remaining 6 semester hours are elected by the student in consultation with his/her graduate adviser. Elective courses taken in the area of accounting may not exceed 3 semester hours. Students enrolled in the M.Acc. program may not take ACG 5805, Contemporary Accounting Thought.

M.Acc. students may select either a general track or a tax track in their master's program. Required accounting courses in each track are:

### Accounting Courses: General Track . . . (15 semester credit hours)

TAX 6065 Federal Tax Research, Planning and Procedures . . .	(3)
ACG 6405 Systems Theory . . . . .	(3)
ACG 6875 Development of Accounting Thought . . . . .	(3)
ACG 6346 Management Accounting and Control . . . . .	(3)
ACG 6636 Contemporary Issues in Auditing . . . . .	(3)

### Accounting Courses: Tax Track . . . . . (15 semester credit hours)

ACG 6875 Development of Accounting Thought . . . . .	(3)
TAX 6065 Federal Tax Research, Planning and Procedure . . .	(3)
TAX 6105 Advanced Corporate Taxation . . . . .	(3)
TAX 6205 Advanced Partnership Taxation . . . . .	(3)

One of the following:

TAX 5405 Taxation of Trusts and Estates . . . . .	(3)
TAX 6445 Estate Planning . . . . .	(3)
TAX 6505 United States Taxation of Foreign Entities . . . . .	(3)

Students in either track must also take the following:

### Business Courses . . . . . (15 semester credit hours)

GEB 6375 Social, Legal, Political Environment of Business . . .	(3)
ECO 6205 Macroeconomic Theory & Policy . . . . .	(3)
ECO 6115 Microeconomic Analysis . . . . .	(3)
GEB 6895 Business Policy . . . . .	(3)

One of the following:

FIN 6246 Advanced Money and Capital Markets . . . . .	(3)
FIN 6446 Financial Policy . . . . .	(3)
FIN 6816 Investments . . . . .	(3)

### Electives . . . . . (6 semester credit hours)

At least one of the elective courses must be outside the field of accountancy . . . . . (6)

**Total Semester Hours . . . . . 36**

## **The Executive M.B.A.**

The Executive M.B.A. is a 20-month, 60 semester-hour 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 increase significantly their personal and organizational effectiveness. The program 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.

Because managerial effectiveness in today's and tomorrow's dynamic, rapidly changing business environment requires more than excellent technical skills, the Executive M.B.A. is structured as an integrative program that will enhance the participant's ability to think across functional lines and to better understand the whole enterprise in a competitive situation.

Each semester begins with a three-day residency session; thereafter, classes are scheduled on alternate Fridays and Saturdays. The one-day-a-week format allows the participants to continue carrying full job responsibilities while they master a broad range of managerial skills.

The program leads to the academic degree of Master of Business Administration (M.B.A.) and consists of the following segments:

- Managerial Decision Analysis
- Business, Government and Society Relations
- Financial Accounting
- Organizational Assessment and Design
- Managerial Accounting
- Human Performance and Organizational Effectiveness
- Management Process
- Quantitative Methods for Managers
- Management Information Systems
- Macroeconomic Analysis for Managers
- Operational Marketing
- Financial Management I
- Applied Research Project
- Microeconomic Analysis for Managers
- Marketing Decision Making
- Financial Management II
- The Administration of Human Resource Systems
- Decision Support Tools
- Business Problems Analysis
- International Business
- Capital Markets and Investments
- Business Policy and Strategy
- Taxation for Managers
- Bargaining Behavior and the Management of Conflict

In addition, Executive M.B.A. students have the opportunity to participate in the annual two-week Overseas Study Module, which involves on-site study of international business practices. A different country/region is selected each year. Past modules have concentrated on the European business community, with visits to such cities as London, Zurich, Geneva, Brussels, Tokyo and Beijing.

## **Admission Requirements**

Applicants are considered for admission on the basis of individual application and interviews. Each applicant must be nominated for the program by his or her employer. Applicants are expected to have eight or more years of organizational experience, including several years in a management or senior professional position. A bachelor's degree from an accredited institution is required for admission. Candidates are required to take the Graduate Management Admissions Test (GMAT). For further information, please call the office of the Director of the Executive M.B.A. Program, College of Business Administration, (813) 974-4281.

## **The Master of Arts (M.A.) Degree in Economics**

### **Admission Requirements**

1. Minimum criteria — Applicant must score 1000 or higher on the GRE or 500 or higher on the GMAT.
2. GPA of 3.0 ("B") or better in all upper division undergraduate work.
3. Applicants with a minimal background in economics and statistics may be required to take prerequisite courses in addition to the required 30 hours in graduate credits.

The primary requisites for success in graduate study in economics are strong motivation, aptitude, and basic intellectual ability. An undergraduate major in economics is not required, but a sound background in economic theory, mathematics, and statistics normally will permit completion of the master's program in one year.

### **Program Requirements**

The Master of Arts in Economics permits students to select one of three approaches. The first emphasizes terminal professional training to prepare the student for decision making and problem solving roles in business and other organizations. The second approach prepares the student for doctoral work and secondary and junior college teaching. In the third approach, students may emphasize public sector — particularly at state and local levels. The fields of economics stressed are industrial organization, international economics, the economics of natural and human resources, and urban and public economics. Particular attention is devoted to such topics as planning, programming, budgeting, cost-benefit analysis, public revenue sources, issues in fiscal federalism, techniques of income redistribution, models of urban growth and development, intra-urban location patterns, analysis of urban social patterns and problems, anti-trust and other forms of government business regulation.

All three approaches involve preparation in economic theory and quantitative methods. Students in the professional programs then supplement these skills with courses in applied economics. Students preparing for doctoral studies normally take additional courses in economic theory, mathematics and statistics. Students selecting public sector economics emphasize applied economics. Work in other areas, such as corporate finance, may be an integral part of these programs. Research and the writing of a thesis may be incorporated into any of these approaches. The nature of thesis subject indicates the area of specialization of interest.

The economics department participates in the Junior College Teaching Program jointly with the College of Education. (Refer to College of Education, Department of Curriculum and Instruction, for details.)

Students must satisfy all University requirements for the Master of Arts degree. In addition, the department requires students to complete 30 hours of graduate credit selected with the approval of the graduate adviser of the department. At least 21 hours must be in Economics and must include:

ECO 5425 Economics .....	(3)
ECO 6115 Microeconomics .....	(3)
ECO 6206 Aggregate Economics .....	(3)
ECO 6305 History of Economic Thought .....	(3)

Prior to clearance for the degree, each candidate must perform satisfactorily on a comprehensive examination.

## **The Master of Science (M.S.) Degree in Management**

The M.S. Program in Management has been designed to help the student develop the technical, behavioral, and leadership skills he/she will need to pursue successfully a management career in the contemporary business-world. To this end, the program has been created to provide students with the knowledge and opportunity to develop and/or sharpen their skills in: (1) critical thinking and decision-making; (2) strategic planning; (3) human resource management and development; (4) oral and written communication; and (5) interpersonal relations. These five managerial "competencies" will be emphasized through a wide range of traditional and innovative pedagogical procedures, including classroom lectures, readings, case studies, behavioral laboratories, research projects, and a thesis.

The primary reason for entering this program is a specific interest in the management area of business, either public or private sector, national or international. This does not mean that the applicant must come from a business (or business school) background — although business experience and/or an undergraduate degree in the field can facilitate understanding of the subject matter to be mastered. In fact, the program has been created to be relevant for applicants with a wide range of undergraduate degrees (including business, engineering, liberal arts, sciences, humanities, etc.). The course curriculum has been structured to meet the needs of three types of advanced degree-seeking students:

1. Individuals who aspire to managerial careers, but seek post-baccalaureate education before entering the job market;
2. Individuals who are already practicing managers, who desire graduate training to enhance their job performance and/or further their career goals;
3. Individuals who are contemplating an academic and/or research career in management and would like to utilize the M.S. Degree as an opportunity to improve their investigative skills and/or as a stepping stone to a Ph.D. in the discipline.

All interested students should contact the M.S. Management Office, Department of Management, College of Business Administration, University of South Florida, Tampa, FL 33620, or phone (813) 974-4155, for additional information.

### **Admission Requirements**

1. GPA in last two years of undergraduate work of 3.0 or better.
2. Acceptable scores on the Graduate Management Admissions Test (GMAT) — approximately 500 or higher. The two quantitative measures above may be considered in combination when one factor is low and the other is high.

3. At the Admission Committee's discretion, a personal interview may be required.
4. Foreign students: acceptable TOEFL score of 550 or higher.

### **Program Requirements**

The M.S. in Management curriculum requires 54 semester hours which include Common Body of Knowledge courses, advanced management courses and a thesis. Any recent coursework that would permit a waiver will be determined by an advisor upon admission to the program.

A student should complete the thesis during his/her final semesters under the supervision of his/her faculty advisor(s). The thesis offers the student the opportunity to further develop research and problem solving skills in the exploration of a single topic of particular interest. When completing their thesis, students will usually be involved in extensive library research, interviews with the persons in organizations directly involved in the area of activity under study, and careful assembly of a data base suitable for computer analysis.

A student in the M.S. in Management Program is required to complete the program within five years from the beginning of coursework. Students are encouraged to complete at least six semester hours each term.

The program of studies normally includes the following courses:

### **Master of Science (M.S.) in Management**

#### **Common Body of Knowledge Courses:**

GEB 6705 Financial Accounting for Managers .....	(3)
GEB 6716 Microeconomic Analysis .....	(3)
GEB 6725 Financial Management .....	(3)
GEB 6735 Social, Legal, Political Environment of Business .....	(3)
GEB 6745 Marketing Management .....	(3)
GEB 6756 Statistical Methods for Management .....	(3)
GEB 6757 Qualitative Methods for Operations Management .....	(3)
GEB 6775 Information Systems for Management .....	(3)
GEB 6895 Business Policy and Strategy .....	(3)
<b>Sub-Total</b> .....	<b>27</b>

MAN 6204 Organizational Theory and Measurement .....	(3)
MAN 6219 The Management of Organizational Development and Change .....	(3)
MAN 6930 Selected Topics: Management Applications I .....	(3)
MAN 6930 Selected Topics: Management Applications II .....	(3)
MAN 6930 Selected Topics: Organizational Behavior .....	(3)
MAN 6930 Selected Topics: Foundations of Organization and Management Studies .....	(3)
MAN 6930 Selected Topics: Seminar in Research Design .....	(3)
MAN 6971 Thesis: Master's .....	(6)
<b>Sub-Total</b> .....	<b>27</b>

**Total Semester Hours** ..... **54**



## Management Institute

The Management Institute provides the College of Business Administration with a vehicle for making available to the community special services that could not be provided through the traditional academic program. In return for these services, the college receives the benefit of having real world applications available to its faculty and students.

The Institute houses Centers designed to provide teaching, research, information, and service to the public and private sector communities served by the University of South Florida.

The common objective of these centers is to facilitate two-way communication between the University and the business/governmental communities, with the goal of sharing knowledge and solving problems.

**The Small Business Development Center** offers assistance in facilitating the initiation and growth of entrepreneurial forms of private enterprise. It offers workshops and individual consultation. A continued support system is provided for its clients to ensure successful implementation. Faculty members and students under faculty direction provide assistance on feasibility studies for new business organizations and for expansions of the product lines of existing firms.

**The Center for Economic and Management Research** helps private and public enterprises solve contemporary business and regional problems by providing a variety of material and human resources. Three primary means are used to provide this service.

First, through the publication of periodic newsletters and reports, local and statewide data are disseminated on topics including local economic indicators, such as employment figures, building activity, and automobile sales; Florida tax data; and descriptions of industrial/business parks in various south and central Florida counties.

Second, through a computerized data base system, the Center's Census Data Service provides custom reports, tape copies, tape extracts and census maps from the 1980 Census of Population and Housing. A computerized system also allows Center staff to tap national data bases to conduct quick and extensive literature searches on business or non-business topics.

Third, the staff of the Center for Economic and Management Research provides Information Network, a consortium of more than 40 public and private agencies designed to disseminate economic and business data. The Network is a joint project of the College of Business Administration and the Tampa Bay Regional Planning Council and sponsors free seminars on a variety of topics throughout the year.

**The Professional Development Center** provides specialized credit and non-credit training and education opportunities to public and private sector decision-makers in the form of conferences, seminars, and short courses. The Center also offers custom designed in-house programs for professional groups and business organizations.

**The Center for Organizational Effectiveness** is the newest of the centers within the college and has been created to evaluate the productivity of individuals and organizations and to develop programs to support improvement in managerial efficiency and effectiveness.

A fifth center, **The Center for Economic Education**, not part of the Management Institute, is jointly sponsored by the College of Education and the College of Business Administration. Its purpose is to provide human and material resources to help school teachers and students better understand the American free enterprise system. It offers access to audio-visual and print materials, in-service training in the use of programs such as trade-offs. and

economic education consultants. The Center facilitates interaction between business persons, teachers, and students.

### **Institute of Banking and Finance**

The Institute of Banking and Finance was established to promote research, training, and development of the financial services industry. The Institute promotes interaction and cooperation among the banking industry, other financial institutions, and the academic community.

### **Campuses Offerings**

Graduate courses as part of the Master of Business Administration program are offered at all USF campuses. All required Common Body of Knowledge courses and a limited number of electives are offered at the St. Petersburg and Fort Myers campuses. Normally, only required Common Body of Knowledge Courses are scheduled at Sarasota. In order to complete the entire M.B.A. program, a candidate from Sarasota should expect to take courses on the Tampa, St. Petersburg or Fort Myers campuses. Students at St. Petersburg may want to take courses at Tampa, either to accelerate the program or to have a wider choice of electives.

### **Graduate Business Association**

The Graduate Business Association (GBA) is composed of graduate students in the College of Business Administration. The goals of the GBA include:

1. To enhance the quality of education for graduate students in the College of Business.
2. To function as a liaison between graduate students and the administration/faculty.
3. To provide the framework necessary for continued student involvement at the administrative level in academic affairs affecting graduate programs.
4. To facilitate career planning and placement.
5. To foster fellowship among graduate students.

Graduate students are eligible for Beta Gamma Sigma national business honorary society.

Further information regarding the Graduate Business Association may be obtained from the Dean's Office in the College of Business Administration.

### **Financial Aid**

Applicants may apply for various forms of financial aid. Awards are made to exceptionally well qualified individuals. These awards are:

1. University Fellowships — Awarded on the basis of outstanding academic credentials. To be considered for fellowships, students must submit all application material no later than March 1.
2. Loans — Apply to the University Financial Aid Office.
3. Other Financial Aids — Apply to the Director of Graduate Studies, College of Business Administration, for
  - a. graduate assistantships,
  - b. scholarships (apply by April 1 for the following academic year), and
  - c. tuition waivers — both in-state and out-of-state.

Application for the above should accompany the application for graduate study and will be considered when all credentials are received by the college.



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## COLLEGE OF EDUCATION

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The College of Education emphasizes learning relevant to contemporary society and involving students deeply in their own thinking about themselves and their universe.

The College of Education is committed to a continuous and systematic examination of the professional program of teacher education. Promising programs are examined experimentally under controlled conditions, which makes possible an objective appraisal of effects in terms of learning outcomes.

The University of South Florida follows an interdisciplinary approach to teacher education. Its programs for the preparation of teachers represent cooperative effort in planning and practice by faculties of all academic areas. Courses needed by teacher candidates, but designed primarily for teacher candidates are taught by the College of Education faculty.

In the total teacher education program there is a special concern for the developing in the student a deep interest in intellectual inquiry and the ability to inspire this interest in others.

### Departments and Programs

The College of Education is organized into the following departments:

- Adult and Vocational Education
- Childhood/Language Arts/Reading
- Counselor Education
- Curriculum and Instruction
- Educational Leadership
- Educational Measurement and Research
- Instructional Computing
- Library, Media, and Information Studies
- Music Education
- Physical Education
- Psychological and Social Foundations
- Special Education

Each department has one or more programs; these are listed alphabetically and by degree level in the Department Program Descriptions section.

## Graduate Degree Programs

The College of Education is a professional school offering a variety of graduate degree programs. A major goal is to contribute to the improvement of public schooling through the preparation of teachers, administrators, specialized practitioners, and the training of researchers.

As a minimum, applicants for admission to graduate degree programs must have a score of 1000 on the GRE General Test or an undergraduate grade point average of 3.0 (on a scale of 4.0) on the last two years of the baccalaureate degree and 800 on the GRE. See Department Program Descriptions for additional requirements.

### Master's Degree Programs

The College of Education offers a Master of Arts and a Master of Education. The M.A. is primarily to increase competence in a teaching specialization or receive professional preparation in one of the service areas of education.

The M.Ed. is designed to prepare administrators with organizational, management, and instructional leadership skills. A student may choose from one of three plans available. (See descriptions below for further details.)

**Master of Arts (M.A.)**

**Admission.** Aside from the general requirement previously mentioned, the applicant must meet all additional requirements specified by the program. S(he) must also receive a favorable recommendation from the department chairperson.

**Filing of Program.** During the first term of graduate study all students must file a planned program of studies. This Graduate Planned Program is to be completed in consultation with the adviser. The completed report should be filed with the Coordinator of Graduate Advising in the College of Education.

**Quality of Work.** Students in the master's program must maintain a 3.0 GPA. If at any time the student's GPA falls below the minimum, the student will be placed on probation. While on probationary status, the student's academic progress will be reviewed to determine: (1) removal from probation; (2) continuation on probation; (3) drop from graduate program.

**Residency.** Students in the master's program will be required to meet the residency requirement established by each program area. Consult the appropriate program area for details.

**Comprehensive Examination.** During the last term of enrollment, prior to completion of degree requirements, students must perform satisfactorily on a comprehensive examination.

**Process Core Examination.** Graduate students with sufficient undergraduate background may take the Process Core Examinations after consultation with their advisers. Successful performance on the examination enables a student to waive the course requirement, but he/she must take elective courses of equal hours. The Process Core Examinations are available in Foundations of Measurement, Psychological Foundations, and Social Foundations of Education. Graduate students on a Plan II Master's Program (see below) are not eligible to take the Process Core Examinations unless they have had a comparable course at the undergraduate level.

**Master's of Arts (M.A.) Programs**

Program	Code	Department
Adult Education	(AAE)	Adult & Vocational Education
Art Education	(AAR)	Curriculum & Instruction
Behavior Disorders	(ABD)	Special Education
Business and Office Education	(ABE)	Adult & Vocational Education
Distributive and Marketing Education	(ADE)	Adult & Vocational Education
Elementary Education	(AEE)	Childhood/Language Arts/Reading Education
English Education	(AEN)	Curriculum & Instruction
Foreign Language Education***	(AFE)	Curriculum & Instruction
Gifted Education	(AGI)	Special Education
Guidance & Counseling Education	(AGC)	Counselor Education
Humanities Education	(AHU)	Curriculum & Instruction
Industrial-Technical Education	(AIT)	Adult & Vocational Education
Junior College Teaching		Educational Leadership

Biology	(BIO 90)	
Business	(BUS 90)	
Chemistry	(CHM 90)	
Economics	(ECN 90)	
Engineering**	(EGP 90)	
English	(ENG 90)	
French	(FRE 90)	
Geography	(GPY 90)	
Geology	(GLY 90)	
History	(HTY 90)	
Mathematics	(MTH 90)	
Physics	(PHY 90)	
Political Science	(POL 90)	
Sociology	(SOC 90)	
Spanish	(SPA 90)	
Speech Communication	(SPE 90)	
Library, Media & Information Studies	(ALI)	Library, Media & Information Studies Education
Mathematics Education	(AMA)	Curriculum & Instruction
Mental Retardation	(AMR)	Special Education
Motor Disabilities	(AMD)	Special Education
Music Education	(AMU)	Music Education
Physical Education	(APH)	Professional Physical Education
Reading Education	(RED)	Childhood/Language Arts/Reading Education
School Psychology	(ASP)	Psychological & Social Foundations of Education
Science Education*	(ASC)	Curriculum & Instruction
Social Science	(ASO)	Curriculum & Instruction
Specific Learning Disabilities Education	(ALD)	Special Education
Speech Communication Education	(ACE)	Curriculum & Instruction

See department section for specific program requirements.

\* With concentrations in Biology, Chemistry, or Physics.

\*\* Engineering bachelor's degree required.

\*\*\* French, German or Spanish.

**Program Plans of Study**

**Plan I.** Plan I is a program of graduate studies designed for those with appropriate certification who desire to increase their competence in a subject specialization or receive professional preparation in one of the service areas of education.

- A. Process Core .....(3-11 hours)  
Students will take a minimum of one Process Core (Foundations) course. Substitution may be made for the remaining courses with the advice and concurrence of the College Program Policy Committee.

**Process Core:**

- a. EDF 6432
- b. EDF 6481
- c. EDF 6211 or EDF 6215

- d. EDF 6517 or EDG 6544 or EDF 6606
- e. EDG 4620
- B. **Current Trends Course in Teaching Specialization . . . . . (3 hours)**
- C. **Specialization . . . . . (18 hours minimum)**  
This is an individually planned graduate major in the teaching field or in an appropriate College of Education program for K-12 specialists.
- D. **Internship . . . . . (6 hours)**  
Enrollment will be in EDG 6947, which involves planned observation and supervision by a member of the University faculty and a secondary school staff member. Inservice teachers are required to complete this assignment over two semesters. Students should have completed the professional requirement and two-thirds of the graduate requirements in the area of specialization or an equivalency (using undergraduate hours taken in the field of specialization to complete the two-thirds requirement.)

**Plan III.** Plan III is a program of graduate studies for holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida. The primary difference between this plan and Plan II is that students will not be required to take EDG 4620 and EDG 6947.

- A. **Process Core . . . . . (11 hours)**
  - a. EDF 6432
  - b. EDF 6481
  - c. EDF 6211 or EDF 6215
  - d. EDF 6517 or EDF 6544 or EDF 6606
- B. **Current Trends Course in Teaching Specialization . . . . . (3 hours)**
- C. **Specialization . . . . . (18 hours minimum)**  
This is an individually planned graduate major in the teaching field or in an appropriate College of Education program for K-12 specialists.

**Master of Education (M.Ed.)**

**Educational Leadership.** This Master of Education (M.Ed.) degree is designed to prepare administrators and supervisors with organizational, management, and instructional leadership skills. Admission requirements include: (1) certification in a teaching field, (2) at least two years of successful teaching experience, (3) fulfillment of USF graduate admission requirements, (4) fulfillment of College of Education requirements for admission to graduate study. Successful completion of the program leads to the M.Ed degree and Florida certification in Educational Leadership.

**Curriculum and Instruction.** This is a practitioner rather than a research degree. No specific research and thesis will be required. The objective of this program is to prepare classroom teachers in instructional leadership and teaching skills through graduate study in a selected variety of courses in curriculum, methods, supervision, learning principles, human interaction, and areas of specialization that may include courses in other colleges.

To be admitted to this program, the applicant must be teacher certified and have two years of teaching experience. The degree requires at least 33 semester hours, with 60 percent or more at the 6000 level. Programs will consist of 11 semester hours of Process Core and also will include EDG 6627. For all students the remainder of the (minimum) 12 semester hours in areas of specialization will be determined by the student and the student's committee. Successful completion of the program will lead to the M.Ed. degree. The Master of Education in Curriculum and Instruction is available in most curricula areas

in which the M.A. is offered. See the departmental section for more detailed descriptions.

**Measurement & Evaluation.** The Master of Education in Measurement & Evaluation is designed to prepare mid-level testing and evaluation personnel for employment in school districts, government agencies, commercial testing, publishing and educational evaluation enterprises. The program prepares personnel with specialized skills in test development, program evaluation and data analysis.

### **Advanced Graduate Education**

The College of Education is a professional school offering a variety of advanced degree programs. All programs have as their central focus the development and application of disciplined inquiry skills. Rigorous inquiry expands and improves the theoretical and informational base from which instructional and administrative practices are developed. This orientation results in the following objectives:

1. To foster disciplined and rigorous inquiry into educational practices, theories, and proposals.
  - a. To create a vigorous community of scholars having complementary proficiencies in inquiry.
  - b. To promote and to encourage conclusion-oriented inquiry in order to provide a base of verified concepts and theories for education.
  - c. To promote and to encourage decision-oriented inquiry as a means for extending the validity of findings from conclusion-oriented investigation and to aid in the development of verifiably better practices and policies in education.
  - d. To promote the development of alternatives to existing theories and practices. Such alternatives, developed out of an apolitical criticism of existing practices, contribute to the development of an educational system that is responsive, rather than wedded, to practices on "non-educational" grounds.
2. To conduct training programs which will
  - a. Contribute to the maintenance of the proficiency of the membership of the system through in-service training and consultation.
  - b. Maintain the performance level in the systems and extend professional/personal opportunities by providing programs for personnel in teaching areas and in the areas of administration, supervision, other school services (guidance, school psychology, etc.), and curriculum.
  - c. Train personnel to conduct different types of inquiry so that the system is self-correcting.
  - d. Produce personnel able to design training programs based on the results of both conclusion-oriented and decision-oriented inquiry, so that school systems can be both self-sufficient and responsive.
3. To form a center that can assist educational clientele in the design of in-service training programs, in planning, in evaluation of projects, and in developing strategies for coping with other unanticipated problems related to schooling education.

### **Educational Specialist (Ed.S.)**

The Education Specialist (Ed.S.) program offers specialization in Curriculum and Instruction, with emphasis in curricular areas such as Adult Education, Communication Education, Elementary Education, Early



Childhood Education, Exceptional Child Education, Guidance and Counseling Education, Interdisciplinary Studies, Library, Media, and Information Studies, Mathematics Education, Measurement and Evaluation, Reading and Language Arts Education, Science Education, and Vocational and Technical Education. The Ed.S. degree also is available in Educational Leadership, Educational Administration and Supervision, and Educational Program Development. This degree consists of a minimum of 36 semester hours (includes 9 hours specialist project) beyond the master's degree and is flexible in its requirements.

Candidates for admission to Ed.S. study must present satisfactory evidence of:

1. Undergraduate grade point average of 3.0 ("B") minimum on the last half of the baccalaureate degree, GPA of 3.5 at the master's level, or GRE General Test minimum score of 1000 (quantitative and verbal).
2. Three letters of recommendation.
3. Favorable recommendation from program chairperson.
4. An earned master's degree.\*
5. Any additional requirements specified by the program.

\*School Psychology is an exception to this requirement.

### **Doctor of Education (Ed.D.)**

The Doctor of Education degree is available with specializations in Educational Leadership and Educational Program Development. The focus of this degree program is on the improvement of educational practice. Program content and method designed to improve practice shall be planned in the context of four basic components: (1) Specialization, (2) Foundations, (3) Research, and (4) Language/Computer Science. Although research skills are recognized as being the basis of any doctoral program, the Ed.D. is considered less a research than a practitioner degree.

A partial list of existing professional roles for whom the Doctor of Education is designed is as follows:

1. **Central Administration**
  - a. Superintendent
  - b. Assistant Superintendents:
    - Finance
    - Federal Programs
    - Research
    - Personnel
    - Instruction
  - c. Supervisors of Services:
    - Guidance
    - Research
    - School Psychology
    - Staff Development
  - d. Supervisors of Instruction:
    - Elementary and Secondary
    - Reading
    - Mathematics
    - Social Studies
    - English
    - Art
    - Adult/Vocational Education
    - Exceptional Child Education
    - Physical Education

Library/Media

**2. Building Personnel**

- a. Principals
- b. Assistant Principals:
  - Administration
  - Curriculum
- c. Deans:
  - Boys
  - Girls
- d. Guidance Counselors
- e. Curriculum Specialist
- f. Learning Specialist
- g. Departmental heads or team leaders
- h. Teachers

**3. Other Professional Roles**

- a. Private School Personnel
- b. Junior College System Personnel
- c. Coordinators of special local and state educational programs such as Adult Education and Rehabilitation Education.
- d. Personnel of municipal and county recreation programs, children's services programs, social welfare programs, and other community-based organizations implementing informal education programs.
- e. Teacher-educators in institutions of higher learning.
- f. Business and industry.

Candidates for admission to Ed.D. study must present satisfactory evidence of:

- 1. Undergraduate grade point average of 3.0 ("B") minimum on the final two years of the baccalaureate degree, or 3.5 GPA at the master's level; and GRE General Test minimum score of 1000 (quantitative and verbal);
- 2. Certification in the field of study in which the candidate is seeking the Ed.D.;
- 3. A master's degree from an accredited institution of higher learning;
- 4. Three letters of recommendation;
- 5. Favorable recommendation from the program coordinator;
- 6. Any additional requirements specified by the program.

**Ed.D. Program Structure**

**I. Major Area**

- A. Specialization . . . . . 28 semester hours
- B. Dissertation . . . . . 18 semester hours

**II. Statistics/Measurement/Research Design . . . . . 12 semester hours**

**III. Foundations . . . . . 12 semester hours**

**Total \*\* . . . . . 70 semester hours**

**Doctor of Philosophy (Ph.D.)**

The Doctor of Philosophy degree is available in Education. Specialization is in Curriculum and Instruction, with research emphasis on problems related to specific areas of curriculum, such as Early Childhood Education, Music Education, Special Education, Mathematics Education, Reading and Lan-

guage Arts Education, Science Education, and Communication Education. In addition to the curriculum content emphases, there also are emphases on interdisciplinary studies, Measurement and Evaluation, Guidance and Counseling Education, and Adult, Vocational, and Technical Education within the Curriculum and Instruction Ph.D. program. For information on additional emphasis within the Curriculum and Instruction specialization, contact the Coordinator of Graduate Advising in the College of Education.

Candidates for admission to Ph.D. study must present satisfactory evidence of:

1. A grade point average of 3.0 ("B") minimum on all work attempted while registered as an upper level student working for a baccalaureate degree of 3.5 GPA at the master's level, and a GRE General Test score of at least 1000 (verbal and quantitative.)
2. Three letters of recommendation.
3. Favorable recommendation from program chairperson.
4. An earned master's degree.
5. Any additional requirements specified by the program.

### Program Structure

#### I. Major Area

- A. Specialization . . . . . 21 semester hours
- B. Cognate Area\* . . . . . 12 semester hours
- C. Dissertation . . . . . 18 semester hours

#### II. Statistics/Measurement/Research Design . . . . . 12 semester hours

#### III. Foundations . . . . . 9 semester hours

**Total\*\* . . . . . 72 semester hours**

\*Supporting courses outside area of specialization

\*\*Post master's semester hours

**Residency Requirement.** The purpose of the Ph.D. program in the College of Education is to prepare individuals who aspire to become producers of knowledge (researchers/university faculty members). This requires that research training and theory exploration be major factors in the education of the Ph.D. candidate. It is during the residency that much of this training occurs, although not in formal course work. To accomplish this focus on training, each Ph.D. student is required to spend at least two consecutive semesters (about 30 weeks) in full-time residency on the Tampa Campus. The student should be engaged in no more than half-time work outside the Ph.D. program during this period. Reduction of job responsibilities will allow the student to take advantage of the opportunities for learning that are available in the University community during regular day-time hours, to participate in research projects with faculty, and to teach courses at the University level.

The student must declare his/her semesters of residency as a part of the program of studies. Changes of these dates must be approved by the supervisory committee and must be submitted in writing to the Director of Graduate Studies at least one semester before the residency is to occur. It will be the responsibility of the Director of Graduate Studies to certify, at the time of application for graduation, that the residency requirement has been met.

Some candidates will find it difficult, if not impossible, to arrange time off from their jobs to meet the residency requirement. However, most of these people would probably be practitioners in school systems, for whom the Ed.D. not the Ph.D., program would be more appropriate.

## Program Descriptions

### Department of Adult and Vocational Education

The Adult and Vocational Education Department offers degrees designed to prepare teachers and leaders in the various fields of Vocational and Adult Education. Qualified persons may pursue the Master of Arts (M.A.) degree in the following majors: Adult Education, Business and Office Education, Distributive and Marketing Education, and Industrial-Technical Education. The Master of Education (M.Ed.) degree is available for an individual who holds certification in Adult or Vocational Education, including Home Economics and Agriculture Education, and who has completed required teaching experience. The degrees of Doctor of Philosophy (Ph.D.) and Doctor of Education (Ed.D.) are granted in recognition of high attainment in a specific field of knowledge.

### Adult Education

#### Requirements for the M.A. Degree (AAE)

The Master's degree in Adult Education is intended to help individuals work with adult learners in a wide variety of settings. In consultation with the student's graduate adviser, a program will be planned to include a minimum of 36 credit hours for the non-thesis option (minimum of 30 for the thesis option). The program consists of course work in the area of specialization, foundations, and electives.

**Area of Specialization** (16 credit hours non-thesis option): Specialization hours are designed to provide competence in areas associated with adult learners: instruction, curriculum development, program planning, organization and administration, and research techniques.

ADE 6360	ADE 6160	ADE 5161
*ADE 6385	*ADE 6080	ADE 6197
ADE 6380	ADE 6370	EVT 5190
EVT 6563	ADE 6387	*EVT 6930

\*Required courses or equivalent.

Two foundations courses are required. One must come from EDF 6481 or EDF 6431. One must be an approved Psychological or Social Foundations course.

**Electives** (14-15 credit hours): Courses in a related area may include those in one of the following areas: psychology, sociology, guidance, administration, gerontology, or any related field. At least one course must be outside the Department of Adult and Vocational Education. A Thesis option of 30 credit hours is also available.

#### Requirements for the M.A. Degree in Adult Education: Emphasis in Training and Staff Development (ADE-TSD)

The Training and Staff Development (TSD) program is designed to develop knowledge and specific competencies required to prepare trainers to function successfully in both profit and non-profit organizations. The coursework is interdisciplinary, derived from an analysis of theory and skills recognized by experts in the field as essential in improving employee performance through training and other staff development activities.

#### Major Objectives of the TSD Program.

- To provide knowledge and skills to enable graduates to:
- Assess training needs.
  - Design appropriate programs and interventions.

- Improve presentation and group facilitation skills.
- Employ a wide variety of instructional techniques.
- Manage training functions.
- Evaluate training.
- Work with adult learners.

### Admission requirements

1. A baccalaureate degree from a regionally accredited college or university with evidence of good standing.
2. A grade point average of 3.0 ("B") or better on all work attempted during the junior and senior years of undergraduate study.
3. A score of 1000 or better (verbal and quantitative) on the GRE General Test taken within the last five years.
4. A statement of interest in the program that also outlines career plans, presented after the other criteria have been met. A subsequent interview with the candidate may be requested to make a final admission decision.

### Program Description

**Foundation Courses:** In consultation with an adviser, a program will be planned that will include a minimum of 36 hours. The foundation requirements include 6-7 hours in:

\*EDF 6481 and \*EDF 6432 and \*EDF 7485

Other Foundations requirements are met through the required Foundations (EDF) courses listed in the Area Specialization.

**Area Specialization:** Requirements of up to 24 hours in the Specialization include the following, with substitutions to be made appropriate to the individual's background and experience. A Practicum of 3-6 hours (ADE 6946) is required as part of the Area Specialization.

*ADE 6385	ADE 6080	EDF 6166
*ADE 6946 (3-6)	ADE 6360	EDF 6281
*EDF 6165	ADE 6370	EDF 7655
*EDF 6167	EVT 5366	
*EDF 6288	EVT 6930	
*MAN 6161 or MAN 6155 or *MAN 6545		

\*Required Courses or equivalent.

## Business and Office Education

### Requirements for the M.A. Degree (ABE)

In consultation with the graduate adviser, a program will be planned to include a minimum of 32 credit hours. In addition, students entering the program who have not yet met competency requirements for business education certification will complete course work in any needed competency area. Students who have not previously completed the undergraduate qualifying competency examination will schedule this examination no later than the first term of enrollment. This degree may be completed with a thesis option.

1. Process core requirements include:

EDF 6432	EDF 6606 or EDF 6517 or EDF 6544
EDF 6517	EDF 6481
EDF 6215 or EDF 6211	
2. A minimum of 16 credit hours in the specialization area of Business and Office Education is required. Specialization courses include:

BTE 5171	BTE 6386	EVT 6661
BTE 5245	BTE 6387 Thesis	BTE 6385
BTE 6944		

Specialization may also include computer courses, such as:

EME 5403	EME 6412	EDF 6284
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3. Selected courses from which to choose in Vocational and Adult Education:

ADE 5385	EVT 5369	EVT 6265
ADE 6197	EVT 6500	EVT 6926
EVT 5664	EVT 6264	EVT 6930

4. Selected courses in one related area, such as Guidance, Exceptional Child Education, Business Administration, Administration, Supervision, Guidance, Special Education (3-8 credit hours).
5. Graduate instructional improvement courses are required as listed for individual student programs.

### **Requirements for the Ed.S., Ed.D., or Ph.D. Degrees**

These degrees are available with emphasis in the Business Education curricular area. (The Ed.S. and Ph.D. degrees are offered through Curriculum and Instruction; the Ed.D. degree in Educational Program Development.)

## **Industrial/Technical Education**

### **Requirements for the M.A. Degree (AIT)**

**Plan I** — Before being admitted to the degree program, a prospective student must have met the work experience and professional preparation requirements for certification in Industrial, Technical, or Health occupations. Requirements include:

- Process core:**

EDF 6432	EDF 6606 or EDF 6517 or EDF 6544
EDF 6481	EDF 6211 or EDF 6215
- Specialization:**

EVT 6948	EVT 6930
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Courses totaling a minimum of 32 credit hours will be a part of the student's program, which will be planned with the graduate adviser for Industrial-Technical Education. Also required are related electives (1-11 credit hours); see areas of specialization listed above.

**Plan II** — This program is designed primarily for non-certified teachers. The candidate is required to complete additional professional education courses EDG 5626, and EDG 6947, which are in excess of the normal Process Core requirements. A student will be advised of other courses that (s)he must complete. Master's degree candidates wishing to be certified must meet the state's minimum certification requirements in the area of specialization.

## **Department of Childhood/Language Arts/Reading Education**

The Childhood/Language Arts/Reading Education Department coordinates the M.A. degree in Elementary Education; Ed.S. and Ph.D. degrees in Curriculum and Instruction with emphasis in Early Childhood and Elementary Education; the Ed.D. degree in Program Development with specialization in Elementary Education, and the M.A., Ed.S. and Ph.D. programs in Reading

Education. Students interested in these programs may obtain additional information from the departmental graduate advisers.

## Elementary Education

### Requirements for the M.A. Degree (AEE)

This program requires full certification as an elementary teacher for admission. A minimum of 33 hours is required. Common core required courses: EDE 6305, EDG 6935 and RED 6116.

In addition, the student will choose one of the following areas of emphasis:

- A. Elementary Curriculum Emphasis: An individually planned program approved by a departmental adviser.
- B. Language Arts Emphasis: Required courses are:
 

LAE 6301	LAE 6415	LAE 6616
RED 6516		
- C. Early Childhood Emphasis: Prerequisites are EEC 4203, EEC 4706, or equivalent certification. Required courses are:
 

EEC 5406	EEC 5926	EEC 6405
EEC 5705	EEC 6261	
- D. Elementary School Mathematics Emphasis: Individually planned program to include four courses from the following:
 

MAE 5636	MAE 6337	MAE 6356
MAE 6549	MAE 6116	MAE 6338
MAE 6548		

Additional work in related areas may be planned with the adviser.

- E. Elementary School Science Emphasis: 12 semester hours in Science Education selected from the following courses: SCE 5937, SCE 6616, SCE 6336, SCE 6436, SCE 6634; 3 semester hours of electives in Science Education or related areas.

## Elementary/Early Childhood Education

### Requirements for the Ed.S. Degree

The Childhood Education/Language Arts Department offers the Education Specialist (Ed.S.) degree in Curriculum and Instruction, with specialization in both Elementary Education and Early Childhood Education. Candidates for admission to Ed.S. study must meet general admission requirements stated in this Catalog, as well as those listed below:

#### Early Childhood Education Admission

1. Grade point average of 3.5 in post-baccalaureate work.
2. GRE General Test score of at least 1000.
3. Three (3) years experience in programs for young children.

#### Program of Studies

1. Early Childhood Specialization . . . . . 24 hours and related courses
2. Project . . . . . 9 hours
3. Electives . . . . . 3 hours

**Total . . . . . 36 hours**  
**Comprehensive Examination**

**Elementary Education Admission**

1. GRE General Test score of at least 1000, or undergraduate GPA of 3.0, or post-baccalaureate GPA of 3.5.
2. Eligibility for certification in Elementary Education.
3. Two or more years of successful work experience with children.
4. One degree must be in Elementary Education.
5. Be recommended for approval by the program faculty.

**Program Studies**

- |                                                  |                              |
|--------------------------------------------------|------------------------------|
| 1. Elementary Education Specialization . . . . . | 24 hours and related courses |
| 2. Project . . . . .                             | 9 hours                      |
| 3. Electives . . . . .                           | 3 hours                      |
| <b>Total . . . . .</b>                           | <b>36 hours</b>              |
- Comprehensive Examination**

**Requirements for Ed.D. Degree**

The Childhood Education/Language Arts/Reading Department offers the Doctor of Education (Ed.D.) degree in Educational Program Development, with specialization in Elementary Education. The degree is designed to provide educators with an opportunity to pursue further the study of a variety of academic areas and to become familiar with the formulation and evaluation of exemplary elementary curricula and programs.

**Admission Requirements**

In addition to meeting the University and college admission requirements, the applicant must meet the following departmental requirements:

1. Have a master's degree in Education from an accredited university or college, with a GPA of 3.5 or better.
2. The Master's degree must be in Elementary Education.
3. Have current Elementary certification.
4. Have two or more years successful work experience in programs for children and submit evidence that the applicant has a commitment to the area.
5. Be recommended for approval by the Elementary Education Advanced Graduate Faculty Committee.
6. Submit three letters of recommendation from persons knowledgeable about the candidate's professional competence and accomplishments.

**Program of Studies**

- |                                                    |                        |
|----------------------------------------------------|------------------------|
| 1. Elementary Education Specialization . . . . .   | 25 hours               |
| 2. Dissertation . . . . .                          | 18 hours               |
| 3. Foundations, Curriculum, and . . . . .          | 16 hours related areas |
| 4. Statistics, Measurement, and Research . . . . . | 11 hours               |
| <b>Total . . . . .</b>                             | <b>70 hours</b>        |

**Requirements for the Ph.D. Degree**

The Childhood Education/Language Arts/Reading Department offers the Ph.D. degree in Curriculum and Instruction, with specialization in both Elementary Education and Early Childhood Education. Candidates for admission to



either specialization must meet general Catalog requirements for admission to the Ph.D. program, as well as the additional requirements listed below:

**Early Childhood Education Admission**

1. Grade point average of 3.5 in post baccalaureate coursework.
2. GRE General Test score of 1100.
3. Minimum of three (3) years experience in programs for young children.

**Program Studies**

1. Early Childhood Education .....21 hours concentration.
2. Dissertation ..... 18 hours
3. Cognate ..... 12 hours
4. Measurement/Statistics ..... 12 hours
5. Foundations ..... 8 hours
  
- Total ..... 71 hours**

**Elementary Education Admission**

1. Eligibility for certification in Elementary Education.
2. GRE General Test score of at least 1000
3. Grade point average of 3.5 in post-baccalaureate work.
4. Recommendation of program faculty.
5. A degree in Elementary Education.

**Program of Studies**

1. Foundations and Curriculum ..... 8 hours
2. Statistics/Measurement/Research Design 1 ..... 2 hours
3. Elementary Specialization ..... 21 hours
4. Dissertation ..... 18 hours
5. Cognate area ..... 12 hours
6. Language/Computer Science ..... no credit
  
- Total .....71 hours**

**Reading Education**

**Requirements for the M.A. Degree (ARD)**

The master's degree in Reading Education is designed to prepare special reading teachers, reading clinicians, and supervisors-directors-coordinators of reading for school systems. Applications should be processed in the semester preceding the one in which the applicant expects to begin the program.

Education core courses include:

**Plan I —EDF 6432, EDF 6481 and LAE 6616.**

Specialization in Reading Education shall include the following Reading courses:

- |          |          |          |
|----------|----------|----------|
| RED 6116 | RED 6247 | RED 6365 |
| RED 6544 | RED 6545 | RED 6747 |
| RED 6540 |          |          |

An optional thesis would substitute for some of the course work required in the previously described programs.

Students entering the program with an undergraduate major outside of elementary education normally will be required to take RED 4310, RED 4515,

and LAE 4414 before beginning the specialization sequence. Electives must be chosen in conference with the adviser.

Selective retention policies require that the student maintain a "B" average, with no more than three hours of "C" work in the major area\* (Reading) courses and a total of no more than six hours of "C" work in the program. If either of these criteria is not fulfilled, the student will be dropped immediately from the program. The student may then petition to the faculty to be reinstated. Reinstatement will occur when the student retakes one of the courses in which a "C" was earned and receives an "A" in that course.

\*Major area courses are RED 4310, RED 6116 and all Reading Education courses.

### **Requirements for the Ed.S. Degree in Curriculum and Instruction with an emphasis in Reading/Language Arts Education**

The purpose of the Ed.S. with emphasis in Reading/Language Arts (R/LA) is to prepare in-school leaders in the field, such as directors of R/LA programs for school systems, clinical directors in private or public settings, or supervisors of R/LA curricula. The program is designed to provide expertise in R/LA processes, designing and evaluating R/LA instructional materials and teaching techniques, and the treatment of R/LA problems. A student may elect to acquire more depth in some of these areas than in others; however, a basic knowledge of all will be required. The Ed.S. involves course work, written comprehensives, and a project. The Ed.S. program is separate from the Ph.D. program and is planned as a terminal degree. Applicants should realize that Ed.S. course work is not necessarily applicable to the Ph.D. degree.

### **Admission Requirements**

1. Meet the general requirements of both the University and the college;
2. Have certification in at least one related area of education;
3. Have at least one year of successful experience in a professional school role;
4. Have a master's degree in education with a minimum of 10 graduate semester hours in R/LA or related disciplines; if this is not filled, admission may be granted if the student is willing to lengthen the program to make up deficiencies;
5. GRE General Test score of at least 1000;
6. Submit an official transcript of post-baccalaureate work showing at least a 3.25 grade point average;
7. Submit a statement of professional history and goals and three letters of recommendation to the Reading Department;
8. Be recommended for approval by the R/LA faculty.

**Exceptions.** A limited number of applicants to the program can be admitted as exceptions to Requirements 5 and 6. In order to be considered for this exception, the candidate must have documentable compensating qualifications. Some examples of these qualifications might be:

1. Grade point average of 3.9 in post-baccalaureate work;
2. Scholarly publication;
3. Creative program development;
4. Designing of creative instructional methods and/or materials; applicants from foreign countries will be appraised individually.

### Ed.S. Program Structure

Specialization in R/LA .....	* 15 hours
Electives .....	12 hours
Project .....	* 9 hours
<b>Total .....</b>	<b>* 36 hours</b>

\* All represent post-master's credit and are minimum requirements.

### Department of Curriculum and Instruction

The department offers programs leading to the Master of Arts (M.A.), Master of Education (M.Ed.), Educational Specialist (Ed.S.), and Doctor of Philosophy (Ph.D.) in the following areas:

#### Master of Arts (M.A.):

- Art Education
- English Education
- Foreign Language Education (French, German, Spanish)
- Mathematics Education
- Science Education (Biology, Chemistry, Physics)
- Social Science Education
- Speech Communications Education

#### Master of Education (M.Ed.):

Curriculum and Instruction with emphasis in English Education, Foreign Language Education, Mathematics Education, Science Education, Social Science Education, Speech Communications Education, Theatre Education

#### Educational Specialist (Ed.S.):

Curriculum and Instruction with emphasis in Communications Education, Mathematics Education, Science Education

#### Doctor of Philosophy (Ph.D.):

Curriculum and Instruction with emphasis in Communications Education, Mathematics Education, Science Education

#### Master of Arts (M.A.)

The M.A. degree is designed for individuals who hold an undergraduate degree in Arts/Arts Education, English/English Education, Foreign Language/Foreign Language Education, Humanities/Humanities Education, Mathematics/Mathematics Education, Science/Science Education, Social Science/Social Science Education, or Speech Communications/Speech Communications Education. Three plans of study are available, depending upon the candidate's background and future goals:

**Plan I** is designed for certified teachers who desire to increase their competency in a content specialization. Specific requirements for each content area are described in this section.

**Plan II** is designed for the holder of a non-education baccalaureate degree who desires to meet initial certification requirements as part of a planned program leading to the Master of Arts degree. In addition to the requirements for Plan I, students in Plan II must take a course in Curriculum (EDG 4620), a course in current trends in secondary education, a course in reading in the content area, and complete a supervised internship (EDG 6947).

**Plan III** is designed for the holder of a non-education baccalaureate degree who does not wish to meet teacher certification requirements in the State of Florida. Plan III is not offered in all content specializations.

### **Master of Education (M.Ed.)**

The M.Ed. degree in Curriculum and Instruction is a flexible degree program intended to improve the skills of the classroom teacher. The M.Ed. is offered with an emphasis in English Education, Foreign Language Education, Mathematics Education, Science Education, Social Science Education, Speech Communications Education, and Theatre Education. The program will be planned on an individual basis by the student and an advisory committee.

#### **Admission Requirements**

1. GRE General Test score of at least 1000, or GPA (last half of undergraduate degree) of 3.0 ("B").
2. Teaching certification.
3. Two years of teaching experience.
4. Recommendations from the Departmental Admissions Committee.

**Course Requirements.** A minimum of 33 semester hours, with 60 percent or more at the 6000 level.

1. 18 semester hours in the area of emphasis, to include courses in content and/or the teaching of this content.
2. 3 semester hours in graduate curriculum and instruction (EDG 6627).
3. 12 semester hours in foundations of education (EDF 6432, EDF 6481, EDF 6211 or EDF 6215, and EDF 6517 or 6544 or 6606).

**Comprehensive Examination.** The comprehensive examination will consist of a written and/or oral examination in the major area.

### **Educational Specialist (Ed.S.)**

The Ed.S. degree programs are designed to prepare specialists in Communication Education, Mathematics Education, or Science Education for classroom instruction or leadership/supervisory role.

**Admission Requirements.** In addition to the minimum college requirements of GRE General Test score of at least 1000, or GPA (last half of undergraduate degree) of 3.0 ("B"), the minimum requirements for this program are:

1. A master's degree with an emphasis in Communication Education, Mathematics Education, or Science Education (or approved related areas), with a 3.25 GPA or equivalent.
2. Three letters of favorable recommendation.
3. Favorable recommendation from the Departmental Admissions Committee.

**Course Requirements.** A minimum of 36 semester hours. The Ed.S. Program is highly individualized. Within the program structure, candidates' programs are planned on the basis of previous educational and professional experience and future goals. The program of study must be approved by a faculty committee.

- I. **Major Area** .....(15 hours):  
Courses in Mathematics Education, Science Education, or Communication Education and/or courses in Natural Sciences, or Arts and Letters.
- II. **Cognate Area** .....(12 hours):  
Courses in supervision, administration, educational technology, curriculum development, measurement, evaluation, educational research, and/or other approved related areas.

**III. Project .....(9 hours):**  
Completed under the direction of a faculty committee.

**Comprehensive Examination.** The comprehensive examination consists of a written and/or oral examination. The candidate will be required to make an oral defense of the project.

**Doctor of Philosophy (Ph.D.)**

The Ph.D. in Curriculum and Instruction, with an emphasis in Communication Education, Mathematics Education, or Science Education, is granted on evidence of proficiency and distinctive academic achievement and by the demonstration of ability to do original, independent investigation culminating in a dissertation.

**Admission Requirements:**

1. GRE General Test score of at least 1000.
2. GPA (last half of B.A.) of 3.0 ("B").
3. A master's degree in Communications Education/approved related field, Mathematics/Mathematics Education, or Science/Science Education, with a 3.25 GPA or equivalent.
4. Three favorable letters of recommendation.
5. Two years of teaching experience.
6. Favorable recommendation for the Departmental Admissions Committee.

**Course Requirements.**

A minimum of 71 semester hours is required. This program is highly individualized. Candidates' programs are planned (with approval by a faculty committee) based upon previous experience and future goals. A language requirement must be satisfied and the following areas must be included:

- I. **Major Area:**
  - a. Communication Education, Mathematics Education or Science Education ..... 21 hours
  - b. Cognate Area\* ..... 12 hours
  - c. Dissertation ..... 18 hours
- II. **Statistics/Measurement Research Design ..... 12 hours**
- III. **Foundations ..... 8 hours**
  
- Total\* .....71 hours**

\* Supporting courses outside communication education, mathematics education or science education.

\*\* Post master's semester hours.

**Art Education (AAR)**

**Master of Arts (M.A.)**

The M.A. degree in Art Education is offered in three different plans, each with a choice of concentration in:

1. Studio
2. Arts administration, supervision
3. Research and curriculum development
4. Museum education
5. Certification, Art K-12

6. Community Arts
7. Expressive Health Arts

**Plan I** — For candidates already certified to teach art and who wish to pursue advanced training.

**37 semester hours minimum:**

Art Education .....	(13)
Art Studio .....	(8)
Art History .....	(4)
Foundations in Education .....	(3)
Electives .....	(9)

**Plan II** — For candidates who wish to gain teacher certification upon completion of the M.A. Program.

**56 semester hours minimum:**

Art Education .....	(23)
Art Studio .....	(8)
Art Studio .....	(4)
Foundations in Education .....	(15)
Internship .....	(6)

**Plan III** — For candidates who do not hold a baccalaureate degree in education and who do not desire teacher certification in the State of Florida.

**43 semester hours minimum:**

Art Education .....	(13)
Foundations in Education .....	(12)
Electives .....	(18)

All programs are planned with student and graduate adviser. An integrative project is required.

## English Education (AEN)

### Master of Arts (M.A.)

#### Admission Requirements:

1. GRE General Test score of at least 1000, or GPA (last two years of undergraduate degree) of 3.0 ("B").
2. Undergraduate degree in English Education or Rank II Certification in Secondary English from the State of Florida or equivalent.
3. Recommendation from the Departmental Admissions Committee.

#### Course Requirements. A minimum of 33 semester hours:

1. 6 semester hours in foundations of education: EDF 6432, EDF 6481 (Students may elect two additional foundations courses, one each from the groupings EDF 6211, EDF 6215 and EDF 6517, EDF 6544, EDF 6606).
2. 3 semester hours in current trends in secondary school English (LAE 6637).
3. 18 semester hours in English Department courses; one course each in linguistics or advanced composition for teachers may be included (Adviser from both English and Education will guide course selection as preparation for the comprehensive examination.)
4. Sufficient English or Education electives to bring the program to a minimum of 33 hours.

**Comprehensive Examination.** The comprehensive examination will include an oral and written examination in the English Department and a demonstration of competence in the College of Education.

### **Master of Education (M.Ed.)**

The M.Ed. degree in Curriculum and Instruction is available with emphasis in English Education. A general description of the program appears on pages 102-103. Additional details may be obtained by contacting the department.

## **Foreign Language Education (AFE) (French, German, Spanish, and Latin)**

### **Master of Arts (M.A.)**

#### **Admission Requirements**

1. GRE General Test score of at least 1000, or GPA (last half of undergraduate degree) of 3.0 ("B").
2. Undergraduate degree in Foreign Language Education.
3. Recommendation from the Departmental Admissions Committee.
4. Fluency in English and a foreign language.

#### **Course Requirements. A minimum of 33 semester hours.**

1. 18 semester hours in foreign language approved by the student's adviser.
2. 12 semester hours in foundations of education: EDF 6432, EDF 6481, EDF 6211 or EDF 6215, and EDF 6606 or EDF 6517 or EDF 6544.
3. 3 semester hours in trends in secondary foreign language education: FLE 6665.

**Comprehensive Examination.** The comprehensive examination will consist of a written and/or oral examination in the major area.

### **Master of Education (M.Ed.)**

The M.Ed. degree in Curriculum and Instruction is available with emphasis in Foreign Language Education. A general description of the program appears on pages 102-103. Additional details may be obtained by contacting the department.

## **Social Science Education (ASO)**

### **Master of Arts (M.A.)**

#### **Admission Requirements**

1. GRE General Test score of at least 1000, or GPA (last half of undergraduate degree) of 3.0 ("B").
2. Undergraduate degree in Social Science Education or a degree with a strong background in social science.
3. Recommendation from the Department Admissions Committee.

#### **Course Requirements. A minimum of 33 semester hours.**

1. 18 semester hours (at least five courses) at the 5000 or 6000 level in the College of Social and Behavioral Sciences; all courses must be approved by the student's adviser, and three or more of these courses must be at the 6000 level.
2. 3 semester hours in current trends in secondary social science (SSE 6636).
3. 6 to 9 semester hours of approved electives.

**Comprehensive Examination.** The comprehensive examination will consist of a written and/or oral examination in the major area.

### **Master of Education (M.Ed.)**

The M.Ed. degree in Curriculum and Instruction is available with emphasis in Social Science Education. A general description of the program appears on pages 102-103. Additional details may be obtained by contacting the department.

## **Speech Communication Education (ACE)**

### **Master of Arts (M.A.)**

#### **Admission Requirements:**

1. GRE General Test score of at least 1000, or GPA (last half of undergraduate degree) of 3.0 ("B").
2. Undergraduate degree in Speech or Communications Education, Theatre or Drama Education, or English Education, or current certification in one of the above areas with a minimum of 20 hours of college course credit in oral communication.
3. Recommendation from the Departmental Admissions Committee.

#### **Course Requirements. A minimum of 33 semester hours.**

1. 15 semester hours in Communication, including COM 6001, courses in rhetoric and/or Communication, and Oral Interpretation.
2. 3 semester hours in foundations of Measurement EDF 6432.
3. 6 semester hours in the history of speech communication and trends in teaching speech communication.
4. 9 semester hours of electives in education.

**Comprehensive Examination.** The comprehensive examination will consist of a written and/or oral examination in the major area.

### **Master of Education (M.Ed.)**

The M.Ed. degree in Curriculum and Instruction is available with emphasis in Speech Communications Education. A general description of the program appears on pages 102-103. Additional details may be obtained by contacting the department.

### **Educational Specialist (Ed.S.) Doctor of Philosophy (Ph.D.)**

Advanced graduate degrees in Curriculum and Instruction with emphasis in Communications are available. Please refer to page 104 for general descriptions of these programs or contact the department directly.

## **Theatre Education**

### **Master of Education (M.Ed.)**

This program is designed to serve the needs of certified teachers who have not completed a degree in theatre (particularly those certified in speech or English). The courses of study are designed to fully qualify the teacher with a minimum of knowledge and experience considered necessary for a drama teacher.

**Program Requirements. Curriculum and Instruction: 15 hours.** These may be taken at any USF branch campus during any semester (up to 6 hours may be transferred). **Theatre Education: 17-18 hours.**

Up to 14 hours may be taken during the summer session; however, four courses (11 hours) will be offered **only** during the 10-week summer session.





**Specialization (two options):**

1. **Elementary School Guidance Emphasis** .....(28 hours):
 

EGC 6006	EGC 6464	EGC 6830
EGC 6225	EGC 6509	EGC 6306
EGC 6935 (1 credit)		
Three hours minimum of elective credit from the following courses:		
EGC 5101	EGC 6472	EGC 6905
EGC 6105		
2. **Secondary and Adult Guidance Emphasis** .....(28 hours):
 

EGC 6006	EGC 6435	EGC 6835
EGC 6225	EGC 6510	EGC 6306
EGC 6935 (1 credit)		
Three hours minimum of elective credit from the following courses:		
EGC 5101	EGC 6472	EGC 6905
EGC 6105		

**Plan II**

Plan II is for students who do not hold teaching certification and who desire certification as counselors in public schools:

**Process Core** ..... (minimum of 14 hours):

1. EDF 6432 or EDF 7437
2. One of the following:
 

EDF 5136	EDF 6213	EDF 6120
EDF 6215		
3. EDF 6354
4. One of the following:
 

EDF 6517	EDF 6544	EDF 6606
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**Specialization:**

(Same as Plan I)

**Additional Requirements** .....(12 hours):

EDG 4620	EEX 6936	EGC 6948
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The M.A. program in Guidance and Counseling has no full-time residency requirement. A student who is employed on a full-time basis is limited to 8 hours per semester. Exceptions are made only with permission of the student's academic adviser.

**Requirements for the Ed.S. Degree**

The Educational Specialist program in Curriculum and Instruction, with specialization in Guidance and Counseling, is designed to improve the skills and competence of practicing counselors. The program comprises 37 semester hours and can be completed in two years by part-time students through evening course work. Students are admitted once a year, at the beginning of the fall semester. Application must be completed by May 15. In addition to meeting the University and college requirements for admission to Ed.S. programs, applicants must meet the following departmental requirements:

1. A master's degree. The following courses or their equivalents must be completed prior to admission: (1) Principles of Guidance or an overview course in a related field; (2) Appraisal Procedures; (3) Informational Service; (4) Counseling Theories; (5) Group Theories; (6) Practicum in Counseling.
2. Adequate grade point average at the master's level and Graduate Record Examination scores.





3. Current university and college requirements for admission to graduate study.
4. Approval by the Department of Education Leadership.

**Program Requirements.** The program requires a minimum of 39 credit hours. Typically, the student's program will consist of the following:

1. **Required Courses** ..... (24 hours)
 

EDA 6061	EDA 6192	EDA 6232
EDA 6242	EDS 6050	EDG 6627
EME 6425	EDF 6432	
2. **Specialization Courses** ..... (6 hours)
 

EDE 6205 and EDG 6693 or,  
EDM 6235 and EDG 6694 or,  
ESE 6215 and EDG 6695 or,  
EEX 6511 and EEX 6025
3. **Electives** ..... (9 hours)
 

6 elective hours in Educational Leadership and 3 elective hours in Foundations.

**Requirements for the Ed.S. and Ed.D. Degrees**

**Ed.S. Admission Requirements**

1. A minimum GRE General Test score of 1000, or a minimum GPA of 3.0 in the last two years of undergraduate study, or a GPA of 3.5 at the master's level, and a master's degree from an accredited institution.
2. Certification in Educational Leadership.
3. Screening by the Educational Leadership Department.

**Ed.D. Admission Requirements**

1. A minimum GRE General Test score of 1000.
2. A master's degree from an accredited institution.
3. Either a GPA of 3.0 or better in the last two years of undergraduate study, or a GPA of 3.5 or better in the master's degree.
4. Certification in Educational Leadership.
5. Three letters of recommendation.
6. Screening by the Educational Leadership Department.

Applicants should contact the Educational Leadership Department and complete a preliminary application prior to making application to the Graduate School.

**Program.** The major components of study in the Ed.S. and Ed.D. degree programs are:

- I. **Specialization in Educational Administration/Supervision required courses**
  - Electives
  - Project/Dissertation
- II. **Foundations**
  - Social Foundations
  - Psychological Foundations

### III. Measurements and Statistics

### IV. Computer Science

The Department of Educational Leadership also offers an Ed.S. and a Ph.D. in Curriculum and Instruction, with a focus in Interdisciplinary Studies. Admission requirements for this program are the same as those for admission to the Ed.S. and Ed.D. programs (above), except that certification in Administration/Supervision is not required. Application for admission begins by completing a preliminary application form available from the Educational Leadership Department.

## Junior College Teaching Program

### Requirements for the M.A. Degree

Areas of specialization in the Junior College program include:

- |                  |                        |
|------------------|------------------------|
| ● Biology        | ● Geology              |
| ● Business *     | ● History              |
| ● Chemistry      | ● Mathematics          |
| ● English        | ● Physics              |
| ● Engineering ** | ● Political Science    |
| ● Economics      | ● Sociology            |
| ● French         | ● Spanish              |
| ● Geography      | ● Speech Communication |

\* Business specialization requires, in addition, a minimum score of 475 on the GMAT, plus a minimum of 3.0 GPA for the last two years of baccalaureate study.

\*\* Engineering bachelor's degree required.

**Admission.** Because of the unique character of the Junior College program, which integrally involves two colleges of the University, admission and advisory regulations go beyond those listed in the section dealing with Graduate Study.

Application for admission to the program is made via the Office of Admissions. Action on all applications is the joint responsibility of the two colleges involved. Admission to the program requires a minimum score of 1000 on the combined verbal and quantitative sections of the GRE General Test. \* Duplicate sets of the student's complete record will be on file in both colleges, with the College of Education given responsibility for making official recommendations for the granting of the degree to the Vice President for Academic Affairs and to the Registrar.

\* Business specialization requires, in addition, a minimum score of 475 on the GMAT plus a minimum 3.0 GPA for the last two years of baccalaureate study.

**Program. A minimum of 32 credit hours, plus an Internship of 6 hours.**

#### 1. Specialization

Typically, the student's program will include 24-30 credit hours of graduate work in a field of specialization. The specialization sequence to be completed will be designed in consultation with a designated major field adviser. This "typical" program is based on the assumption that the student has an undergraduate background in his specialization area that is roughly equivalent to the pattern of the appropriate University of South Florida major. Students admitted without such preparation may be required to correct deficiencies. By the same token, the unusually well prepared student may be permitted to take fewer courses in his

specialization area, substituting approved electives from other fields of study.

**2. Professional Education**

Typically, the student's program will include approximately 15 hours of graduate work in professional education, as in the example below. Additional hours may be required if the student's background is weak in relevant areas.

EDH 6061                                      EDH 6938                                      EDG 6947

Typically, the internship will consist of full-time supervised teaching for one semester or part-time teaching for two semesters. At least one-half of the internship must be in the community college, the other half being left to the discretion of the student's adviser. The internship follows the completion of professional education coursework.

**Department of Educational Measurement and Research**

The Department of Educational Measurement and Research is a foundational department within the College of Education. It provides support services to graduate programs. It offers courses and consultation in the following areas; Measurement, Statistics, Program Evaluation, Research Design, Systems Approaches to Planning, Evaluation, and Development. Two graduate degrees are offered by the department: Master of Education (M.Ed.) and Doctor of Philosophy (Ph.D.).

**Master of Education (M.Ed.)**

The Master of Education degree prepares personnel to work in school districts, state government agencies, commercial test publishing, and program evaluation enterprises. The program prepares personnel with specialized skills in test construction, program evaluation, and data analysis. Course requirements include:

<b>Process Core</b> .....	<b>(11 hours minimum)</b>
EDF 6432 Foundations of Measurement .....	(3)
EDF 6481 Foundations of Research .....	(3)
EDF 6215 Learning Principles Applied to Instruction .....	(4)
EDF 6606 Socio-Economic Foundations of American Education ...	(4)
<b>Sub-total</b> .....	<b>(14)</b>
<b>Concentration</b> .....	<b>(8 hours minimum)</b>
EDG 6627 Foundations of Curriculum & Instruction .....	(3)
EDF 6485 Applied Educational Program Evaluation .....	(3)
EDF 6288 Instructional Design .....	(3)
<b>Sub-total</b> .....	<b>(9)</b>
<b>Specialization</b> .....	<b>(12 hours minimum)</b>
EDF 6407 Statistical Analysis for Educational Research .....	(4)
EDF 7408 Statistical Analysis for Educational Research II .....	(4)
EDF 7488 Application of Computer Language & Procedures in Education .....	(1)
EDG 6931 Computing as a Research Language: Collecting Educational Research Data .....	(3)
EDG Computer Elective .....	(3)
EDF 6437 Development & Validation of School-Wide, District-Wide, & State-Wide tests .....	(3)
<b>Subtotal</b> .....	<b>(18)</b>
<b>Total</b> .....	<b>(41)</b>

## Doctor of Philosophy (Ph.D.)

The Ph.D. degree in Curriculum and Instruction is available with emphasis in Measurement and Evaluation. Focus in this area is upon developing the systematic inquiry skills essential to the objective study and evaluation of educational processes and products. Included are competencies in the fields of measurement, statistical analysis, research evaluation design, and systems approaches to program planning and development.

The intent of the program is to develop personnel who can strengthen the research and development capabilities of agencies concerned with education. Emphasis is placed upon those aspects of design, measurement, and statistical analysis that are particularly relevant to decision-oriented research. In addition to consideration of traditional experimental designs, emphasis is placed on quasi-experimental correlational, historical, ethnographic, case study, and naturalistic approaches.

While the doctoral program in measurement and evaluation emphasizes methodology, concentration in substantive disciplines within education and/or the social sciences also is possible. Concentration in a cognate may suggest a further context within which the methods of systematic inquiry may be applied. Experience gives each student the opportunity to apply skills.

In sum, methodological skills necessary for systematic inquiry are developed within a programmatic context that encourages growth of knowledge about education, considers important principles of leadership, and provides a clinical setting in which these elements can be fused into professional applications. The program of studies is organized into four areas:

1. Foundations
2. Specialization or major emphasis
3. Measurement-Statistics
4. Cognate

## Program Requirements

1. **Foundations** ..... (8)  
A minimum of 8 hours of study to be selected from offerings in Educational Psychology, Historical-Philosophical-Social Foundations, and Curriculum and Instruction.
2. **Specialization or Major Emphasis** ..... (42)
  - EDG 7980 Dissertation: Doctoral ..... (18)
  - EDF 7940 Practicum in Educational Planning, Evaluation, and Development ..... (8)
  - EDF 7988 Statistical Analysis Laboratory I ..... (1)
  - EDF 7488 Statistical Analysis Laboratory II ..... (1)
  - EDF 7493 Systems Approaches to Program Planning, Evaluation, and Development ..... (4)
  - EDF 7485 Theory and Practice of Program Evaluation ..... (3)
  - EDF 7410 Design of Systematic Studies in Education ..... (4)
  - EDF 7655 Organization Development in Educational Institutions ... (4)
  - EDH EDF 7667 or 7692
3. **Measurement/Statistics** ..... (19)
  - EDF 6407 Statistical Analysis for Educational Research I ..... (4)
  - EDF 7408 Statistical Analysis for Educational Research II ..... (4)
  - EDF 7484 Statistical Analysis for Educational Research III ..... (4)
  - EDF 7437 Advanced Measurement I ..... (3)
  - EDF 7438 Advanced Measurement II ..... (4)



4. **Cognate** ..... (11)  
**Elective Courses**

### **Department of Instructional Computing**

The graduate program in Instructional Computing prepares professionals to work with computers in a variety of instructional settings. It provides a wide range of experience in microcomputer hardware, softwares, and the educational applications of computers. An M.Ed. in Curriculum and Instruction, with an emphasis in Instructional Computing, is available. In addition, instructional computing cognates are available in a variety of other graduate level programs.

#### **Admission Requirements for the M.Ed. Degree**

1. GRE General Test score of 1000, or GPA (last two years of undergraduate degree) of 3.0 ("B").
2. Two years of teaching experience.
3. Approval by the department.
4. Certification.

#### **Course Requirements**

1. 21 semester hours in instructional computing, including: EME 5403, EME 6412, EDF 6284, EME 6425, and CAP 6125.
2. 3 semester hours in graduate curriculum and instruction (EDG 6627).
3. 12 semester hours in foundations of education (EDF 6481, EDF 6215, and EDF 6517 or EDF 6544 or EDF 6606).

**Comprehensive Examination.** The comprehensive examination will consist of a written and/or oral examination covering both theoretical and applied objectives within the degree program.

### **Library, Media and Information Science**

#### **Requirements for the M.A. Degree (ALI)**

In addition to University and college admission requirements, the School of Library and Information Science asks that the student have an interview with the program chairperson, the program's admission committee, or an individual designated by the chairperson. The school also requires each applicant to submit a typewritten statement expressing personal reasons for wanting to pursue graduate study in librarianship. Graduation requirements include the completion of four core courses, LIS 5404, LIS 6271, LIS 6608, and LIS 6735, plus a planned program of electives developed for each student in conjunction with his/her adviser. The program requires a minimum of 36 semester hours.

#### **Requirements for the Ed.S. Degree**

The sixth year Ed.S. degree in Curriculum and Instruction, with an emphasis in Library, Media and Information Science, provides librarians with an opportunity to specialize in particular aspects of library, media, and information services in different types of libraries. In addition to college requirements for admission to Ed.S. programs, the school requires that students have a master's degree from an ALA accredited program, an interview with a relevant professor in the school, and an application letter on file in the school. Graduation requires completion of a minimum of 36 hours of approved coursework, including at least 5 hours in cognate courses outside the school, 9 hours for a thesis or project, and a final comprehensive exam.

## **Accreditation and Certification**

The School of Library and Information Science master's degree program is fully accredited by the American Library Association. Completion of the required program of studies for the school media librarianship specialization results in Florida certification as an Education Media Specialist. Students may also plan electives to meet the certification requirements of other states.

## **Additional Information**

Even though degree-oriented undergraduate study is not offered by the school, the faculty will counsel those undergraduates interested in exploring the kind of program most appropriate as a basis for graduate study in librarianship at USF. Details concerning the graduate program, including information on the profession, are available from the Director, School of Library and Information Science, University of South Florida, Tampa, Florida 33620.

The goals of the school are to:

1. Serve the needs of library and information agencies and to add to the bodies of knowledge in library science;
2. Prepare students to assume a wide variety of service and leadership roles in librarianship;
3. Assist students in developing the attitudes necessary for involvement in the social, intellectual, cultural, economic, and scientific interests of the community;
4. Encourage students and graduates to establish high standards of intellectual inquiry through research;
5. Provide an intellectual environment in which the student may develop creative self-direction;
6. Impress upon students the social significance of libraries in a democratic society;
7. Foster an understanding of the librarian and libraries in a multicultural society;
8. Promote the advancement of librarianship through faculty research and publication;
9. Uphold the Library Bill of Rights, the First Amendment to the Constitution, and the concept of intellectual freedom which is expressed in the statements on labeling and on freedom to read prepared by the American Library Association in conjunction with other professional organizations and incorporated in the Intellectual Freedom Manual.

## **Objectives of the Graduate Program**

Upon successful completion of the Master's program, students will be able to:

1. Describe the role of the librarian and library in a multicultural society;
2. Effectively use technology in the rapidly changing field of librarianship;
3. Build and maintain collections of library materials;
4. Effectively use library facilities and resources to develop programs which support the goals, interests and needs of library clientele;
5. Apply practical and theoretical knowledge gained independently and through planned experiences in libraries;
6. Analyze and evaluate research in librarianship and relate findings to the solution of library problems;

7. Discuss the importance of professional organizations for librarianship and to library education;
8. Describe and draw upon the contribution of other disciplines to librarianship;
9. Discuss the importance of research and publication to the advancement of librarianship.
10. Demonstrate a commitment to freedom of expression.

## Department of Music Education

### Requirements for the M.A. Degree (AMU)

Plans in both instrumental and vocal music are offered. A placement examination in music theory is required of all new registrants. Each candidate must meet the undergraduate level of piano proficiency before the semester in which he/she expects to graduate. Participation in ensembles is required for at least two semesters. Three plan areas are available to the candidate: 35 hours of class work, or 32 hours plus recital, or 30 hours plus thesis. Required are: Seven credits in education to include EDF 6215 and EDF 6432; nine credits in music education including MUE 6080 and MUE 6145, six credits in music theory-history-literature; four credits in applied music and MUS 6793.

### Doctor of Philosophy (Ph.D.) in Curriculum and Instruction — Major in Music Education

The degree Doctor of Philosophy is a research degree. It is granted on the basis of evidence of proficiency and distinctive achievement in music and demonstration of the ability to do original, independent investigation.

### Admissions — University and College of Education Requirements

The applicant for admission to Ph.D. study must present satisfactory evidence of:

1. Undergraduate grade point average of 3.0 ("B") minimum on the last half of the baccalaureate degree or a grade point average of 3.5 at the master's level; and an minimum score of 1000 on the GRE (quantitative and verbal).
2. Three letters of recommendation.
3. Favorable recommendations from program faculty.
4. Master's degree from an accredited institution of higher education.
5. At least two years of public or private school music teaching experience.

In addition to University and College requirements, the applicant must comply with music department requirements for admission. After consulting the program, the candidate should contact the College Coordinator of Graduate Advising (EDU 312) for the College Data Form and the University application.

### Program Structure

<b>Specialization</b> .....	<b>21 semester hours</b>
Cognate area outside the major .....	12 semester hours
Dissertation .....	18 semester hours
Foundations .....	9 semester hours
Statistics/measurement/research design .....	12 semester hours
<b>Total</b> .....	<b>72 semester hours</b>

Other specific requirements can be obtained by contacting the music department.

## **Department of Physical Education Professional Physical Education**

### **Requirements for the M.A. Degree (PET)**

The master's degree program in Physical Education focuses on the teaching-learning process in physical education. Students may concentrate their studies in Elementary or Secondary Physical Education, or Physical Education for the Handicapped.

Enrollment in PET 6016C, Professional Assessment, is required of all students. This course should be completed during their first semester of study in the program, and not later than the completion of six semester hours of credit in the physical education curriculum area.

## **Department of Psychological and Social Foundations of Education**

### **School Psychology**

The School Psychology Program offers two graduate degrees which prepare students for the professional practice of school psychology: the Educational Specialist (Ed.S.) degree and the Doctor of Philosophy (Ph.D.) degree. Designed to meet recognized national and state accreditation standards, the Program is offered through the Department of Psychological and Social Foundations in cooperation with the Department of Psychology. The School Psychology Program is approved by the Florida Department of Education. Thus, graduates of the Program, at the Ed.S. level and beyond, are eligible for certification as school psychologists in the State of Florida. While Florida-certified school psychologists often are certifiable as school psychologists in other states, professional reciprocity is not always immediate or guaranteed. The School Psychology Program Faculty will help students to plan programs which will result in certification in other states whenever possible. In most cases, completion of the School Psychology Program will satisfy the certification requirements of other states.

### **Program Philosophy**

The School Psychology Program is based on three primary philosophies of comprehensive professional practice. These are integrated into all facets of the Program; they are taught, modeled, and reinforced by the Program Faculty to guide our students' professional practices both before and after their entry into the field. These program philosophies involve:

1. **Commitment to Advocacy and Respect for Individual Differences.**  
The School Psychology Program encourages a special sensitivity to the cultural diversities of all people and a special respect for the uniqueness and human dignity of all individuals. Within this context, advocacy is emphasized as a conscious philosophy and activity whereby school psychologists help others to know, understand, and attain their legal, educational, oral, and individual rights. Initially, advocacy may involve students and their parents. Yet, individual advocacy often involves systemic and community-wide foci and change. Thus, the School Psychology Program is committed to a comprehensive, system-wide orientation where mental health and educational services are not just school-based, but family and community-based as well.
2. **Commitment to Empirical Knowledge and Professional Competency.**  
The School Psychology Program is dedicated (a) to teaching professional practices that have been empirically demonstrated as

effective and socially valid, and (b) to the pursuit of new knowledge through sound research practices. Within this context, the School Psychology Program is committed to training students who are professionally competent in their knowledge of best empirical practices, their ability to implement and evaluate those practices, and their dedication to research and the development of valid practices. This is an ongoing process. Thus, the Program endorses a perspective of lifelong professional study through its curriculum and by providing continuing education activities after graduation.

- 3. Commitment to Self-Awareness and Ethical Practice.** The School Psychology Program promotes students' development of personal and professional skills that influence and ensure sound psychological practice. The Program, therefore, is committed to evaluating students' knowledge and skill and their interpersonal skills and interactions. Evidence of accomplishment in both of these areas is necessary for professional practice and, therefore, for graduation. Concurrent with one's interpersonal skills is one's commitment and ability to practice in an ethical manner. The School Psychology Program adheres to the ethical standards of the American Psychological Association and the National Association of School Psychologists, and adheres to the belief that ethical practice is the only acceptable approach to professional training and service delivery.

### **Commitment to Students**

Just as the Program integrates the philosophical commitments above into every facet of training, so too does it practice them amongst its faculty and within the training process. Briefly, the Program Faculty is dedicated to producing highly trained psychologists through the use of positive techniques. The positive approach can be seen in the following policies and procedures: (a) Thorough admission procedures result in the selection of outstanding students. This makes possible a faculty commitment to do everything possible to guide each student to a high level of professional competence. This strategy contrasts with the practice of accepting large numbers of students with the assumption that some will "flunk out". (b) The curriculum is well organized and explicit so that students are always aware of program expectations and their progress in relation to these expectations is clear. (c) **The student body is kept small** resulting in greater student-faculty interaction than would otherwise be possible. (d) **Skills of practice are developed** through a non-threatening apprenticeship network established with local school systems and mental health support agencies. This model encourages the student to "assist" several professors and practicing school psychologists throughout her/his training. The intent here is to provide positive environments, rich in feedback, in which competent psychological skills develop. (e) **Research guidelines** have been established for the purpose of reducing the anxiety and ambiguity so often associated with research efforts. The goal is to increase the probability that thesis and dissertation research will be a positive experience, while producing quality data with reasonable energy expenditure.

In addition, the faculty is (a) **committed to advocating for all students** in the program in any way possible to facilitate quality training, personal and professional growth, and effective services for the clients they will eventually serve; (b) **mindful of their responsibility to model respect for students' individual differences** and to recognize students' individual strengths, weaknesses, assets, and limitations through individual programming and attention where necessary; (c) **committed to their own research programs** that

provide students with practical experience and thesis and dissertation opportunities, and to their own professional competence both in the classroom and in their field; and (d) committed to their own personal and professional development and awareness, and to a training process that exemplifies sound ethical judgment and practice.

### **Program Orientation**

The School Psychology Program is committed to training professionals who have expertise in both psychology and education. This training is accomplished utilizing a **scientist-practitioner** model which emphasizes **comprehensive school psychological services using a social and cognitive behavioral learning** orientation that recognizes the importance of children's **individual differences**. The School Psychology Program trains students to deal with the full range of school psychological practice from (a) prereferral intervention to (b) standardized and curriculum-based assessment to (c) consultation and/or indirect psychoeducational interventions to (d) direct and/or therapeutic psychoeducational interventions to (e) program and service delivery evaluation. This training occurs within a problem-solving model and focuses on services at the individual child level; the teacher or curricular level; the principal, program, or administrative level; and the community, system, or social level. Finally, Program training emphasizes all three levels of preventive services: primary, secondary, and tertiary.

At an applied level, the Program recognizes the **importance of field work, hands-on experience, and supervision in the training process**. The Program faculty believe that practica and internship field experiences are indispensable parts of the preparation of a school psychologist. Thus, in cooperation with several local school districts and their departments of school psychological services, students in the Program receive continuous field experience beginning in their first semester. These experiences complement the more formal coursework in the Program, and students receive close supervision by both University and Field Supervisors who provide ongoing feedback relative to students' specific, professional skills. At the doctoral level, students complete an advanced internship in a hospital, developmental or residential center, community mental health, or correctional setting. Finally, also at the doctoral level, supervision is itself taught in the Program; this is an important skill that all advanced school psychologists need in the field.

### **Description of Degree Programs**

The Master of Arts (M.A.), the Educational Specialist (Ed.S.), and the Doctor of Philosophy (Ph.D.) degrees are awarded with a major in School Psychology. The master's degree is not considered a terminal degree and is not sufficient for certification.

**The Ed.S. Program.** For the beginning graduate student, the entire program through the Ed.S. degree, including conferral of the M.A. degree, consists of three full years of study or approximately 85 graduate semester hours. These hours include academic and professional coursework, a thesis, relevant practical experiences, and a full-time, full-year internship. For the student who has completed pertinent graduate work the program may be shorter and transfer credit opportunities are available. For the student who already has earned a master's degree with experience in school psychology, the Ed.S. program may be completed with a minimum of 36 semester hours. Supervised experience in the delivery of comprehensive school psychological services may take the place of internship at this level. No undergraduate course credit will be applied to the Ed.S. (or Ph.D.) Program, and all courses are open exclusively

to graduate students. Further, no courses designed to remediate a specific student weakness will be applied to the student's program.

**Practica experiences** during the first two years of the Ed.S. Program prior to and in preparation for the full-year internship. These experiences are supervised by the School Psychology Faculty and are systematically evaluated to determine the student's readiness to proceed into the internship. All practica experiences are conducted in a manner consistent with the legal and ethical guidelines of the profession of school psychology.

The internship occurs during the last year of the Ed.S. student's program. It is a full-time, full-year experience which consists of at least 1200 clock hours in a school setting. Utilizing both field-based and Program-based supervisors, the internship provides students with a comprehensive experience involving regular and special educational programs across the school-age spectrum. Field-based supervisors are employees of their respective school districts and hold valid school psychology credentials. These supervisors are responsible for only one intern per year, and they meet with the intern at least two hours per week in direct supervision. Each intern is systematically evaluated throughout the internship year, and the entire internship is conducted in a manner consistent with the legal and ethical guidelines of the profession of school psychology.

**The Ph.D. Program.** The curriculum leading to the Ph.D. degree with a major in school psychology consists of approximately 65 semester hours beyond the Ed.S. degree. These hours include academic and professional coursework including specialization in an advanced area of school psychology practice, and advanced internship beyond the full-year internship during the third year of the Program, and the dissertation. For the beginning graduate student, the entire program, including the M.A. and Ed.S. degree can be completed in four years, although most students take a fifth year to complete the dissertation. For the student who already has earned an Ed.S. degree in school psychology, the Ph.D. program can be completed in two to three years.

### **Residency**

The M.A./Ed.S. program can be completed in three calendar years. Since the curriculum is carefully sequenced, full-time study is required of all students. An alternate planned experience may be allowed for students entering with a master's degree and previous school psychology experience. It is assumed that a student will have time for an assistantship or part-time job up to 20 hours per week.

The residency requirement for the doctoral program is two consecutive academic years of full-time study, after conferral of the Ed.S. degree, with no more than 20 hours per week employment.

### **Student Feedback and Evaluation**

Professional School Psychology requires high level intellectual abilities, a broad background of knowledge in human behavior, superior skills in the areas of assessment and intervention, and excellent interpersonal abilities. Students will be continually observed and evaluated across all of the dimensions above, and they will receive formal, programmatic feedback at least once per year from the faculty.

Other types of feedback will come periodically to the student through other sources:

1. Through course examinations, papers, and other projects;
2. From faculty when participating in collaborative research endeavors;
3. From practicum courses and internship experiences involving skill development;

4. From the Program Director, Program Advisors, and other program and affiliated faculty;
5. Through Comprehensive Examinations at both the master's and Ph.D.-qualifying levels.

While one form of evaluation involves grades from academic and skill-based courses, evaluation to determine a student's continuation in the Program is also based on a candidate's interpersonal abilities. Among the interpersonal areas evaluated by the Program are: adaptability, communication skills, conscientiousness, cooperation, independence, motivation, personal stability, productivity, professional ethics, and professional image.

The School Psychology Faculty reserves the right to require remedial or compensatory experiences or additional coursework to address any identified student deficiency in the areas discussed above. The faculty also reserves the right to recommend a student's dismissal from the Program due to documented deficiencies in necessary academic, skill, or interpersonal areas. Such decisions will be accomplished with full respect for the student's due process rights and in accordance with College and University policies and procedures.

### **Admission to the Program**

The primary assumption underlying admission to either the Ed.S. or the Ph.D. program is that every student who is accepted is capable (a) of successfully completing his or her respective program and (b) of performing competently in the field as a school psychologist. For this reason, the selection and admissions procedure is quite rigorous. Applicants are selected based on their potential to benefit from the training program and their potential to contribute to the Program and to the field of School Psychology.

A culturally diverse student body is actively recruited, and applicants of academic and professional promise are not excluded on the basis of race, ethnic origin, sex, age, religion, or physical handicap. The admissions process is highly selective, but flexible. That is, no one piece of information is weighted substantially over another so long as they meet the minimal requirements of the University and College. The evaluation process, however, does involve both academic and interpersonal considerations.

Admission to the Program is based on past academic work; GRE verbal and quantitative scores; pertinent volunteer work, and extracurricular experience; letters of recommendation; and a statement of professional goals that should include a current resume or vita. Students may apply, after conferral or anticipated conferral of their Bachelor's degree, at either the Ed.S. or Ph.D. level depending on their professional aspirations. Applications may be accepted through the end of the 10-week Summer term (generally around July 10th); however, admission to the Program is on a space-available basis. Most applications are completed by March 1st, and most acceptances occur during the early Spring. All students are accepted to begin their program in the **Fall Semester**; no January admissions are permitted.

The application process begins by securing an application and graduate catalog from the Office of Graduate Admissions, University of South Florida, Tampa, Florida 33620 or by contacting the School Psychology Program (Department of Psychological Foundations, FAO 268; 813/974-3246). Two sets of information must be provided by the applicant:

1. To the Office of Graduate Admissions should go:
  - a. The completed University application and application fee;
  - b. An official copy of the student's GRE scores (scores greater than 5 years old are not acceptable; the College requires the GRE verbal



- plus quantitative scores to add up to a minimum of 1000 for Ph.D. study);
- c. An official copy of all student transcripts for all undergraduate and graduate work.
2. To the School Psychology Program (c/o Dr. Howard Knoff for Ph.D. applicants; c/o Dr. James Barnard for Ed.S. terminal applicants);
- a. Three letters of recommendation sent directly to the Program;
  - b. An official copy of all student transcripts for all undergraduate and graduate work;
  - c. A statement of professional goals which also describes past activities or experiences relevant to the application, and a current vita or resume;
  - d. Completion of the Financial Aid Questionnaire.

Upon receipt of application material, prospective students are sent acknowledgments so they can keep abreast of their application status and so they know when it is complete. Once complete, the application file is reviewed by faculty members who individually recommend whether the candidate should be invited to campus for a formal interview. Ph.D. interviews involve the entire School Psychology Faculty; Ed.S. interviews involve selected representatives of the Faculty. During the interview, the applicant will have the opportunity to pose questions to the interviewers in order to further familiarize themselves with the Program.

After the interview, an admissions decision is made based on the applicant's:

1. career goals and their compatibility with those of the Program;
2. potential for successful completion of the Program;
3. sensitivity to the needs of children, families, teachers, and systems;
4. interpersonal skills;
5. oral and written communication skills.

**NOTE:** If geographic constraints prohibit a personal interview, a telephone interview may be conducted by the faculty or a taped interview may be used. In addition, the Faculty reserves the right to contact all references specified as appropriate by the applicant.

### **Affirmative Action**

The University of South Florida and the school psychology program are committed to affirmative action, and members of minority groups are strongly urged to apply.

### **Financial Aid**

Normally, all of our students receive funding through assistantships, fellowships, and/or tuition waivers. Separate forms, where necessary, are forwarded with each acceptance letter. Information concerning other forms of financial aid should be obtained as early as possible from the Office of Financial Aid, SVC 262. February 1 is the application deadline for most forms of assistance through that office.

### **Paid Internships**

A full-time internship of one academic year in a local school system is required at the specialist level. Internship stipends must be negotiated annually with school boards. However, for the past few years all students desiring paid internships have received them, and we expect this trend to continue.

## Continuing Education

Elements of the curriculum listed below will be made available to qualified practicing school psychologists who wish to upgrade their knowledge and skills without necessarily working toward a degree. Other courses and workshops will be developed for this purpose as the need arises, and a list of pertinent courses available from other departments will be maintained. The faculty will provide appropriate advising.

## Undergraduate Prerequisites

Although no particular undergraduate major is required, students beginning our program must have completed one course in each of the following areas: statistics, experimental (or research methods in) psychology, and psychological (or educational) measurement. In addition, students must complete a course in curriculum and instruction. This course may be completed prior to entry into the program or during the student's completion of the Ed.S. program. Given the latter circumstance, this course will not be considered part of the academic load toward the Ed.S. degree.

## Sample Curricula

**M.A. and Ed.S. degrees.** The following outline represents a typical program for a student without prior graduate work. Other courses may be selected on an individual basis to fit background and goals, and equivalent work is acceptable. Minor changes may be made due to routine program development.

### A. Academic/Theoretical Bases

#### 1. Developmental Psychology

##### **Acceptable Courses:**

EDF 5136 Adolescence

EDF 6120 Child Development

SPS 6806 Developmental Bases of Diverse Behavior

\*DEP 6058 Developmental Psychology

#### 2. Learning and Cognitive Psychology

##### **Acceptable Courses:**

EDF 6215 Learning Principles Applied to Instruction

EDF 6217 Behavior Theory and Classroom Learning

EDF 6938 Applied Learning for School Psychology

\*EXP 6406 Learning

\*EXP 6526 Human Memory

\*EXP 6608 Cognitive Psychology

#### 3. Personality and Abnormal Psychology

##### **Acceptable Courses:**

\*CLP 6166 Psychopathology

\*CLP 6477 Behavior Disorders of Children

\*PPE 6058 Personality

#### 4. Biological/Physiological Psychology

##### **Acceptable Courses:**

EDF 6213 Biological Bases for Learning and Behavior

\*PSB 6056 Physiological Psychology

#### 5. Social Psychology

##### **Acceptable Courses:**

\*SOP 6059 Social Psychology

**B. Statistics, Measurement, and Professional Research**

**Acceptable Courses:**

EDF 6407 Stats I

EDF 6481 Foundations of Educational Research

EDF 7408 Stats II

EDF 7410 Design of Systematic Studies in Education

**C. Professional School Psychology**

SSP 6197, 6198 Psychoeducational Diagnosis and Prescription I, II

SPS 6943, 6944 Practicum in Psychoeducational Assessment

SPS 6936 Graduate Seminar in School Psychology

SPS 6700, 6701, 6702 Psychoeducational Interventions with  
Children and Adolescents I, II, III

SPS 6940, 6941 Practicum in Psychoeducational Interventions

EDF 6166 Consulting Skills in Staff Development

EDF 6938 Personality Assessment with Children and Adolescents

**D. Social/Organizational Foundations of Education**

**Acceptable Courses:**

EDF 6517 Historical Foundations of American Education

EDF 6544 Philosophical Foundations of American Education

EDF 6606 Socioeconomic Foundations of American Education

EDF 7655 Organizational Development in Educational Institutions

**E. Thesis**

EDG 6971 Thesis

**F. Internship**

**G. Electives**

Selected courses in the Counselor Education, Special Education, and Reading Education programs and in the Department of Psychology.

\* Offered in the Department of Psychology

**Ph.D. Degree.** With our master's/specialist curriculum forming a foundation, each doctoral student's program additionally will include a full-year advanced professional seminar, required coursework at the College of Education level, two courses in an advanced specialization area as chosen by the student, an advanced supervision course, an advance internship, and the dissertation. At this level, emphasis is on research and on training for leadership positions in school psychology.

## **Department of Special Education**

The Department of Special Education program is designed to prepare students to plan and implement educational programs for students requiring specialized education services. Training programs are designed for the master, educational specialist, and doctoral level candidates. Areas of training include behavior disorders, gifted, mental retardation, motor disabilities and specific learning disabilities. Masters and specialist level programs emphasize the development of leadership personnel to serve in consultant and supervisory capacities in public school and private settings. Doctoral level training further sharpens the theoretical and practical skills of experienced practitioners to assume positions focusing on research, teacher training, and significant leadership roles.

There are different entrance requirements at each level of the program. When the candidate has met the requirements for his/her program admission,

a departmental adviser will be assigned. Field-based experiences are a significant component of all programs. Practicum and internship are included in each training program in educational environments in those districts near a campus on which there are resident faculty. Transportation to practicum and internship sites must be furnished by the student.

**Master of Arts (M.A.)**

**Plan I** — For students holding valid teaching certificates. Secondary and K-12 students must have previously taken or include in their planned program the basic special education certification courses.

**Plan II** — For students not holding valid teaching certificates but who wish to obtain certification through the master’s degree.

**Plan III** — For holders of a non-education undergraduate degree who do not wish to meet teacher certification requirements in the state of Florida.

**Educational Specialist (Ed.S.)**

The College of Education offers an Educational Specialist (Ed.S.) degree in Curriculum and Instruction, with an emphasis in Exceptional Child Education.

**Admission Requirements.** Candidates for admission to the Ed.S. Program must meet the entrance requirements of the College of Education, plus the following:

1. Certification in exceptional student education; and
2. One year of teaching experience in exceptional student education.

**Program Requirements**

1. Special Program Courses . . . . . 25 hours
2. EDG 6931 Proposal Development . . . . . (2)  
or  
EDF 7410 Design of System Studies in Education . . . . . (4)  
or  
EDF 7493 System Approaches for Program Planning Evaluation & Development . . . . . (4)
3. EDG 6971 Independent Project . . . . . 9 hours

**Total** . . . . . **36-38 hours**

Courses will be selected by the student and adviser from those available at the 6000 and 7000 level. Six hours of 5000 level courses may be included with approval of the department chairperson.

During the last term of enrollment, the candidate must perform satisfactorily on a comprehensive examination.

**Doctor of Philosophy (Ph.D.)**

The Specialist Education Department offers the Ph.D. in Curriculum and Instruction, with specialization in Special Education. The department strives to maintain a quality program and is restrictive and selective of its applicants.

**Admission Requirements.** In addition to the University and College criteria for admission to the Ph.D. program, the department requires the following:

1. Three years teaching experience in special education;
2. Grade point average of 3.5 at the graduate level;
3. Adequate departmental resources necessary to maintain the quality of the Ph.D. Program;

4. Competitiveness of the candidate in relation to other candidates for the limited available departmental resources; and
5. Favorable recommendation of the Department Advanced Graduate Admissions Committee and the department chairperson.

**Program Requirements.** The Ph.D. candidate's program of study is individually planned by the student and a faculty advisory committee and approved by the department chairperson. The program will include, but not be limited to, the following:

Dissertation .....	18 hours
Special Education .....	21 hours
including EEX 7341 .....	3 hours
EEX 7931 .....	3 hours

At least 10 hours from the following:

EEX 7203 .....	3 hours
EEX 7301 .....	1-4 hours
EEX 7841 .....	1-8 hours
EEX 7930 .....	1-4 hours
<b>Cognate Area</b> .....	<b>12 hours</b>
<b>Statistics/Measurement/Research</b> .....	<b>12 hours</b>
Foundations/Curriculum .....	8 hours
Language/Computer Science .....	non-credit
<b>Total</b> .....	<b>71 hours</b>

## Behavior Disorders

### Requirements for the M.A. Degree (ABD)

**Plan I** — For students holding valid teacher certificates. Secondary and K-12 students must have previously taken or include in their planned program the basic special education certification courses; 36 minimum program hours:

- a. **Process Core** ..... (3 hours minimum)  
EDF 6481
- b. **Program Core** ..... (18 hours):  
EEX 6025                      EED 6221                      EEX 6732  
EEX 6222                      EEX 6245                      EEX 6939
- c. **Specialization** ..... (12 hours):  
EED 6201                      EED 6211                      EED 6246  
EED 6943
- d. **Electives** ..... (3 hours minimum)

**Plan II** — For individuals not holding valid teaching certificates and wishing to acquire certification; 66 minimum program hours:

- a. **Process Core** ..... (15 hours minimum):  
EDF 6432                      EDF 6606 or EDF 6544 or EDF 6517  
EDF 6481  
EDF 6215 or EDF 6211
- b. **Program Core** ..... (18 hours):  
EEX 6025                      EED 6222                      EEX 6221  
EEX 6245                      EEX 6732                      EEX 6939
- c. **Specialization** ..... (12 hours):  
EED 6201                      EED 6211                      EED 6246  
EED 6943
- d. **Internship** ..... (6 hours):

EDG 6947

- e. Additionally, to meet State of Florida certification requirements, the following courses must be included:

One: SPA 4004 or EEX 4706 or LAE 6301

One: RED 4310 or RED 6116

One: MAE 4310 or MAE 6116

One: LIS 4302, LIS 6506, LIS 6508, or LIS 6586

- f. One course from the following:

SCE 4310	SCE 6616	SSE 4313
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SSE 6617	PET 6645	PET 6646
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ARE 4112	ARE 4313	ARE 6358
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EGC 6205	EGC 6306	ADE 6197
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**Plan III** — For holders of a non-educational baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida; 42 minimum program hours:

- a. **Process Core** ..... (12 hours minimum):

EDF 6432	EDF 6606 or EDF 6544 or EDF 6517
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EDF 6481

EDF 6215 or EDF 6211

- b. **Program Core** ..... (18 hours):

EEX 6025	EED 6221	EEX 6732
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EEX 6222	EEX 6245	EEX 6939
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- c. **Specialization** ..... (12 hours):

EED 6201	EED 6211	EED 6246
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EED 6943

- d. **Electives** ..... (3 hours minimum):

Additional courses, including electives, are planned jointly by the student and his/her adviser.

## Curriculum and Instruction/Pre-School Handicapped

### Requirements for the M.Ed. Degree

(Birth - 5 years old) — For students holding a valid teacher certificate in Special Education; 45-47 minimum program hours:

- a. **Process Core**

EDG 6627	EDF 6431	EDF 6481
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EDF 6120 or EDF 6217

EDF 6544 or EDF 6606

- b. **Special Education**

EEX 6732	EEX 6222
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EPH 5051 or EPH 5321

EEX 6706	EEX 6943	EEX 5705
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- c. **Other Departments**

EEC 5705

EEC 4203 or EEC 6261

SPA 6401 or LAE 6301 or SPA 5402

## Mental Retardation

### Requirements for the M.A. Degree (AMD)

**Plan I** — For students holding valid teaching certificates. Secondary and K-12 students must have previously taken or include in their planned program the basic special education certification courses; (36 minimum program hours):

- a. **Process Core** .....(3 hours minimum):  
EDF 6481
- b. **Program Core** .....(18 hours):  
EEX 6025                      EED 6221                      EEX 6732  
EEX 6222                      EEX 6245                      EEX 6939
- c. **Specialization** .....(12 hours):  
EMR 6052                      EMR 6303                      EMR 6943  
EPH 5051
- d. **Electives** .....(3 hours minimum).

**Plan II** — For individuals not holding valid teaching certificates and wishing to acquire certification; 55 minimum program hours:

- a. **Process Core** .....(12 hours minimum):  
EDF 6431                      EDF 6481  
EDF 6544 or EDF 6517 or EDF 6606  
EDF 6215 or EDF 6211
- b. **Program Core** .....(18 hours):  
EEX 6025                      EED 6221                      EEX 6732  
EEX 6222                      EEX 6245                      EEX 6939
- c. **Specialization** .....(9 hours):  
EMR 6052                      EMR 6303                      EMR 6943
- d. **Internship** .....(6 hours):  
EDG 6947
- e. Additionally, to meet State of Florida certification requirements, the following courses must be included:  
One: SPA 4004 or EEX 4706 or LAE 6301  
One: RED 4310 or RED 6116  
One: MAE 4310 or MAE 6116  
One: LIS 4302, LIS 6506, LIS 6508, or LIS 6586
- f. One course from the following:  
SCE 4310                      SCE 6616                      SSE 4313  
SSE 6617                      PET 6645                      PET 6646  
ARE 4112                      ARE 4313                      ARE 6358  
EGC 6205                      EGC 6306                      ADE 6197

**Plan III** — For holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida; 39 minimum program hours:

- a. **Process Core** .....(12 hours minimum):  
EDF 6432                      EDF 6481  
EDF 6544 or EDF 6606 or EDF 6517  
EDF 6215 or EDF 6211
- b. **Program Core** .....(18 hours):  
EEX 6025                      EED 6221                      EEX 6732  
EEX 6222                      EEX 6245                      EEX 6939
- c. **Specialization** .....(9 hours):

EMR 6052

EMR 6303

EMR 6943

## Motor Disabilities

### Requirements for the M.A. Degree (AMD)

**Plan I** — For students holding valid teaching certificates. Secondary and K-12 student must have previously taken or include in their planned program the basic special education certification courses; 40 minimum program hours:

- a. **Process Core** ..... (3 hours minimum):  
EDF 6481
- b. **Program Core** ..... (18 hours):  
EEX 6025                      EED 6221                      EEX 6732  
EEX 6222                      EEX 6245                      EEX 6939
- c. **Specialization** ..... (16 hours):  
EPH 5051                      EPH 6944                      EPH 5321  
PET 6645                      SPA 4333                      SPA 4336
- d. **Electives** ..... (3 hours minimum).

**Plan II** — For individuals not holding valid teaching certificates and wishing to acquire certification; 55 minimum program hours:

- a. **Process Core** ..... (15 hours minimum):  
EDF 6432                      EDF 6481  
EDF 6544 or EDF 6517 or EDF 6606  
EDF 6215 or EDF 6211
- b. **Program Core** ..... (18 hours):  
EEX 6025                      EED 6221                      EEX 6732  
EEX 6222                      EEX 6245                      EEX 6939
- c. **Specialization** ..... (16 hours):  
EPH 5051                      EPH 6944                      EPH 5321  
PET 6645                      SPA 4333                      SPA 4336
- d. **Internship** ..... (6 hours):  
EDG 6947
- e. Additionally, to meet State of Florida certification requirements, the following courses must be included:  
One: SPA 4004 or EEX 4706 or LAE 6301  
One: RED 4310 or RED 6116  
One: MAE 4310 or MAE 6116  
One: LIS 4302, LIS 6506, LIS 6508, or LIS 6586

- f. One course from the following:  
SCE 4310                      SCE 6616                      SSE 4313  
SSE 6617                      PET 6645                      PET 6646  
ARE 4112                      ARE 4313                      ARE 6358  
EGC 6205                      EGC 6306                      ADE 6197

**Plan III** — For holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida; 39 minimum program hours:

- a. **Process Core** ..... (12 hours minimum):  
EDF 6432                      EDF 6481  
EDF 6544 or EDF 6517 or EDF 6606  
EDF 6215 or EDF 6211
- b. **Program Core** ..... (18 hours):  
EEX 6025                      EED 6221                      EEX 6732  
EEX 6222                      EEX 6245                      EEX 6939



- c. **Specialization** ..... (18 hours):
 

EPH 5051	EPH 6944	EPH 5321
PET 6645	SPA 4333	SPA 4336

## Specific Learning Disabilities

### Requirements for the M.A. Degree (ALD)

This course of study is designed to prepare the student to become a more effective learning disabilities specialist.

**Plan I** — For students holding valid teaching certificates. Secondary and K-12 students must have previously taken or include in their planned program the basic special education certification courses; 36 minimum program hours:

- a. **Process Core** ..... (3 hours):  
EDF 6481
- b. **Program Core** ..... (18 hours):
 

EEX 6025	EED 6221	EEX 6732
EEX 6222	EEX 6245	EEX 6939
- c. **Specialization** ..... (12 hours):  
ELD 6015                      ELD 6235                      MAE 6549
- d. **Electives** ..... (3 hours):

**Plan II** — For individuals not holding valid teaching certificates and wishing to acquire certification; 66 minimum program hours:

- a. **Process Core** ..... (15 hours minimum):  
EDF 6432                      EDF 6481  
EDF 6544 or EDF 6606 or EDF 6517  
EDF 6215 or EDF 6211
- b. **Program Core** ..... (18 hours):
 

EEX 6025	EED 6221	EEX 6732
EEX 6222	EEX 6245	EEX 6939
- c. **Specialization** ..... (12 hours):  
ELD 6015                      MAE 6548                      ELD 6235  
MAE 4545
- d. **Internship** ..... (8 hours):  
EDG 6947
- e. Additionally, to meet State of Florida certification requirements, the following courses must be included:
 

One: SPA 4004 or	EEC 4706 or	LAE 6301
One: RED 4310 or	RED 6116	
One: MAE 4310 or	MAE 6116	
One: LIS 4302, LIS 6508, LIS 6586 or LIS 6506		
- f. One course from the following:
 

SCE 4310	PET 6645	ARE 6358
SCE 6616	PET 6646	EGC 6205
SSE 4313	ARE 4112	EGC 6306
SSE 6617	ARE 4313	ADE 6197

**Plan III** — For holders of a non-education baccalaureate degree who do not wish to meet teacher certification requirements in the State of Florida; 45 minimum program hours:

- a. **Process Core** ..... (12 hours minimum):  
EDF 6432                      EDF 6481  
EDF 6544 or EDF 6217 or EDF 6606  
EDF 6215 or EDF 6211

- b. **Program Core** ..... (18 hours):  
 EEX 6025                      EED 6221                      EEX 6732  
 EEX 6222                      EEX 6245                      EEX 6939
- c. **Specialization** ..... (12 hours):  
 ELD 6015                      MAE 6548                      ELD 6235  
 MAE 4545
- d. **Electives** ..... (3 hours):  
 Additional courses, including electives, are planned jointly by the student and his/her adviser.

## **Student Organizations and Activities**

### **Association for Childhood Education International**

The Association for Childhood Education is a non-profit professional organization concerned with the education and well-being of children two to twelve years of age. Members come from throughout the United States and other countries.

The USF chapter works directly with children through observation, projects, and programs. In addition, it provides opportunity for students to attend study conferences throughout the state of Florida, which allows the student an opportunity for professional growth and exchange of professional ideas. Membership is open to all students concerned with children two to twelve years old.

### **Student Council for Exceptional Children**

The Student Council for Exceptional Children is an organization of students interested in the education of the exceptional — "different" — child. Various exceptions included are gifted, emotionally disturbed, physically handicapped, mentally retarded, and culturally different.

Activities of the USF chapter include field trips to various special educational facilities, prominent speakers, seminars, state and national conventions, and social events. The specific activities are determined by the members and the exceptions in which they are interested. All interested students are invited to join.

### **Student Music Educators National Conference**

Student Music Educators Conference is an affiliate of the Music Educators National Conference and the Florida Music Educators Association. It is devoted to the expansion of knowledge and understanding of music education on all levels. Membership is open to any student in the University of South Florida who is interested in the teaching of music.

### **National Education Association Student Program**

The National Education Association Student Program is designed to provide professional growth opportunities, leadership training, and membership benefits available to other members of the National Education Association, including \$1 million liability insurance coverage while engaged in student teaching (internship). Membership is open to all students who have been admitted to the College of Education.

### **Delta Pi Epsilon**

Delta Pi Epsilon is a nationally honorary professional graduate society for men and women in business education. Objectives of the society include encouraging and recognizing exceptional research achievement, publishing/research in business education, and promoting professional

development of its members. The Gamma Rho chapter at USF was installed in April 1984.

### **Phi Beta Lambda**

Phi Beta Lambda is a business fraternity open to all students expressing an interest in business. The emphasis is on promoting free enterprise and instilling leadership qualities.

### **Kappa Delta Pi**

Kappa Delta Pi is an international co-educational honor society in education. The society was founded to recognize and encourage excellence in scholarship, high personal standards, improvement in teacher preparation, and distinction in achievement.

### **Physical Education Association (PEA)**

The Physical Education Association (PEA) is open to all students enrolled in the Physical Education program. Social and professional meetings are conducted throughout the year to promote interaction with the organization.

### **Student Counselor Education Organization**

This is an organization for graduate students presently enrolled in the Guidance program. Social and professional meetings are conducted throughout the year. Members also participate in annual retreats and attend district and state meetings.

### **Mathematics Education Club**

The Mathematics Education Club is mission-oriented; it is primarily concerned with children and youth who evidence learning problems in mathematics. However, an important purpose of the club is also to develop hypotheses that can result in generalized professional knowledge that improves the teaching and learning of mathematics.

Clinical, correlation, normative, and experimental approaches are used in the study of the etiology and symptomatology of mathematical learning disabilities. General models and specific teaching strategies are provided the classroom teacher and the student-clinician for implementing effective diagnostic and prescriptive programs.

Close professional relations are maintained between the Mathematics Education faculty and the appropriate faculties in the College of Education whose interests and professional skills are related to the work of the club.

### **Association for Library and Information Science**

This is a professional organization associated with the Library, Media, and Information Science Department and is open to all members of the University community interested in librarianship.

The USF group provides programs and guest speakers of interest to the campus community and publishes a newsletter for its members. It is the official voice of students in the department, and members of the association are included on faculty-student committees within the department.

### **The Delta Epsilon Pi of America (DECA)**

DECA is an integral part of the Distributive and Marketing Education and Marketing Teacher Preparation program at the University of South Florida. It provides Distributive Education majors with leadership opportunities, social experience, learning activities and professional involvement. Participation in the activities of Collegiate DECA is encouraged for graduate students.

**Minority Organization of Students in Education**

The Minority Organization of Students in Education is organized to provide experience and opportunities that will facilitate the educational professional growth of its members.



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## COLLEGE OF ENGINEERING

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The College of Engineering graduate activity is provided by five departments. Each department is responsible for an area of engineering disciplines and the supervision of one or more academic programs. Students are assigned to a specific academic program in a specific department. In addition to the centralized facilities of the college, departments are equipped with their own specialized laboratories and equipment related to their disciplines. The following sections provide more information on the engineering disciplines, the academic programs, and the resources of each department. For additional information on a specific department, request a copy of the department's Graduate Student Handbook from its Graduate Program Coordinator.

### Graduate Degree Programs

The graduate programs offered by the College of Engineering to meet the diverse requirements of the future cover both Engineering and Applied Sciences.

This spectrum of program offerings provides the prospective student with a choice of avenues, depending upon individual interests, career objective, and capabilities for significant technological contributions. These programs are described in detail under their respective Catalog headings.

Laboratory experience, as well as real-world participation in technological problem-solving, is a key aspect of a professional engineer's college education. The College of Engineering, in addressing this need, augments its own modern laboratory and research facilities by close contact with professional societies and the many industries in the metropolitan Tampa Bay area and beyond.

Students interested in particular programs offered by the College of Engineering should direct their inquiries to the specific department or to the Associate Dean for Academic Affairs of the College of Engineering.

### Master's Degree Programs

#### Engineering

- Master of Science in Chemical Engineering (M.S.Ch.E.)
- Master of Science in Civil Engineering (M.S.C.E.)
- Master of Science in Computer Engineering (M.S.Cp.E.)
- 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 (M.S.E.)
- Master of Science in Engineering Management (M.S.E.M.)
- Master of Science in Industrial Engineering (M.S.I.E.)
- Master of Science in Mechanical Engineering (M.S.M.E.)
- Master of Civil Engineering (M.C.E.)
- Master of Engineering (M.E.)

#### Applied Science

##### **Master of Science in Engineering Science (M.S.E.S.)**

The master's degree is awarded for advanced study beyond the baccalaureate degree within an area of specialty. The College of Engineering offers

several programs leading to degrees at the master's level. These programs can be divided into Engineering-oriented and Engineering Science programs.

The Engineering-oriented degree programs offered by the college are: the Master of Science in a designated engineering field, the post-baccalaureate Master of Science in Engineering program, the Master of Engineering program, and the Five-Year Program leading to the simultaneous award of both the bachelor and master degree. Each department determines the degree to be awarded, depending upon the student's background and the specific program of study pursued.

The Engineering Science degree program includes a combination of engineering principles and their application to such varied fields as physical sciences, life sciences, social sciences, environmental sciences, applied mathematics, bio-medical engineering, and ocean engineering. A strong foundation in rigorous scientific and engineering principles and practice is expected. The Master of Science in Engineering Science is awarded for this program of study.

Admission to a master's program is dependent upon a favorable evaluation by the department to which the student is applying. Applicants are expected to meet the minimum requirements of the University and those of the College of Engineering, outlined below. Individual departments may have additional specific and higher requirements. More complete information may be obtained from the Graduate Programs Coordinator for the specific department.

### **General Entrance Requirements**

Except when additional requirements are noted, all master's programs in the College of Engineering have the following entrance requirements:

1. A baccalaureate degree in Engineering from an ABET accredited program is generally for graduate work in the same field. However, due to differences in undergraduate programs at different universities some remedial work may be required for students with undergraduate degrees from other schools. Degrees in Mathematics, Physics, Chemistry, and other fields may be accepted on an individual basis to meet this requirement. In such cases, it is probable that supplemental remedial work in engineering will be necessary.
2. A minimum total score of 1000 on the verbal and quantitative portions of the GRE General Test, and/or a minimum grade point average of 3.0 out of a possible 4.0 for all work attempted during the last two years of undergraduate work is required. Individual departments may have higher standards. In all cases, the GRE exam must be taken.
3. Those who do not meet the regular requirements may (with prior approval of the appropriate department chairperson) attempt a trial program as a non-degree seeking student. Up to 12 hours of department specified work attempted on this basis may be accepted into a graduate program upon satisfactory completion. Before attempting such a trial program, the student should obtain from the departmental adviser a list of courses and performance criteria for admission. Individual departments may allow fewer than 12 hours of course work taken as a non-degree seeking student to transfer into a graduate degree program.
4. Students whose native language is not English must have a score of at least 550 on the TOEFL exam.

### **General Program Requirements**

Except when otherwise noted, all master's programs in the College of Engineering have the following program requirements:

1. A minimum of 30 credits of approved course work is required.

2. Students must maintain an overall grade point average of 3.0 out of possible 4.0. No grade below "C" will be accepted in a graduate program. In the event that a student's average falls below 2.0, the student will be placed on probation and must obtain a directed program from the appropriate adviser, approved by the Dean, prior to continuing course work toward the degree.
3. All students are required 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.

### **Five-Year Programs Leading to Bachelor and Master Degrees**

Students who, at the beginning of the senior year, clearly are interested in graduate study are invited to pursue a five-year program leading simultaneously to the Bachelor of Science in Engineering or Engineering Science and Master of Science in Engineering or Engineering Science degrees. The keys to this program are:

1. A two-year research program extending through the fourth and fifth years.
2. The opportunity to take graduate courses during the fourth year and deferring senior courses to the fifth year. The requirements of the combined degrees do not differ from those for the two degrees pursued separately.

Students apply for admission to this program through their advisers, who should be consulted when additional information is needed. General requirements include:

1. Senior standing (90 credits) with at least 16 upper level engineering credits completed at the University of South Florida with a 3.0 Grade Point Average.
2. A minimum score of 1000 on the verbal and quantitative portions of the GRE General Test is expected.

### **Doctoral Programs**

The Doctor of Philosophy degree is awarded in recognition of demonstrated scholarly competence and capability to conduct and report original and significant research. Unlike the baccalaureate and master's degrees, the Ph.D. degree can not 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 his/her conclusions in a professional manner.

The doctoral degree programs offered by the College of Engineering are as follows:

#### **Engineering**

- Doctor of Philosophy in Chemical Engineering
- Doctor of Philosophy in Civil Engineering
- Doctor of Philosophy in Computer Science and Engineering
- Doctor of Philosophy in Electrical Engineering
- Doctor of Philosophy in Industrial Engineering
- Doctor of Philosophy in Mechanical Engineering



## **Applied Engineering Doctor of Philosophy in Engineering Science**

### **Admission Requirements**

1. An undergraduate degree in the respective Engineering discipline, with a minimum GPA of 3.0 in junior-senior work in the major area of concentration, is required.
2. A minimum score of 1000 in verbal and quantitative sections of the GRE General Test is required.
3. Applicants from other disciplines, non-ABET accredited programs, or foreign institutions may be considered for admission; however, they will be required to engage in additional course work to develop proficiency equivalent to an undergraduate of the discipline in which the student will pursue graduate work. The exact number of hours of such remedial work will be determined by the major department.
4. Individual departments may have higher than college standards.
5. Students whose native language is not English must have a score of at least 550 on the TOEFL exam.

### **Program Requirements**

1. An adviser will be appointed by the chairman of the appropriate department or program for each student during the first semester of registration at the University of South Florida. The adviser 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 external to the College of Engineering. A majority of the committee will be from the College of Engineering, with at least two departments of the college represented.
2. A minimum of 90 semester hours beyond the baccalaureate degree (including dissertation research) is required, with a minimum scheduled coursework of 27 hours in an engineering area of concentration. The 27 hours need not be coursework in the same department, but must focus directly upon the areas of concentration; at least 20 hours must be at the 6000 level. In addition, a minimum of 8 hours of mathematics or statistics is required. Engineering Mathematics may be approved by the committee if appropriate. Also, a minimum of 8 hours of coursework as defined by the committee outside the major area of concentration is required. Further requirements may be imposed by the candidate's committee.
3. 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 the 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. All prospective candidates must pass a Ph.D. diagnostic examination that includes an area of mathematics and a prescribed area of concentration.

This examination must be taken after the student has completed appropriate studies, usually equivalent to one year's course work. Students entering with a master's degree must take this examination before the end of the first year after admission to the program.

5. 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 the course work is completed. Completion of this examination and the Tools of Research admits the student to candidacy.
6. Before students are eligible to take the qualifying examination, they must have completed the Tools of Research requirement. The requirement can be met by either a) demonstrating proficiency in two foreign languages, or b) demonstrating proficiency in one foreign language and superior ability in an approved computer language or statistics or other area of mathematics.
7. 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 program, the candidate must prepare a written dissertation covering the research. Student's in the Ph.D. program must take an appropriate number of doctoral dissertation credits, but not less than 20 semester hours; the exact number is determined by department and/or individual requirements.
8. The defense of the dissertation will conform to the University's general rules and regulations.
9. Minimum residency requirements may be satisfied by completing at the University of South Florida, beyond the master's degree or equivalent, the following: (1) the University's minimum requirement, or (2) 24 semester hours in one calendar year, or (3) 30 semester hours in no more than four semesters within a period of three calendar years. Any graduate work counted toward the fulfillment of the requirement for the Ph.D. degree after admission to candidacy must be accomplished within seven calendar years.
10. An advanced graduate advisory college committee reports to the Dean of the College of Engineering. This committee provides recommendations to the dean, department heads, and advisory committees relative to programs, procedures, and examinations.

### **Doctor of Philosophy in Designated Engineering Field Degree**

This degree is awarded to students pursuing a program in the following Engineering disciplines: Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Industrial Engineering, and Mechanical Engineering. Students receiving this degree must demonstrate a thorough foundation in the designated discipline.

### **Doctor of Philosophy in Engineering Science Degree**

This program is designed to meet the needs of students who wish to pursue doctoral studies in interdisciplinary areas closely related to engineering. Generally, students in this program are expected to gain proficiency in two disciplines: an area of science and an area of engineering. Consequently, this program is administered jointly by two departments who cooperate in monitoring the student's program of studies, examinations, and dissertation research. To derive maximum benefit, the student's dissertation committee should be

constructed to draw on the expertise of the cooperating departments in Engineering and Natural Science or other appropriate discipline.

## **Chemical Engineering**

The department offers graduate degrees leading to M.S. and Ph.D. in Chemical Engineering. Professional degrees such as Master of Engineering also are available. The Chemical Engineering program has faculty members with interests in a number of research areas, ranging from classical topics in Chemical Engineering, such as thermodynamics and transport phenomena, to current research areas, such as computer-aided process design and optimization and super-critical extraction. Some of the other areas of current research include applications of artificial intelligence to chemical engineering problems, computer data acquisition and analysis, crystallization from solutions with special reference to the manufacture of phosphoric acid via the wet process, development and characterization of polymers for special application, direct digital control and tuning of controllers, protein denaturation/renaturation kinetics, application of thermodynamics to problems in biological and medical sciences, and development of on-line sensors for process parameter measurements.

The department offers Chemical Engineering graduate courses in transport phenomena, reactor design, thermodynamics, applied mathematics, computer-aided process design and optimization, electrochemistry, advanced separation process controls, and polymer reaction engineering.

Chemical engineering research facilities include an electron particle counter, an image analysis system, a mass spectrometer, a differential scanning calorimeter, a UV system, a super-critical fluid processing laboratory, a surface characterization system, and a collection of HPLC and gas chromatographs. Controls and computer-aided process engineering laboratories include a TDC 2000 control system, micro computers, sun workstations, graphic capabilities, and a rich variety of software for statistical analysis, numerical analysis, optimization, flowsheet simulation, and artificial intelligence applications. The department also has access to a SEM and an X-ray diffraction unit.

Strong collaboration with the Chemistry, Biology, Industrial, Civil, Mechanical and Electrical Engineering Departments make research programs in Chemical Engineering truly interdisciplinary.

## **Civil Engineering and Mechanics**

The Civil Engineering and Mechanics Department offers graduate programs at both the master's and Ph.D. levels.

The following areas of study are available: (1) Structures (steel, prestressed concrete, reinforced concrete, composites, plastics, and connections), (2) Water Resources/Environmental (hydraulics, systems analysis and modeling, water treatment, waste water treatment, and water resources development), and (3) Engineering Mechanics (elasticity, continuum mechanics, plasticity, fluid mechanics, plates & shells, and structural stability). Over a four-year period, most courses are offered at least once in the evening.

The field of Civil Engineering has long been known for its breadth and its 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 waste water treatment, remain very important. In addition, the modern area of managing the environment has been included in the Civil Engineering domain. Graduates of the programs are prepared for careers with public agencies or

private firms involved in planning, design, research and development or regulation.

The Engineering Mechanics program, while it resides in a Civil Engineering environment, may be viewed as a separate discipline and is staffed by several specialists in this area. Graduates who elect this field find employment in a variety of research and development areas, such as the stress analysis of complex machines and structures.

College computer facilities are available to all departmental students. In addition, the department has a variety of microcomputers available for student use. The department has a high bay structures laboratory, which includes an MTS 250 kip testing machine. There are also well equipped environmental, soils, and hydraulics laboratories. These laboratories include equipment such as an ion chromatograph, atomic absorption unit, environmental chamber, constant rate of stress consolidometer, and triaxial units.

The Center for Mathematical Modeling (part of CEDAR) is an integral part of the department. The mathematical modeling effort relating to decision-making is accomplished by graduate students, under the supervision of faculty, as a normal part of their education. The development and evaluation of alternatives for government agencies and private firms provides a valuable learning mechanism for students.

The department offers the following graduate degrees: M.S.E., M.S.C.E., M.C.E., M.S.E.S, and Ph.D.

The Master of Civil Engineering (M.C.E.) degree is offered as an alternative to the Master of Science in Civil Engineering (M.S.C.E.) in order to provide an option for those students who desire a designated degree oriented toward the professional practice of Civil Engineering. The M.C.E. emphasizes both design and non-technical aspects of engineering practice. The M.C.E. degree requirements consider the applicant's total education from college entrance through the master's degree program. It differs from the M.S.C.E. and M.S.E. degrees by requiring (1) an additional design component, (2) study in non-engineering areas related to professional practice, (3) participation in the Engineer Intern (EI) Examination as a first step toward professional registration, and (4) work experience or internship prior to receipt of the M.C.E. degree. The Department of Civil Engineering and Mechanics, in cooperation with the Florida Section A.S.C.E., will assist students in locating suitable employment to satisfy the work experience requirement. The internship may be satisfied before, during, or following the academic requirements.

## **Computer Science and Engineering**

This department offers opportunities for study and research in all areas fundamental to Computer Science and Engineering. An excellent selection of courses and laboratories support undergraduate and graduate studies in computer engineering, software engineering, programming languages, computer algorithms, computer system organization, computer networks, fault tolerant and distributed computing, artificial intelligence, database systems, theory of computation, and coding theory.

In addition to the vast array of college-wide computer facilities, the department's facilities include a software laboratory equipped with two VAX 11/750's running Unix and VMS operating systems and a PDP 11/44, a microcomputer network laboratory equipped with both tightly coupled and loosely coupled network facilities, a graphics laboratory equipped with modern display devices, a substantial number of graphics-oriented personal computers, and a robotics and computer vision laboratory. A PRIME 750 medium

scale computer also functions as a node in a college-wide network of five computers.

Graduate students will find that their studies and research prepare them well for making contributions in the exciting computer field. Research interests of the department's faculty are diverse, including such areas as distributed and reliable computing, computer networks, simulation and modeling, image processing, computer architecture, computer-aided design, operating systems, programming languages, real-time software engineering, robot intelligence, computer vision, graphics, data base design, application-oriented VLSI architecture, performance modeling of computers, coding theory, and signal processing. Consequently, students have a wide range of research areas available for theses and projects.

The department administers the master's degrees in Computer Engineering (M.S.Cp.E.) and Computer Science (M.S.C.S.), and a Ph.D. degree in Computer Science and Engineering. Students pursuing the M.S.C.S. degree are required to write a thesis; students pursuing the M.S.Cp.E. degree may elect to substitute coursework and a project for a thesis. Some graduate courses offered by the department are available to practicing engineers through the FEEDS program.

## **Electrical Engineering**

This department offers master's and Doctor of Philosophy degrees in the major areas fundamental to the electrical sciences and Electrical Engineering. Program concentration areas include Circuit Theory, Communications and Signal Processing, Microelectronics, Microwave Engineering, and Systems and Control Theory. Course topics and research opportunities include circuit modeling; communication theory and systems; digital signal processing; electromagnetic field theory; electro-optics; linear, non-linear and digital control theory; microwave instrumentation; network analysis and synthesis; noise theory and low noise circuit design; solid state electronics and microelectronics; passive and active microwave circuits and devices; stochastic and random processes; VLSI design; etc.

In addition to the vast array of college-wide computer facilities, the department's facilities include a VAX 750 computer and a variety of microcomputers with extensive computer-aided design software for circuit synthesis, analysis, and modeling of analog and digital circuits, including VLSIs. Other facilities include an electro-optical laboratory, microwave and transmission line laboratories, including modern computer-controlled network analyzers, microprocessor and signal-processing laboratories, an extensive hybrid and integrated circuit microelectronic fabrication facility, and a low-noise instrumentation facility.

Graduate students will find that their studies and research activities prepare them well for making unique contributions in such fast-moving fields as semiconductor processing, microwave hybrid and integrated circuit design, communications, signal processing, and other digital system R & D, guidance, and other control systems, etc.

The department offers the M.S.E.E., M.S.E., M.E., M.S.E.S., and Ph.D. degrees. Non-thesis master's studies are available to practicing engineers through the FEEDS program.

## **Industrial and Management Systems Engineering**

This 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 service industry, to the operation of

manufacturing concerns. Course topics and research opportunities include production planning, production control, facility 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, automation, and applications in robotics. The department laboratories include two full-size industrial robots, a PDP 11/34 minicomputer, CNC and DNC machine tool systems, Microbot robotic trainers, microcomputers, eye-tracking devices, physiological measurement devices, speech synthesis and voice recognition equipment, noise, vibration and illumination measurement devices, dynamic anthropometry equipment, and data collecting equipment.

The department administers the Master of Science in Industrial Engineering (M.S.I.E.) and the Ph.D. in Industrial Engineering, with options available in quantitative methods, manufacturing systems, and human factors. The department also administers the Industrial Engineering option in the M.S.E., M.E. and M.S.E.S. programs.

The Master of Science in Engineering Management (M.S.E.M.) program is an off-campus, part-time program designed to prepare working engineers from various disciplines to make the transition to the management track. Courses in this program involve concepts in engineering management, resource management, strategic planning, and productivity. Advanced courses in the student's area of speciality may be taken as electives. Neither a thesis nor an engineering design project is required. Admission requirements for the M.S.E.M. program are the same as those for the other master's programs. As with the other master's programs, a comprehensive examination is required.

More detailed and complete information on all of these degree programs can be obtained by directly contacting the department.

## **Mechanical Engineering**

The department offers graduate degrees leading to the M.S. and Ph.D. in Mechanical Engineering. Course topics and research opportunities include fluid mechanics and aerodynamics, heat transfer, robotics (with an emphasis on automation, miniaturization and instrumentation), mechanical controls, computational methods in structural analysis, energy conservation, and analysis of composite materials. Departmental laboratory facilities include main-frame, mini and personal computers, a wide assortment of basic instrumentation with A/D converters, a subsonic wind tunnel, robotics sensors (acoustic and optical), engines, dynamometers, fluid flow/heat transfer equipment, and remote sensing and control instrumentation for data acquisition and energy management systems. The department administers the Master of Engineering, Master of Science in Mechanical Engineering and the Ph.D. degrees in Mechanical Engineering. It maintains close ties with the Chemical Engineering Department because of the two department's shared interest in instrumentation, process controls, fluid mechanics, heat transfer and computer optimization of design. The department also maintains close ties with the Civil Engineering and Mechanics Department due to shared interest in materials, structural analysis, vibrations and fluid mechanics.

## **Cooperation with Other Departments and Colleges**

Advanced study and research challenges exist at the interfaces between engineering and other academic disciplines. Examples here 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 geohydrology, and biomedical engineering, to name only a few. The college cooperates with other academic units of the University in research activities and selectively educates students to become proficient in such interdisciplinary fields. Degree programs associated with this effort are the M.S. in Engineering Science and the Ph.D. in Engineering Science.

## **Supporting Activities and Facilities**

The College of Engineering supports its departments, academic programs, and research through a spectrum of common facilities and service activities described in further detail in the following sections.

### **College Facilities**

In addition to the specialized laboratory facilities of the individual departments the USF College of Engineering maintains College facilities to support the teaching and research activities of all departments. These facilities include a machine shop, a scanning electron microscope facility and the computer facilities provided by Engineering Computing Services.

The Machine Shop, manned by expert model makers, includes welding and machine tools to permit fabrication of devices for teaching and research from a wide range of engineering materials.

The Scanning Electron Microscopy facility houses a JEOL scanning electron microscope which can create a magnified image up to 300,000 times the original size. Also used is an energy dispersive X-ray analysis system which identifies and quantifies elements present in a sample. Any dry sample up to six inches in diameter can be placed in the chamber of the microscope to be magnified and photographed and/or analyzed for sample composition.

### **College Computing Facilities**

The College of Engineering computing facilities are used to provide support for specialized engineering calculations above and beyond those which are available at the IBM-based Central Florida Regional Data Center (CFRDC).

The College operates four PRIME computers, a VAX, a ten node SUN net, and open use small computer facilities. These machines provide support for teaching and research in all of the engineering disciplines. Additionally, the Computer Science and Engineering department within the College which runs other facilities, consisting of a pair of VAX machines, an Ethernet with SUN and AT&T 3B2 machines, and extensive microcomputer laboratories.

The College facilities run most of the standard engineering software. Languages include Fortran, BASIC, Pascal, C, Ada, several varieties of LISP, and Prolog. Applications software includes mathematical libraries, suites of programs for VLSI design, chemical process design, civil and mechanical engineering design, robotics simulation, and circuit simulation and analysis. There are high resolution color terminals for use in conjunction with these activities, and for mechanical design there are four multiple display workstations

with joysticks and digitizing pads. Similar arrangements are used for VLSI design.

The multiple computer operations within the College are made accessible at each faculty desk, research laboratory or classroom terminal, through a new network (ISN). This new facility will provide more extensive connectivity, including both of the Engineering buildings, providing superior connections to CFRDC, and to the remote Engineering sites at Sarasota, St. Petersburg and Lakeland. The College ISN will also provide a link between departmental networks as they emerge. There is currently a joint EE/CSE net and other departments are expected to follow suit.

The College has also opened two PC classrooms with a total of about 50 machines. These classrooms will be run as open access laboratories except for limited scheduled class meetings. The PC rooms are supplemented by an open access, 40 seat, terminal room which provides access to the network.

## **Florida Engineering Education Delivery System (FEEDS)**

The Florida Engineering Delivery System (FEEDS) is a cooperative effort of the Colleges of Engineering of the University of South Florida, Florida Atlantic University, the University of Central Florida, and the University of Florida. The remaining state universities are participating in the delivery of the Engineering programs.

The FEEDS plan was developed in response to the needs of engineering graduates working in industry for access to quality graduate programs and extended studies in engineering. Florida's industrial, political, and educational leaders agree that ready access to the highest quality engineering education by people all over the state will play an important role in the growth of high technology industry and in the economic and social health of all its people.

FEEDS is to provide this access. The courses available through FEEDS are selected from the graduate programs available on the campuses of the Colleges of Engineering of FAU, UCF, UF, and USF. The following methods of delivery are in use or scheduled for use in the near future: Tutored Videotape Instruction (TVI), Live Instruction, Instructional Television Fixed Service (ITFS) (one-way video, two-way audio "live" delivery), and Computer Based Education (CBE).

### **Programs**

Providing graduate degrees at off-campus locations is the main reason for FEEDS. However, since FEEDS resources are limited, priority is given to areas in which the need and/or demand is greatest. Presently, FEEDS offers master's degree programs in Civil Engineering, Computer and Information Science, Electrical Engineering, Industrial and Systems Engineering, and Mechanical Engineering. Selected course offerings in other engineering disciplines also area available.

### **Admissions, Advising, and Registration**

Since FEEDS is a delivery system of courses to off-site centers, regular admissions requirements apply. All students registering for one or more courses offered through FEEDS must be admitted to one of the primary universities as a degree or non-degree student. Application for admission may be made directly to USF's Office of Graduate Admissions. Prospective students must refer to the admissions procedures and requirements in this Catalog.

FEEDS Center procedures require that students registering for FEEDS courses coordinate with their academic advisers prior to registration. All students (degree and non-degree) must register each semester for each course



desired. Registration for courses will be handled at the FEEDS Centers. Contact the nearest FEEDS Center or the Dean's Office in the College of Engineering for registration schedules.

### **Centers for Engineering Development and Research (CEDAR)**

The College of Engineering has established CEDAR (Centers for Engineering Development and Research) for the purpose of facilitating university/industry cooperative research efforts. This research organization allows graduate students to work on engineering projects that are of mutual benefit to industry and the University. CEDAR is a multidisciplinary research laboratory that involves all departments within the College of Engineering, as well as cooperative efforts with the College of Natural Science and the College of Medicine.

Research activities are conducted by the various centers within CEDAR. Specific centers deal with: Microelectronics Design & Testing; Environmental Studies & Water Resources; Modeling Hydrological & Aquatic System; Development of Materials; Communication & Signal Processing; Distributed Intelligence; Interactive Technology, Applications & Research; Electron Microscopy Center; and Southern Technology Applications.

CEDAR is supported by grants and contracts from industry and government. Graduate student research assistantships frequently are derived from this support. More than one million dollars in equipment has been donated by industry to enable students to conduct state-of-the-art research. Students often spend time at industrial plants as a part of their research programs at CEDAR. For more information, contact the College of Engineering's Associate Dean for Research, Dr. Thomas Wade.

### **Florida Engineering and Industrial Experiment Station (EIES)**

The Florida Engineering and Industrial Experiment Station developed from early research activities of the Engineering faculty at the University of Florida, and was officially established in 1941 by the Legislature. Its mandate is to "organize and promote the prosecution of research to such of these problems as are important to the industries of Florida". In 1977, the University of Florida extended the provisions of the Engineering and Industrial Experiment to the Engineering College of the University of South Florida and the other two state engineering colleges. The Legislature supported this extension with an appropriation: the four colleges of engineering now work together in a joint effort through EIES to assist industry with special problems that can be appropriately solved by engineering colleges. During the academic year 1985-86, a sponsored research volume of approximately \$2 million passed through EIES (USF). All departments, faculty as well as students, contribute to this research at the University of South Florida. The direct exposure of students to real research needs of the state adds additional meaning and depth to the engineering education offered by the college.

### **NASA STAC (Southern Technology Application Center)**

The NASA Southern Technology Applications Center (STAC) is a sophisticated network of information resources and technology transfer expertise devoted to providing high-quality service that entrepreneurs, researchers, high-

tech professionals, and business manager need to survive in today's competitive climate.

Created by NASA and the State University System of Florida through the Colleges of Engineering to assist the private sector in commercializing technology, STAC has grown into a full-service technology transfer service which accesses more than 1200 databases worldwide, containing in excess of 500 million records. By using these databases and the expertise of STAC's professional staff, researchers and decision makers receive the most timely information on virtually any subject area — from state-of-the-art developments to commercially applications of their innovative concepts. STAC's on-line interactive searches retrieve a greater number of relevant documents than those obtainable through traditional research techniques.

STAC's diverse services satisfy the demand for automated information research, provide tailored reports to interpret data, create linkages between universities and industry for research and development activity, and assist in consultant recruitment. STAC provides the most current, accurate and comprehensive information research available as well as technical assistance, expert connections, custom database development, demographic trends, patents and trademarks, business opportunities in space, SBIR grant assistance, and proposal writing seminars. Results are STAC's number one priority. STAC charges a minimal fee for its services since its operation is partially supported through NASA and state funds. The STAC office, which services the southwest area of Florida, is located in the College of Engineering at the University of South Florida.



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## COLLEGE OF FINE ARTS

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The College of Fine Arts provides opportunities for students to develop their interests and talents to the highest level possible, and encourages them to do so whether they wish to commit to a life in the arts or to develop appreciation for and involvement in the arts. For these purposes, the college educates in the practice of creating, performing, presenting and understanding theatre, music, dance, and the visual arts.

Our mission is three-fold:

1. Teaching the disciplines for creating, performing, presenting, and understanding the arts. The college prepares students to:
  - A. Practice an art as a full time life commitment;
  - B. Practice an art as an important element of the individual's life commitment;
  - C. Appreciate the arts as important life enrichers.
2. Creating and researching the arts:
  - A. To expand horizons and explore new dimensions in the arts;
  - B. To contribute to the expansion of general knowledge and information about the arts;
  - C. To improve the teacher's own effectiveness with students.
3. Serving the public by providing cultural enrichment and expertise.

In recognition of its academic and artistic achievements, the College of Fine Arts has been given program of emphasis status by the Board of Regents of the State University System. The college offers degree programs and courses in art, dance, music and theatre. It also offers courses in Music Education and Art Education in cooperation with the College of Education.

### Graduate Degree Programs

The College of Fine Arts offers four master's degree programs:

- **Master of Fine Arts (M.F.A.)**
  - Drawing, Painting, Sculpture, Ceramics, Graphics, Photography, and Cinematography (film)
- **Master of Arts (M.A.)\***
  - Art History
- **Master of Music (M.M.)**
  - Performance, Composition, Piano Pedagogy, Theory, Choral Conduction, and Band/Wind Ensemble Conducting
- **Master of Arts (M.A.)**
  - Music Education (offered in collaboration with the College of Education)

\*For the Master of Arts in Art Education, refer to the College of Education for details.

### Admission Requirements

In addition to general University admission requirements and regulations governing graduate study, each program within the College of Fine Arts has its own requirements for admission. It is important that the applicant simultaneously seeks to satisfy these requirements along with those of the Graduate

Admissions Office in order to meet all deadlines. Application for admission is made through the Graduate Admissions Office. When all required information is received by them, it is forwarded to the appropriate department in the College of Fine Arts for final processing.

### **Financial Aid**

Available to graduate students who show special potential for creative contribution to the profession are the Graduate Council Fellowships and graduate assistantships and fellowships. Additionally, loans, grants and work programs are available to qualified University of South Florida students. Financial aid is granted on need, academic promise and character.

### **Fine Arts Events**

The College of Fine Arts, recognizing the importance of maintaining an arts-filled environment as an integral part of the total learning experience it offers to students within the college and to the community at large, is critically aware that a truly comprehensive university performing arts program must include performances and related activities by internationally recognized artists and ensembles.

The list of prestigious artists who have been presented over the years by the College of Fine Arts is impressive; a sampling includes John Cage, the Guarneri String Quartet, Lazar Berman, the New York Pro-Musica, Alvin Ailey, Martha Graham, Marcel Marceau, and the Polish Mime Ballet Theatre. (More extensive lists of visiting artists and performing organizations appear in this Catalog under the sections of the specific academic units in the college in which research, demonstration, teaching, and other educational activities have directly benefitted students.)

## **Program Descriptions**

### **Art**

#### **Master of Fine Arts (M.F.A.)**

The major concentrations, or areas of emphasis, available to graduate (M.F.A.) art students are: Drawing, Painting, Sculpture, Ceramics, Graphics (lithography and/or intaglio), Photography, and Cinematography.

**Admission Requirements.** The application for admission to graduate study should be sent to the Graduate Admissions Office prior to deadlines published in the Academic Calendar. However, the application and all support materials portfolio, etc.) should be submitted early enough to reach the Art Department by the following dates: for Semester I admissions by March 1; for Semester II admissions by October 1.

At least one week should be allowed for internal processing of the applications, providing all transcripts have been received and the applicant's grade point average (GPA) for the final 60 semester or 90 quarter credit hours of undergraduate work is 3.0 or above. If the GPA is below 3.0, the GRE score must be available, which may take up to six weeks from the date the exam is taken.

**Portfolio.** The applicant should submit a portfolio of art work directly to the Graduate Art Adviser in the College of Fine Arts for faculty review. The portfolio should consist of 35 mm slides, for convenience in shipping, handling, and presentation. Applicants in drawing and printmaking, however, should send original prints. Cinematography applicants should send duplicate prints.

The portfolio should provide evidence of maximum strength in the area of the applicant's primary interest, although work submitted may represent more than one discipline. Return postage in stamps in the amount necessary for the return of all materials should accompany the portfolio. (Please do not send cash, checks or money orders.)

**Letters of Recommendation.** Applicants to the Master of Fine Arts degree program also are required to submit (in addition to the portfolio) three letters of recommendation and a statement of intent indicating your aims and goals as a student in our graduate program.

It is the applicant's responsibility to see that all required materials, such as transcripts, GRE scores, portfolio, and letters of recommendation, are received in time to be processed by art department deadlines. For information concerning University graduate studies, admissions and graduation policies, see the appropriate section of this Catalog.

**Acceptance Program.** A student may be accepted into the M.F.A. program either provisionally or fully. Provisional enrollment is normally provided for one or two consecutive terms. When accepted fully as degree-seeking, the student will have only one opportunity to be advanced to candidacy. This will come at the end of either the second or third semester of the student's enrollment in the M.F.A. program. (Summer semesters will not count in this process.) The decision by a student to come up for candidacy should be made in consultation with the graduate critique committee. Students up for candidacy will have their work reviewed by the faculty during the normal end of the semester review. If the student is not advanced to candidacy he/she will be terminated from the program.

Upon acceptance to candidacy, the student will select a committee of three faculty members, two of whom must be studio faculty of the student's primary discipline.

**Program Requirements.** The M.F.A. degree requires a minimum of 60 semester hours. The bulk of a student's program is discretionary, and is planned with the advice of the Graduate Art Adviser in its initial stages, and later with the advice of the student's graduate committee.

Specific program requirements include work in theory (ART 6936 Graduate Seminar: 2 hours credit, must be taken twice); participation in instruction (ART 6937 Graduate Instruction Methods; variable credit to 4 hours); presentation of work (thesis exhibition, for which credit normally is given); and thesis documentation (usually earned under ART 6971, Master Thesis, but in certain circumstances under ART 6911, Directed Research; credit for documentation is variable); and 12 hours in art history.

**Thesis.** Students also are required to participate in a thesis orals session in conjunction with the thesis exhibition. This is a forum for questions from faculty representatives and is open to other graduate students.

**Studio Space.** Graduate students normally are assigned studio space, when available, in the department and are expected to remain in residence during their enrollment. Exceptions must have the approval of the student's graduate committee and the Graduate Art adviser. Approval from both of these sources is also necessary for the acceptance of any courses taken as a non-degree seeking student (up to 8 hours) prior to admission and for any transfer credit from another institution (limited to 9 hours). The graduate committee must approve the written thesis, the thesis exhibition and the conduct of the orals in satisfaction of degree requirements.

### **Master of Arts (M.A.) — Art History**

The program emphasizes the history of art from the Renaissance to the present. The focus of the program is one intellectual history and art historiog-

raphy, supplemented by practical internships in area galleries and museums. a knowledge of French or German is required.

### **Admission Requirements**

The application for admission to graduate study should be sent to the Graduate Admissions office prior to deadlines published in the Academic Calendar. However, the application and all support materials should be submitted early enough to reach the Art Department by the following dates: for Semester I admissions by March 1, for Semester II admissions by October 1.

At least one week should be allowed for internal processing of the application, providing all transcripts have been received and the applicant's grade point average (GPA) for the final 60 semester or 90 quarter credit hours of undergraduate work is 3.0 or above. If the GPA is below 3.0, the GRE score must be available, which may take up to six weeks from the date the exam is taken.

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 and a statement of intent indicating the applicant's goals as a student in the M.A. program should be sent directly to the Graduate Art Advisor in the College of Fine Arts for faculty review. A personal interview by the art history faculty may also be requested.

Applicants who do not have an undergraduate degree in Art History will be expected to complete four undergraduate Art History survey courses plus two critical studies courses. Any exceptions can be granted only by the art history faculty.

### **Program Requirements**

Course work will consist of 16 hours of specially designated courses, 20 hours of electives plus 2 hours of thesis for a total of 38 hours.

- A. Students must take the following courses:
  - 1. methods of Art History;
  - 2. one historiography course;
  - 3. one cultural intellectual history course;
  - 4. one seminar.
- B. The Methods course must be taken during the students first two semesters in the program.
- C. Museum internship is optional and can be taken any term after the first semester.
- D. A museum internship must be arranged through the Art History faculty.

The formation, of a thesis committee shall be completed by the end of the student's second semester in the program. The student will select, in consultation with the art history faculty, a Faculty Graduate Thesis Committee. The thesis defines the area of the student's specialization.

The graduate committee must approve the written thesis and the conduct of the oral defense of the thesis in satisfaction of degree requirements.

Any transfer of credit or special student hours to be used towards M.A. degree requirements is granted only after a faculty review of such hours and after the student has been accepted into the program. The Art Department has designated a six-hour limit on all credit transferred from other institutions or colleges and an eight-hour limit on all credit taken under special student status.

It is the applicant's responsibility to see that all required materials, such as transcripts, GRE score, portfolio, and letters of recommendation, are received in time to be processed by art department deadlines. For information

concerning University graduate studies, admissions and graduation policies, see the appropriate section of this Catalog.

### **Master of Arts (M.A.) — Art Education**

A Master of Arts in Art Education is available through the College of Education. Please refer to College of Education, Department of Curriculum and Instruction for program details.

### **Visiting Artists and Artist-In-Residence**

The Art Department is widely known for the consistent level of excellence of its programs. To complement the contributions of its permanent staff and to insure the continuing expansion of learning opportunities available to students, the Art Department has brought to the campus internationally known artists and lecturers such as Vito Acconci, Alice Aycock, Scott Bartlett, Lee Friedlander, Edward F. Fry, Russ Gant, Betty Hahn, Barbara Kruger, Lucy Lippard, Robert Mapplethorpe, Robert Morris, Robert Rauschenberg, James Rosenquist and Gene Youngblood.

### **Art Galleries**

The University of South Florida Art Galleries, under the aegis of the Art Department, present more than 30 exhibitions a year in three on-campus galleries. The exhibition program is an integral part of the studio and art history curriculum of the Art Department. It also is vital to other liberal arts areas of the University, as it provides a context and forum for students to test and broaden their perceptual and analytical abilities. Brochures and catalogs documenting the exhibitions are available through the Galleries office (FAH 236).

In addition, the University Collections are made available as loans both on and off campus through the Art Bank Program. Part of the collections is arranged in 65 circulating exhibitions that are available as loans to galleries, universities and major cultural institutions throughout the Southeast.

## **Music**

### **Master of Music Degree (M.M.)**

The major concentrations available to graduate (M.M.) music students are:

- Performance Theory
- Composition Choral Conducting
- Piano Pedagogy Band/Wind Ensemble
- Conducting

**Admission Requirements.** The applicant seeking acceptance into the Master of Music degree program must meet the University's general admissions requirements and make formal application through the Graduate Admissions Office. Concurrently, the applicant must arrange to fulfill the specific acceptance requirements in the Music Department of the College of Fine Arts. Full acceptance cannot be given until the applicant satisfies: (1) performance audition, (2) special requirements in music theory (see dept. handbook). Dates and times for auditions and examinations may be obtained by calling or writing the Music Department. Persons to contact directly are the Chairperson of the Music Department and the Coordinator of Graduate Music Studies.

**Program Requirements.** In addition to general University and college requirements, the applicant for the Master of Music degree must satisfy the following requirements in music before initial registration: (1) performance audition, and (2) placement examinations in music theory.

All candidates for the degree must take the following course work:



*Techniques of Research in Music . . . . .	(3)
Critical Analysis of Music Repertory . . . . .	(2)
20th Century Music Literature . . . . .	(3)

\* Should be taken during the first semester of enrollment.

Degree requirements will vary according to the program chosen and the student's needs and interests. Recommended programs may be obtained from the department chairperson. Each program must be approved by the Coordinator of Graduate Studies, in conformance with the guidelines established by the graduate music committee. A minimum of 30 semester hours is required.

No secondary applied music course may be used to satisfy the major applied requirement. Students must enroll for the major applied offering (4 semester hours).

The responsibility for seeing that all graduation requirements are met rests with the student.

### **Master of Arts (M.A.) — Music Education**

**Admission Requirements.** The applicant seeking acceptance into the Master of Arts degree program must meet the University's general admissions requirements and make formal application through the Graduate Admissions Office. Concurrently, the applicant must arrange to fulfill the specific acceptance requirements in the Music Education Department of the College of Education. Full acceptance cannot be given until the applicant satisfies: (1) interview with the Director of Music Education; (2) special requirements in music theory (see dept. handbook). Dates and times for auditions and examinations may be obtained by calling or writing the Music Department. Person to contact directly if the Director of the Music Education Department.

**Program Requirements.** Three plans are available to the candidate in both instrumental and vocal music: 35 hours course work; 32 hours plus recital; or 30 hours plus thesis.

#### **Course Requirements:**

1. **Professional Education . . . . . (7)**  
EDF 6215 and EDF 6431
2. **Music Education . . . . . (9)**  
MUE 6080 and MUE 6189
3. **Music Theory/History/Literature . . . . . (6)**
4. **MUS 6793**

### **USF Music Faculty**

USF's superior music faculty has been carefully chosen for its training, performing ability, and ability to teach. It is in every sense a team. This achievement has been demonstrated by such fine musical ensembles as the Faculty String Quartet, the Arts Nova (faculty) Wind Quintet, the Faculty Musart Piano Trio and the Faculty Jazz Quartet. USF music graduates are found teaching successfully in public schools and universities around the country and performing in a variety of concert settings.

## **SYCOM**

The Systems Complex for the Studio and Performing Arts delivers essential instructional services and state-of-art reproduction, mixing, editing, and electronic sound generating, as well as processing equipment (digital and analog) for development and implementation of exploratory research and crea-

tive activity by artists, scientists, and students (generally enrolled in related classes) at USF.

Basic recording facilities in Studio A include a custom-designed 12 channel quad, mixing console, constructed around an OPAMPS frame (with patchbay, remotes and monitor controls), an MCI eight-track recorder (10 format; 7-1/2, 15, 30 ips) with DBX 208, an Ampex ATR 102 two-track recorder with Dolby A, a TEAC 40-4 four-track recorder with DBX, a MIC MIX stereo reverb and four White 1/3 octave equalizers. Four JBL 4315 B studio monitors are powered by two Yamaha amplifiers. Eu Systems provides a modular synthesizer with a real time 16-voice microprocessor controlled, keyboard/sequence (6000 notes of storage, cassette "load and store" of software, a Prophet-5 and Emulator complete sound generating capabilities). Computer facilities include a standard Z80 cpu (system upgradable to a Z8000) with 64 K of RAM, and IBM compatible, digital tape drive (7 or 9 track; 800 or 1600 BPI), a 29 megabyte Shugart disk, two 500 K double density floppy diskettes, four channels of 12 bit d to a for synthesizer control (8 for pitch; 8 for amplitude; 16 separate triggers), one channel of analog-to-digital conversion and two Hazeltine 1500 terminals. A Megasystems hybrid microprocessor/sequencer with 2000 notes of storage and an array of specialized software entered on a standard ASCII terminal is also available. Peripherals include a Technics SL 1600 MK2 turntable system, an Akai GX-M50 cassette deck, a frequency counter, and a digital clock.

Written proposals for individual or group projects to be sponsored or subsidized by SYCOM and/or extramural granting agencies should be submitted for consideration to the director of SYCOM. The subsequent results of project activities will be exhibited in the form of public lectures, performances, reports, publications, or large theatrical events and special workshops, such as Sound Gallery, the Event/Complex Series, Art-Tech Workshop, and the new music/media festival, INTERMUSE.

### **Unique Learning Opportunities**

The Music Department at the University of South Florida offers the student the opportunity to study with a distinguished faculty, work with the newest in creative equipment, and to be in the company of other superior music students for an extended, exciting and exacting period of study. In addition to the already established programs in the choral, orchestral and wind ensemble areas, opportunities are now available in jazz via performances with the jazz ensemble and chamber jazz ensembles, a full range of jazz courses, and professional playing opportunities in the area.

### **Visiting Artists and Artists-In-Residence**

The Department of Music utilizes guest composers, conductors, and performing musicians to enhance its offerings in terms of teaching faculty, forum appearances, and the conducting of musical programs, symposia, and clinics. Some prominent musicians who have appeared in the past are:

Norman Dello Joio  
 Randall Thompson  
 Virgil Thompson  
 Walter Trampler  
 Fred Ilemke  
 Lukas Foss  
 Maurice Andre  
 Jean Pierre Rampal

Oily Wilson  
 Guarneri String Quartet  
 Beaux Arts Trio  
 Boris Goldovsky  
 Gregg Smith  
 Norman Luboff  
 Phil Woods  
 David Baker

Adele Adison  
Byron Janis  
Louis Bellison  
David Samuels  
Julius Baker  
Ransom Wilson  
T.J. Anderson  
Hale Smith  
George Russell  
Art Blakey

John Cage  
Karel Husa  
Leslie Bassett  
Samuel Adler  
Gunther Schuller  
Robert Merrill  
Doc Severinsen  
Bethany Beardslee  
Robert Shaw  
Toshiko Akiyoshi

### **Student Organizations**

Sigma Alpha Iota, national professional music fraternity for women, and Phi Mu Alpha Sinfonia, a professional music fraternity for men, are dedicated to serve the cause of music in America. Student Music Educators National Conference is an affiliate of the Music Educators National Conference and is open to all interested students.

### **Financial Aid**

Graduate students who show special potential for creative contribution to the profession are eligible for Graduate Council Fellowships and graduate assistantships and fellowships. Loans, grants and work programs also are available to qualified University of South Florida students. Financial aid is granted on the basis of need, academic promise and character.

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## COLLEGE OF MEDICINE

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The College of Medicine opened its doors to medical students in 1971 and began its Ph.D. training program in Medical Sciences in 1975. The Graduate Faculty in the College consists of those members of the six departments that offer the Ph.D. degree who are credentialed by the Graduate School of the University. These faculty members are medical research scientists who are productive in many fields of research related to understanding disease processes and to the development of improved methods of diagnosis, treatment and prevention of disease.

In addition to teaching graduate students, the faculty is responsible for the comprehensive pre-clinical training of medical students in the sciences basic to the modern practice of medicine.

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.

### Graduate Degree Programs

#### **Doctor of Philosophy (Ph.D.) Medical Sciences**

The USF College of Medicine offers a graduate program leading to the Doctor of Philosophy degree in Medical Sciences, with a specialty in Anatomy, Biochemistry, Medical Microbiology and Immunology, Pathology, Pharmacology and Therapeutics, or Physiology and Biophysics. This program is administered through the College of Medicine by the Graduate School of the University of South Florida.

The program is designed to provide students with a broad knowledge in the basic medical sciences, while preparing them for careers as effective and knowledgeable teachers, as well as productive and versatile researchers. These objectives are met through a broadly based curriculum that includes formal courses in the medical sciences, participatory seminar programs, and individual research training. The program requires approximately four years to complete.

The entering student is assigned an advisory committee within his/her chosen department, which advises the student until a major professor is selected and a formal dissertation committee is appointed. The dissertation committee assists the student in planning his/her research and course of study, evaluates his/her progress, supervises the comprehensive examination, and conducts the final examination of his/her dissertation.

The first year student, in consultation with the advisory committee, selects a curriculum of basic and advanced courses applicable to his/her area of major interest. In addition to formal course work, students may be required to attend and participate in seminars in accord with the policies of the individual's major department. During the first year, students are expected to become familiar with ongoing research in the chosen department; when possible, they are encouraged to work on a part-time basis as research assistants in the major department in order to supplement their research training.

By the end of the second year, a student has usually completed the course work and tools of research requirements. A comprehensive qualifying examina-

tion in the chosen discipline of major is then taken, and following successful completion of this examination, the student is admitted to candidacy for the Ph.D. Degree. He or she then enters the final phase of the program, which emphasizes research and independent study culminating in a written dissertation. The Ph.D. degree is awarded upon successful completion and oral defense of the dissertation.

Information concerning this program may be obtained by contacting the Associate Dean for Research and Graduate Affairs, College of Medicine, MDC Box 40, 12901 Bruce B. Downs Boulevard, University of South Florida, Tampa, Florida 33612-4799.

### **Requirements for Admission**

1. Students who seek admission as first-time graduate students to the Ph.D. Program In Medical Sciences of the College of Medicine must meet the minimal system-wide (State University System of Florida) and University of South Florida) entrance requirements.
2. In addition, while working for the baccalaureate degree, the applicant must have earned a minimum overall grade point average of 3.0 out of a possible 4.0, with a minimum grade point average of 3.0 in the sciences.
3. The applicant must have a total quantitative-verbal GRE General Test score of 1100 or higher. However, if the applicant takes an advanced (subject) test on the GRE in his or her major and achieves a score of 600 or higher, and achieves a score of 1000 or higher on the quantitative-verbal test, the minimum score of 1100 may be waived under special circumstances.
4. In addition to course requirements summarized above, the department of the chosen major discipline may require additional course work to be completed before admission into the Graduate Program. Specific deficiencies may be corrected through courses taken within a specified period of time at the discretion of the faculty of the department of major study. Each course to be taken, as well as the acceptable grade, is agreed upon by the student's department of major at the time the student is accepted into the Graduate Program. This information will be communicated to the student and to the Associate Dean for Research and Graduate Affairs (College of Medicine) prior to the time of regular registration for the term.
5. Except for the system-wide and/or University-wide minimum admission criteria, all other requirements herein summarized may be waived as follows:
  - a) under exceptional circumstances, in consideration of the applicant's expected success in the program,
  - b) with the recommendation of the faculty of the department of major, and
  - c) with the approval of the Associate Dean for Research and Graduate Affairs or the Dean of the College of Medicine.

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## COLLEGE OF NATURAL SCIENCES

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Students in the College of Natural Sciences are trained in the tools of logical analysis and the modes of experimentation in the continuing attempt to better understand the nature of the physical and biological universe. In all its functions the college is dedicated to fostering a spirit of inquiry and intellectual growth.

### Graduate Degree Programs

The College of Natural Sciences offers programs in Biology, Botany, Microbiology, Zoology, Chemistry, Geology, Marine Science, Mathematics, Oceanography and Physics.

#### Master's Degree Programs

The College of Natural Sciences offers a graduate program leading to the Master of Arts degree in the fields of Chemistry (CHM) and Mathematics (MTH), and Master of Science degrees in Botany (BOT), Chemistry (CHM), Geology (GLY), Marine Science (MSC), Microbiology (MIC), Physics (PHY), and Zoology (ZOO).

#### Doctoral Programs

The College of Natural Sciences offers five programs leading to the degree of Doctor of Philosophy:

##### **Biology (BIO)**

This program leads to the Ph.D. in Biology, including fields of Marine Biology, Systematics, Behavior, Ecology, Physiology, Molecular Biology, and Genetics.

##### **Chemistry (CHM)**

This program leads to the Ph.D. in Chemistry, including the fields of Analytical, Biochemistry, Inorganic, Organic and Physical Chemistry.

##### **Mathematics (MTH)**

This program leads to the Ph.D. in Pure and Applied Mathematics.

##### **Marine Science (MSC)**

This program leads to the Ph.D. in Marine Science.

#### **Admission Requirements**

Students apply for graduate work through the College of Natural Sciences and are recommended for admission by the department in which they intent to concentrate. The College of Natural Sciences requires a minimum of "B" average in the last two years of undergraduate work and a minimum of 1000 (1100 for Marine Science and Biology Ph.D. applicants) on the GRE General Test. Applicants with a "B" average in the last two years of undergraduate work or a minimum of 1000 on the GRE General Test may be considered for provisional admission, subject to departmental recommendation.

#### **Program Requirements**

A departmental committee is appointed to supervise and guide the program of the candidate. The general University requirements for graduate

work must be satisfied. The specific requirements for each department are listed under that department below. A student who enrolls in 9 or more credit hours leading to a graduate degree is classified as a full-time student.

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 his/her thesis, or dissertation, he/she shall enroll for no fewer than 3 hours of research and/or thesis and/or dissertation each semester, other than the summer semester, except that no student shall be required for the purposes of this rule to enroll for more than 9 hours total per semester. Additional requirements may be imposed in any department in the college.

A student must be registered for an appropriate load (in no case fewer than 3 hours) in the college for the semester in which all degree requirements are satisfactorily completed.

To remain in good standing, a graduate student must maintain a cumulative grade point average of at least 3.0. A graduate student whose cumulative grade point average falls below 3.0 will be placed on probation and must meet the college probation requirements to be reinstated in good standing. A graduate student who receives three grades below "B" in structured courses required by his/her advisory committee to meet the requirements for the degree will be dropped from the program.

**Registration in Research, Thesis and/or Dissertation Courses.**

Registration in courses entitled Directed Research, Thesis: Master's, or Dissertation: Doctoral must be with the approval of the major professor and must be commensurate with each student's research plan. A student who enrolls in courses entitled Thesis: Master's but does not submit a thesis or who enrolls in Dissertation: Doctoral but does not submit a dissertation will not be certified for graduation.

**Additional Requirements.** Students in a graduate program in the College of Natural Sciences must be either active or on a leave of absence granted by the college. Students on active status must register for a minimum of 1 hour of graduate level course work each semester. During any semester that a student is using research space, other university facilities, faculty/staff time, or completing any requirements for the degree, including thesis (dissertation) defense or approval, the student must register for a minimum of 3 graduate credit hours. Additional regulations concerning graduate study may be found in the departmental sections of this Catalog and are on file in the Office of the Dean. The student is responsible for meeting all requirements of his/her degree program.

**Master's Program Requirements.** A graduate student working on a master's degree in a program in the College of Natural Sciences that requires a thesis must register in course 6971 when engaged in research, data collection, or writing activities relevant to the master's thesis. Advisers should assign the number of credits in this course appropriate to the demands made on faculty, staff, and University facilities, but in no event will the total number of earned thesis credits be fewer than 6. Only 6 credits of 6971 may be applied to the minimum number of credit hours required for a given degree.

**Ph.D. Program Requirements.** Following admission to candidacy, a graduate student in a Ph.D. program in the College of Natural Sciences must enroll in course 7980 when engaged in research, data collection, or writing activities relevant to the doctoral dissertation. Advisers should assign the number of credits in this course 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 16. Students not admitted to candidacy are not eligible to enroll in 7980.

### **Financial Aid**

For further information regarding admission and the availability of fellowships and assistantships, a candidate should write to the appropriate departmental chairperson, College of Natural Sciences, University of South Florida, Tampa, Florida 33620.

### **Teacher Education Programs**

The College of Natural Sciences offers an M.A. degree program for secondary school teachers and the M.A. degree for junior college teachers.

#### **M.A. Degree Program for Secondary School Teachers**

The College of Natural Sciences, in cooperation with the College of Education, offers the M.A. degree in Mathematics and in Science. In science, concentrations are available in Biology, Chemistry, and Physics. Because requirements apply in both colleges, the student will have an adviser in each college. At the outset, the planned courses in mathematics and science must be approved by the student's adviser in the College of Natural Sciences.

Mathematics majors must complete a minimum of 34 semester hours; science majors must complete at least 18 semester hours in the discipline of concentration. For requirements in education, the student should consult the College of Education portion of this Catalog.

#### **M.A. Degree Program for Junior College Teachers**

The M.A. degree for Junior College Teachers is available in the College of Natural Sciences, with specializations in Biology, Chemistry, Geology, Mathematics, or Physics.

The student may complete the M.A. degree in a program offered jointly by the College of Natural Sciences and the College of Education. This program requires 24 hours in mathematics or science specialization courses, which must be approved by the student's adviser in the College of Natural Sciences. Credit hours also are required in professional education courses and in internship, depending on the depth of the student's teaching experience. For requirements in Education, the student should consult the College of Education portion of this Catalog.

## **Program Descriptions**

### **Biology (BIO/BOT/MIC/ZOO)**

#### **Requirements for the M.S. Degree**

Master's degrees are offered in Botany, Microbiology and Zoology. Areas of specialization in any of these degrees include Marine Biology, Ecology (Tropical Ecology, Population Ecology, and Physiological Ecology), Molecular Biology, Genetics, Host-Parasite Relationships, Physiology (Cellular Physiology, Microbial Physiology, Neurophysiology), Systematics and Behavior. The



M.S. degree requires completion of structured coursework, a research thesis or a review paper, and passing a comprehensive examination.

The departmental graduate coordinator functions as the student's adviser until the student makes arrangements for a faculty member to serve as major adviser. The selection of a major adviser includes acceptance of the student by the faculty member. The major adviser and two additional faculty constitute the student's supervisory committee, which must be established within two semesters after matriculation. Failure to do so will be cause for dismissal. The supervisory committee must be approved by the departmental chairperson and the college dean.

For students enrolled in the thesis program, a minimum of 30 credit hours is required at the 5000-6000 level; 16 hours must be at the 6000 level; 20 of the 30 credit hours must be in formally structured courses, of which 15 hours must be Biology; 10 of the 20 structured hours must be at the 6000 level. All students in the thesis program must complete the graduate seminar (BSC 6935). A maximum of 10 hours of combined thesis, research and seminar may apply toward degree. Six hours of graduate work done at another institution may be transferred to the master's program, with approval of the supervisory committee. Twelve hours of graduate work completed while a non-degree seeking student at this institution may be transferred to the master's program, with approval of the supervisory committee.

For students enrolled in the non-thesis program, 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 in Biology. A review paper of a topic approved by the supervisory committee is required.

A final comprehensive examination is required for all students. This examination is open to all departmental faculty and normally is taken after the completion of formal course work, at least one semester before thesis presentation.

Any graduate work counted toward the requirements for the M.S. degree must be completed within five years after matriculation.

### **Requirements for the Ph.D. Degree**

A doctoral program in Biology is offered. Areas of specialization for the Ph.D. are Marine Biology, Ecology (Tropical Ecology, Population Ecology, and Physiological Ecology), Microbiology, Molecular Biology, Genetics, Host-Parasite Relationships, Physiology (Cellular Physiology, Microbial Physiology, Neurophysiology), Systematics, and Behavior.

The departmental graduate coordinator functions as the student's adviser until the student makes arrangements for a faculty member to serve as major adviser. The selection of a major adviser includes acceptance of the student by the faculty member and must be done within two semesters after matriculation. Applicants are strongly urged to contact faculty conducting research in the student's areas of interest. The major adviser and four additional faculty constitute the student's supervisory committee. The supervisory committee must be approved by the departmental chairman and the college dean.

Twenty credit hours are required in structured graduate-level courses. Additional courses may be required, depending upon the needs of the student's program as determined by the supervisory committee. Individuals who receive the M.S. degree from the Department of Biology at USF may waive 10 credits, with the approval of the supervisory committee. Six hours of graduate work done in a master's program at another institution may be transferred to the doctoral program, with approval of the supervisory committee. Twelve hours of graduate work completed while a non-degree seeking student at this institution may be transferred to the doctoral program, with approval of the supervisory

committee. A total of 90 credits beyond the baccalaureate must be earned; this includes any graduate credit earned prior to admission to the doctoral program.

Doctoral students must show a proficiency in two languages or a single language and computer programming, and must pass a qualifying examination. The written and the oral portions of this qualifying examination must be taken within four semesters after matriculation, if the student has a master's degree, or six semesters after matriculation, if the student does not have a master's degree. Any language or other technical skills required by the supervisory committee must be completed within the same time limits after matriculation. If the doctoral degree is not awarded within five years after passing the qualifying examination, the examination must be retaken and passed.

Any graduate work counted toward fulfilling the requirements for the Ph.D. degree must be completed within seven years after matriculation. The student is eligible for admission to candidacy after completing structured course requirements and passing the qualifying examination, upon recommendation of the supervisory committee and approval of the Dean of the College and the Director of Graduate Studies. Students must complete all requirements for admission to candidacy by the end of the second year, with a master's degree, or by the end of the third year, without a master's degree, after matriculation. A public seminar presenting the dissertation is required. A final oral examination administered and evaluated by the supervisory committee emphasizes the dissertation and the student's general field of research.

### **Graduate Application Deadlines**

Application must be completed by February 15 for Fall applicants who wish to be considered for assistantships. All other applications must be completed by the twelfth week of the semester preceding the one for which application is made. Applicants to the master's program must have a combined score of at least 1000 on the verbal and quantitative portions of the GRE General Test. Applicants to the Ph.D. program must have a combined score of at least 1100 on the verbal and quantitative portions of the GRE General Test, and a score of at least 640 on the "Subject (Advanced) Test" of the biology portion of the GRE non-native English speaking graduate students must score at least 550 on the TOEFL.

### **Chemistry (CHM)**

The Department of Chemistry offers Master of Science and Doctor of Philosophy degrees, each with specialization in the areas of Analytical Chemistry, Biochemistry, Inorganic Chemistry, Organic Chemistry, and Physical Chemistry. The Chemistry graduate faculty is comprised of 28 full-time senior faculty members, all of whom hold the Ph.D. degree. A comparable number of teaching assistants, generally graduate students enrolled in the Ph.D. program, serve as instructors in the laboratories. The combination of a large and strong faculty with a wide variety of courses and electives 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.

In graduate work, the excellent physical facilities and very low student-teacher ratio combine to afford unique opportunities for advanced study in Chemistry. In addition to the five traditional fields, Analytical Chemistry, Biochemistry, Inorganic, Organic, and Physical Chemistry, research opportunities also are available in such interdisciplinary and specialized areas as Bio-organic and Bio-inorganic Chemistry, Clinical Chemistry, Environmental Chemistry, Nuclear Magnetic Resonance Spectroscopy, Computer Modelling, Polymers, Lasers and Photochemistry, Marine Chemistry, Photoelectron

Spectroscopy (ESCA), Medicinal Chemistry, Electrochemistry, Nucleic Acid Chemistry, and Enzymology.

### **Requirements for the M.S. Degree**

All entering graduate students who have no advanced work beyond a B.A. or B.S. will be required to take the core courses in three of five areas: Analytical, Biochemistry, Inorganic, Organic, and Physical Chemistry. The core courses are:

- BCH 5065 (biochemistry)
- CHM 5225 (organic)
- CHM 5425 (physical)
- CHM 5621 (inorganic)
- CHM 6150 (analytical)

**Diagnostic Examinations.** All entering graduate students are required to take a series of diagnostic examinations during the week prior to enrollment. These examinations are in the five areas of Chemistry noted above. A course of study is then agreed upon with each student, according to his/her performance on the diagnostic examinations, previous academic performance, and stated academic preferences and goals.

**Course Requirements.** Each student is required to pass three of the five graduate level core courses (3 semester hours each). Three additional 6000-level lecture courses in chemistry (3 semester hours each) must also be completed.

**Thesis.** The student must carry out a research project under the direction of a faculty member, and the results of the research shall be written up as the M.S. Thesis.

**Comprehensive Examination.** Upon completion of thesis research and preliminary approval of the thesis by the supervisory committee, the M.S. candidate will be orally examined by the committee on the results of his/her research and directly related topics.

### **Requirements for the Ph.D. Degree**

**Diagnostic Examinations.** All entering graduate students are required to take a series of diagnostic examinations during the week prior to enrollment. These examinations are in the five areas of Chemistry: Analytical, Biochemistry, Inorganic, Organic, and Physical. A course of study is then agreed upon with each student, according to his/her performance on the diagnostic examinations, previous academic performance, and stated academic preferences and goals.

**Course Requirements.** Each student is required to complete a minimum of 18 semester hours of formal, regularly scheduled coursework (i.e. six 3-credit lecture courses). This coursework must include at least two areas (one of which is the student's major area), and at least 12 semester hours must be at the 6000 level. These courses will count toward the University requirement of 90 semester hours beyond the bachelor's degree.

**Tools of Research.** A reading knowledge of the Chemical literature in a foreign language (usually French, German or Russian) must be demonstrated. In lieu of a second foreign language, chemistry graduate students are expected to demonstrate proficiency in a computer language (usually Fortran).

**Major Comprehensive Examination.** A comprehensive examination must be passed in the student's area of specialization. This examination must be passed within two (2) years from the end of the student's first academic year and at least one year before graduation.

**Admission to Candidacy.** Completion of the foregoing requirements admits the student to candidacy for the Ph.D.: The supervisory committee must

evaluate the student for admission to candidacy within six semesters after matriculation. If the committee does not recommend admission to candidacy by that time, it may dismiss the student or grant an extension to the semester immediately following. At the end of the additional semester (the 7th semester of enrollment, excluding summers), the committee must recommend that the student be admitted to candidacy or be dismissed from the program.

**Research.** The student, under the supervision of the Major Professor, must complete an original research project in Chemistry. Enrollment in the corresponding courses, Directed Research (CHM 7820) and Dissertation: Doctoral (CHM 7980) will constitute the major portion of the 90 semester hours required for the Ph.D. degree.

**Final Dissertation Defense.** When the supervisory committee has inspected the final draft (final unbound form; typewritten and ready for duplication, with the exception of possible minor corrections) of the dissertation and found it suitable for presentation, the major professor will complete a form requesting the scheduling and announcement of the final oral examination. The request form will be submitted via the Chemistry Graduate Office to the College Dean and the Dean of the Graduate School at least two weeks prior to the scheduled oral examination.

The examination committee shall consist of a chairperson and the members of the student's supervisory committee, including the major professor(s). The chairperson of the examination committee shall be appointed by the Dean of the College and shall not be a member of the student's supervisory committee or the department or program in which the degree is sought.

The candidate may expect questions concerning the details and significance of his/her research, after the oral presentation, which is open to the public. Final approval of the candidate's degree will require approval by a majority of the examination committee, including the chairperson.

## **Geology (GLY)**

The Department of Geology offers programs leading to the Master of Science degree. Geology is one of the broadest of all sciences because of its dependence on fundamentals of Biology, Chemistry, Mathematics and Physics as applied to the study of the earth.

The graduate program in Geology allows the student to specialize in a wide variety of areas. Because of the location of the University in a rapidly expanding urban center of coastal Florida, a number of areas of specialization are emphasized: Coastal Geology, Hydrogeology, Low Temperature and Pollution Geochemistry, Applied Geophysics, Geology of Carbonate Rocks and Phosphate Deposits, as well as traditional areas of specialization. All of these are closely related to local environmental problems.

### **Requirements for the M.S. degree**

Students who have met general College requirements are admitted for graduate work in Geology if they present the requisite background in Geology and supporting sciences. The bachelor's degree with a major in Geology or a major in other sciences with a strong supporting program in Geosciences is required. Students who wish to enter the graduate program in Geology without the proper background will be required to take a number of undergraduate courses without credit. In addition, a formal summer field course or equivalent professional experience is required. All incoming graduate students are required to take a written comprehensive examination during the first semester in the program.

The curriculum for a Geology graduate student will vary depending on the area of interest. Course work for the degree will be determined by the thesis

committee after consultation with the student. The traditional curriculum leading to the MS degree in geology requires 30 semester hours plus a thesis (GLY 6971) of six hours. Of these, 16 hours must be numbered 6000 or above; 24 semester hours must be in structured courses, 10 of which must be numbered 6000 and above. All graduate students must enroll in Graduate Seminar (GYL 6931) at least twice. An oral thesis defense and a public presentation of the thesis are also required.

In addition, a non-thesis M.S. option is available in hydrogeology. This program requires 33 semester hours of structured coursework, 2 semester hours of departmental seminar, and a 3 credit hour internship/project. The curriculum includes a minimum of 3 courses in Civil Engineering and requires a comprehensive exit exam.

The department also offers an Advanced Certificate in Hydrogeology which requires 24 semester hours of structured coursework.

### **Marine Science (MSC)**

Marine Science is a unique interdisciplinary department in the College of Natural Sciences of the University of South Florida. It is devoted to research, graduate instruction, and public service in Biological, Chemical, Geological, and Physical Oceanography.

Marine Science is located on a peninsula in Bayboro Harbor, adjacent to downtown St. Petersburg. The harbor can accommodate any ship in the U.S. fleet of oceanographic vessels, making the department ideally situated for an oceanographic research operation.

The department operates a number of boats, ranging in size up to 36 feet. Two larger ships, R/V Suncoaster (110') and R/V Bellows (65'), are available through the Florida Institute of Oceanography (FIO), located in the same building as the department. FIO serves faculty members at all the institutions in the State University System by providing shiptime, equipment, and, at times, coordination for multi-institutional proposals. The department's specialized laboratories include those for Trace Metal Analysis, Water Quality, Organic and Isotope Geochemistry, Optical Oceanography, Sedimentology, Micropaleontology, Benthic Ecology, Phycology, Bacteriology, Ichthyology, Planktonology, Geophysics, a flume facility for interdisciplinary Boundary Layer Studies, and a computer-controlled scanning electron microscope/energy dispersive x-ray analysis system.

### **Admission Requirements**

Prospective students with baccalaureate degrees in Biology, Chemistry, Geology, Physics, or Mathematics generally possess an adequate course work background for undertaking graduate studies in Marine Science. Those with such degrees who have an upper-level undergraduate grade point average of 3.0 or better and a GRE General Test score of 1100 or better are encouraged to apply for either the Master of Science or the Ph.D. program. In addition to meeting the GPA and GRE standards noted above, research interests of the prospective student and the availability of suitable laboratory space and equipment will be considered.

The department has graduate fellowship and assistantship funds at its disposal, as well as out-of-state tuition waivers; most faculty members are able to hire students to work part time on research grants. Those in need of financial support are urged to have their applications completed by February 15. Awards of scholarships and assistantships generally will be announced by April 15.

Admissions materials for students entering during the fall semester must reach the department by March 1; for those wishing to enter during the spring

semester, materials must be in by October 15. Items required for a complete application are: (1) official transcripts of grades, (2) GRE scores, (3) three letters of recommendation solicited by the applicant, and (4) an essay describing the applicant's research interests in Marine Science. Since items (1) and (2) should be sent directly to the Graduate Admissions Office in Tampa, sufficient time should be allowed for processing by that office before materials are forwarded to the department for review. Only items (3) and (4) are sent directly to the Marine Science Department. Applications that are not complete by the review dates will be reviewed, but may be updated to the next semester (fall or spring only) at the student's request.

### **Requirements for the M.S. Degree**

In addition to general University requirements, students must complete a minimum of 32 credits, including OCC 5050, OCG 5050, OCP 5051, and OCB 5050. A grade of "B" or better is required in each of these core courses. The student may emphasize Biological, Chemical, Geological, or Physical Oceanography through his/her thesis research and course work. A thesis is required, but a foreign language is not.

### **Requirements for the Ph.D. Degree**

Students with exceptional qualifications may be accepted to work directly toward the Ph.D. without first earning the M.S. degree. However, in most cases, the master's degree will be a prerequisite. The latter may have been earned in Marine Science or one of the related areas, i.e., Biology, Chemistry, Geology, Mathematics, or Physics. In addition to general University requirements, USF Marine Science doctoral program requirements are as follows:

1. OCC 5050, OCG 5050, OCP 5051 and OCB 5050; a grade of "B" or better is required in each of these core courses.
2. The "Tools of Research" requirement consists of two foreign languages, or one foreign language and facility in computer techniques. The department will administer proficiency examinations.
3. The qualifying examination will consist of a written and an oral exam. Students receiving a passing vote from at least four committee members will be admitted to candidacy.

Any member of the graduate faculty at USF may serve on a doctoral committee and each committee will consist of at least five faculty members. One member of the doctoral committee shall be from a science department outside Marine Science.

## **Mathematics (MTH)**

The Department of Mathematics offers a diversity of courses designed not only to enable the student to pursue a professional career in mathematics itself, but also to enhance his competence in the fields of engineering, the physical sciences, the life sciences, and the social sciences. The department offers programs leading to the M.A. and Ph.D. degrees.

The department has a flexible Ph.D. program designed to encourage students to take an active role in shaping their own curricula. This flexibility is coupled with a desire to promote interdisciplinary research. In cooperation with the Department of Physics, and the Colleges of Engineering and Medicine, the department offers special Ph.D. programs in the applications of mathematics. While programs in the more traditional areas of pure mathematics are offered, the department is committed to emphasizing applied mathematics at both the graduate and undergraduate levels. Students and faculty have access to the

University's computers, an IBM 3033 and 3081, and to the college Harris mini computers.

The Department of Mathematics consists of 31 full-time faculty members, whose areas of interest include algebra, applied mathematics, applied statistics, approximation theory, celestial mechanics, complex analysis, functional analysis, graph theory, harmonic analysis on Lie groups, logic, mathematical physics, nonlinear functional analysis, number theory, ordinary differential equations, partial differential equations, probability theory, real analysis, statistics, theoretical computer science, and topology.

**Requirements for the M.A. Degree**

The course of study is flexible, and interdisciplinary work is encouraged. Some of the areas of specialization are: Algebra, Analysis, Applied Mathematics, Computer Science, Statistics and Topology. Each candidate for the M.A. degree is required to pass one of the four written examinations listed below:

- 1. **Algebra**  

MAS 5107	MAS 5311	MAS 5312
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- 2. **Topology**  

MTG 5316	MTG 5317	
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- 3. **Real Analysis**  

MAA 5306	MAA 5307	
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- 4. **Mathematical Statistics**  

STA 5446	STA 5326	
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Each examination will cover the prescribed contents of the courses listed above.

For the Master's Degree, each student must pass appropriate courses or an examination in one of three languages: French, German, or Russian, or fulfill a computer science language requirement.

A thesis is optional. The thesis program requires a minimum of 30 credits of course work of which the thesis carries 2 to 6 credits. The non-thesis program requires 30 credits of course work.

**Requirements for the Ph.D. Degree**

In addition to the general University requirements for the Ph.D. degree, the Mathematics Department requires the following:

1. **Qualifying Examinations**

Each doctoral student must pass four of the ten qualifying examinations listed below. The examinations are classified into six categories. The four examinations selected by the student must represent at least three of the six categories listed, and cannot include both Applied Mathematics and Differential Equations.

- 1. Algebra ..... (MAS 5107, MAS 5311, MAS 5312)
- 2. Topology ..... (MTG 5316, MTG 5317)
- 3. Real Analysis ..... (MAA 5306, MAA 5307)
- Complex Analysis ..... (MAA 5405, MAA 5406)
- 4. Probability ..... (STA 5446, STA 5206)
- Mathematical Statistics ..... (STA 5326, STA 6208)
- Computational Statistics ..... (STA 5166, STA 6167)
- 5. Differential Equations ..... (MAP 5316, MAP 5317)
- Applied Mathematics ..... (MAP 5407, MAP 5345)
- 6. Theoretical Computer Science . . . . (any two of MAD 5101 [LISP],  
    ..... MAD 6510, MAT 6616, or MAD 6617)

## 2. Foreign Language Requirement

The language requirement is the same as that described for the Master's degree, except that two languages are required. The computer science option may be substituted for one language.

## 3. Course Requirements

The student's program of study must meet the course requirements for the M.A. degree. In addition, the student must pass one semester of course work in five of the six categories listed above. The course can be on of the courses listed or any other course in the same general area, if the substitution is approved by a majority of the department graduate committee. Other course requirements will be determined by the student's supervisory committee.

## 4. Progress Evaluation

Before the end of the second year after admission to candidacy, the candidate shall give an oral presentation to his/her supervisory committee members of the problem(s) under investigation. This presentation may also include a discussion of partial results. The dissertation advisor shall submit to the chairperson of the department a written report of the presentation. Yearly after that, the dissertation adviser shall submit a progress update to the chairperson of the department after consultation with other members of the student's supervisory committee.

5. For specific program requirements, the student should consult the chairperson of the Department of Mathematics.
6. After the research is completed and before defense, the candidate shall offer a departmental colloquium.
7. The student must submit a dissertation to be approved by the supervisory committee.

Special accommodations may be made for students with interest in interdisciplinary areas.

## **Physics (PHY/PHS)**

The Department of Physics offers programs leading to a Master of Science degree and a Doctor of Philosophy degree (offered in conjunction with the the Engineering Sciences Department). Both thesis and non-thesis programs are available.

Qualified graduate students with appropriate backgrounds may obtain a Ph.D. in Applied Mathematics or Engineering Science, under an interdisciplinary arrangement between the Department of Mathematics and the College of Engineering. Students should consult with the Physics Graduate Adviser for details.

Thesis research areas include solid state physics, semiconductor physics, applied physics, atomic-molecular physics, quantum electronics and laser physics, theoretical physics, and medical applications of physics. Supporting facilities include computers, from Departmental PCs to the University's main-frame, as well as machine, electronics, and glass-blowing shops.

### **Requirements for the M.S. Degree**

When a student is admitted to the graduate program in Physics, the student will consult with the Physics Graduate Adviser, who will be the student's course adviser and also will keep a close check on the progress of the student's work. After a decision has been made concerning the student's academic goals, the duties of the graduate adviser will be assumed by a 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.

The student desiring the M.S. degree with a thesis is required to take a minimum of 30 credits, no more than 6 of which may be for PHY 6911, PHY 6935 and PHY 6971. Of these 30 credits, 16 must be in Physics courses numbered 6000 or above.

The student desiring the M.S. degree without a thesis is required to take a minimum of 30 credits, no more than two of which may be for PHY 6911 and PHY 6935. Of these 30 credits, 16 must be in Physics courses numbered 6000 or above.

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## COLLEGE OF NURSING

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The College of Nursing is committed to the improvement of nursing and health care services through its educational programs, community service, and related research activities.

The College of Nursing limits enrollment on the basis of availability of sufficient qualified faculty, laboratory and classroom facilities, and clinical resources for nursing practice experience for students. Florida residents are given priority. Applications from all qualified applicants are accepted without regard to age, sex, cultural, racial, religious, or ethnic background.

### Graduate Degree Programs

The College of Nursing offers one graduate program leading to the Master's degree: Master of Science with a major in Nursing. This program is accredited by the National League for Nursing.

#### Master of Science with Major in Nursing

The College of Nursing master's degree program offers six areas of clinical concentration: Adult Health, Oncology, Gerontological, Psychiatric-Mental Health, Community Health, and Family Health Nursing. All clinical concentrations prepare for leadership in advanced nursing practice in primary and/or acute care or in nursing education. A functional minor to prepare teachers also is available. The curriculum is designed to meet the needs of full-time and part-time students. Student options are based on individual background and needs.

The University requirements for graduate work at the Master's level apply. Prospective students must meet the following requirements in addition to University requirements.

1. A baccalaureate degree in nursing from an NLN accredited program. Nurses with baccalaureate or graduate degrees in another discipline are accepted on the basis of individual evaluation of previous educational preparation.
2. Current licensure as a registered nurse in the State of Florida.
3. A minimum of one year's experience in clinical nursing practice.
4. Three letters of reference, indicating potential for graduate study, from professional nurses who can attest to the applicant's ability and professional competence.
5. A course in elementary statistics, including introduction to probability and testing hypotheses (comparable to USF course STA 3122 in Social and Behavioral Science).
6. Ability to demonstrate competencies in physical assessment skills comparable to those required in NUR 3066C (a challenge exam is available).
7. Record of physical examination prior to enrollment.
8. Current professional liability coverage. Admission to the program will be dependent on availability of adequate facilities and faculty in addition to the above stated criteria. Preference is given to Florida residents.

#### Application Process

Application includes the following steps:

1. Complete and submit application forms to the Office of Admission.
2. Provide transcripts of all previous college work.
3. Provide results of scores on the Graduate Record Examination.
4. Attend a general information session at the College of Nursing.
5. Complete a personal interview with designated College of Nursing faculty.
6. Submit letters of reference as indicated under Requirements for Admission.

A new class is admitted in Semesters I and II of each year. Admission to the program is competitive and is based on the admission criteria and on availability of adequate facilities and faculty. Applicants seeking admission for Semester I must have all admission materials on file with the Office of Admissions no later than February 1 of that year. For those seeking admission in Semester II, admission materials must be on file with the Office of Admissions no later than October 1 of that year.

### Requirements for M.S. Degree

Course Work and thesis minimum of 36 required semester hours (S.H.)

1. **Core requirements . . . . . 9 hours**  
 NGR 6121 Theory Development in Nursing . . . . . (3)  
 NGR 6705 Conceptual Basis for Specialized Nursing Practice . . . . . (3)  
 NGR 6800 Nursing Research . . . . . (3)
2. **Clinical concentration requirements minimum . . . . . 15 S.H.**  
**Adult Health Nursing . . . . . 15 hours**  
 NGR 6140 Advanced Physiologic Assessment . . . . . (4)  
 NGR 6210 Adult Wellness — Illness I . . . . . (2)  
 NGR 6211 Adult Wellness — Illness II . . . . . (3)  
 NGR 6210L Adult Wellness — Illness Pract I . . . . . (2-4)  
 NGR 6211L Adult Wellness — Illness Pract II . . . . . (2-4)  
 Electives  
**Family Health Nursing . . . . . minimum of 15 hours**  
 NGR 6610 Conceptual Basis of Family Health Nursing . . . . . (3)  
 NGR 6609 Management of Practice in Family Health Nursing . . . . . (2)  
 NGR 6617C Practicum in Family Centered Nursing . . . . . (6)  
 NGR 6630C Family Centered Nursing Care . . . . . (4)  
 or  
 NGR 6631C Family Centered Nursing Care of Children . . . . . (4)  
**Gerontological Nursing minimum of . . . . . 15 hours**  
 NGR 6250 Gerontological Nursing I . . . . . (3)  
 NGR 6251 Gerontological Nursing II . . . . . (3)  
 NGR 6260 Gerontological Nursing III . . . . . (3)  
 NGR 6253 Gerontological Nursing Pract I . . . . . (3)  
 NGR 6254 Gerontological Nursing Pract II . . . . . (3)  
 Electives  
**Oncology Nursing minimum of . . . . . 15 hours**  
 NGR 6142 Pathobiology of Neoplasia . . . . . (2)  
 NGR 6096 Oncology Nursing Concepts . . . . . (3)  
 NGR 6539 Psychosocial Aspects of Cancer Nursing . . . . . (3)  
 NGR 6948 Oncology Nursing Practicum I . . . . . (3)  
 NGR 6949 Oncology Nursing Practicum II . . . . . (3)  
 Electives  
**Psychiatric — Mental Health Nursing minimum . . . . . 18 S.H.**  
 NGR 6505 Theoretical Found in PMHN . . . . . (3)  
 NGR 6506 Conceptual Bases for PMHN . . . . . (3)

- NGR 6507 Therapies PMHN ..... (2)  
 NGR 6508 Group Therapy ..... (2)  
 NGR 6509 Family Therapy ..... (2)  
 NGR 6566 Practicum I Individual Therapy ..... (2-4)  
 NGR 6567 Practicum II Group Therapy in  
 Psychiatric/Mental Health Nursing ..... (2)  
 NGR 6568 Practicum III Family Therapy in  
 Psychiatric/Mental Health Nursing ..... (2)  
 Electives  
**Community Health Nursing minimum of .....15 hours**  
 NGR 6121 Theory Development in Nursing ..... (3)  
 NGR 6738 Contemporary Community Health  
 Nursing: Issues and Trends ..... (2)  
 NGR 6602C Strategies for Community Health Nursing ..... (4)  
 NGR 6603L Methods in Community Health Nursing ..... (3-6)  
**3. Support Courses or Electives ..... 6-9 semester hours**  
 (Including courses from other disciplines and/or courses listed  
 below).  
 NGR 5935 Ethics in Health Care ..... (3)  
 NGR 5949C Undergraduate/Graduate Transition Course in Nursing ..... (4)  
 NGR 6030C Adult Health Assessment ..... (3)  
 NGR 6120 Management in Nursing Practice ..... (2)  
 HUN 6124 Clinical and Community Nutrition ..... (3)  
 NGR 6141 Advanced Pathophysiology ..... (2)  
 NGR 6155 Factors Influencing Health Care ..... (3)  
 NGR 6190 Pharmacology for Advanced  
 Nurse Clinicians ..... (3)  
 NGR 6252 Issues in Gerontological Nursing ..... (2)  
 NGR 6255 Physiological and Psychological  
 Aspects of Gerontological Nursing ..... (2)  
 NGR 6280 Social and Economic Factors in  
 Gerontological Nursing ..... (3)  
 NGR 6432 Measurement in Nursing Education  
 and Research ..... (3)  
 NGR 6511 Geropsychiatric Nursing ..... (3)  
 NGR 6703 Advanced Role Development ..... (3)  
 NGR 6710 Curriculum and Instruction in  
 Nursing Education ..... (2)  
 NGR 6712 Nursing Education in Institutions  
 of Higher Education ..... (2)  
 NGR 6790 Consultation/Liaison in  
 Psychiatric/Mental Health Nursing ..... (3)  
 NGR 6905 Independent Study ..... (1-6)  
 NGR 6931 Selected Topics ..... (1-4)  
 NGR 6947 Practicum in Nursing Education ..... (4)  
**4. Thesis or alternative courses ..... (6)**

### Other Academic Requirements

1. A minimum cumulative grade point average "B" (3.0).
2. A minimum grade of "C" (2.0) in each course accepted toward the graduate degree.

3. A minimum grade of "B" (3.0) in all undergraduate courses (1000-4000 level) taken after matriculation as electives or to make up deficits. Grades for these courses are not computed in the overall academic average.
4. All incomplete grades must be removed from the student's record before graduation.
5. Degree requirements must be completed within seven (7) years of matriculation, the date on which a student formally enrolls for study after having been accepted. Candidates who are unable to meet this requirement may petition to have their credentials and program re-evaluated. Such candidates must expect to meet any requirements added after their original matriculation. The College reserves the right to alter aspects of the Program on the basis of on-going curriculum evaluation by faculty and students.
6. Application for the degree must be filed with the University Registrar on the appropriate form signed by appropriate College of Nursing personnel. The degree candidate is responsible for obtaining and submitting the degree application form by the date specified by the University.

**Special Requirements.** Tuition and fees for students enrolled in nursing are the same as for other students at the University of South Florida. However, there are substantial expenses not covered by the basic tuition and fees.

Textbooks in nursing are somewhat more expensive than are those in general education, and it is estimated these costs will range from \$150 - \$200 per semester.

Graduate students must provide or have access to physical assessment equipment, including ophthalmoscope, stethoscope, etc.

Medical care and hospitalization insurance is required.

Graduate students are expected to carry professional liability insurance.

An annual physical examination is required. The first one must be done prior to enrollment in the nursing major.

Transportation to and from community health agencies for clinical nursing experience is the responsibility of the student. Since public transportation in the Tampa area is not usually convenient to the hours of clinical schedules, students must have access to some other means of transportation, or from car pools. Also, from time to time, trips to an institution or agency at some distance from the campus will be required.

**Financial Aid.** Policies and procedures pertaining to financial aid are the same as for other graduate students. For general information, write to the Office of Financial Aid, Student Affairs, University of South Florida, Tampa, Florida 33620. Information specific to funds available through the College of Nursing may be obtained through the Dean's Office (974-2191).

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## COLLEGE OF PUBLIC HEALTH

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The College of Public Health offers the Master of Public Health degree and the Master of Science in Public Health. The Ph.D. program in Public Health was implemented in the fall semester of 1987. Other USF graduate students also are eligible to enroll in Public Health courses. Selected College of Public Health courses are also offered on the USF Sarasota Campus and in the Orlando and Tallahassee areas.

### **Objectives of the Public Health Master's Degree Programs**

**General Objectives.** Every effort is made in the College of Public Health to link coursework, field experience, and project thesis requirements with the numerous public health problems and needs facing the state, the nation, and other countries. These problems and needs relate directly to population dynamics, patterns of disease in population groups, the availability of knowledge of health promotion and disease prevention, and to the design of policies for, and the management of, health services delivery systems for all citizens. Course content is directly related to addressing and meeting public health needs.

**Student Learning Objectives.** The College of Public Health provides academic programs through which each student working toward a Master of Public Health degree or Master of Science in Public Health degree will develop an understanding of the areas of knowledge basic to public health. The student will learn:

- Biological, physical, and chemical factors that affect the health of a community.
- Concepts and methods of relevant social and behavioral sciences.
- Distribution of diseases or conditions in populations and factors that influence this distribution.
- Collection, storage, retrieval, analysis, and interpretation of health data.
- Planning, policy analysis, and administration of health programs.

The USF College of Public Health provides opportunities for professional degree students to achieve these learning objectives through coursework in:

- Environmental and Occupational Health Sciences
- Social and Behavioral Sciences
- Epidemiology
- Biostatistics
- Health Policy and Management
- Maternal and Child Health
- International Health
- Information Systems
- Pathobiology
- Tropical Diseases
- Laboratory Sciences

In addition, field experience and other approaches to application of knowledge and skills are offered to all students, and are required for those students without previous substantial work experience in public health. Students wishing to enter the Public Health Program who do not have adequate courses or training in the health and human biological sciences are urged to take Pathobiology I or equivalent and PHC 4100.

## Graduate Degree Programs

### Master's Degree Programs

At the present time, the following areas of concentration are offered in the Master of Public Health (MPH) and Master of Science in Public Health (MSPH) programs:

1. Health Policy and Management
2. Epidemiology and Biostatistics
3. Public and Community Health Education
4. Environmental Health
5. Safety Management and Industrial Hygiene
6. Maternal and Child Health
7. Joint Master's Program in Maternal and Child Health (MPH) and Social Work (MSW)

#### Requirements for Admission

Applicants to either the Master of Public Health program or the Master of Science in Public Health program will be required to satisfy general University requirements and special requirements for the Public Health master's degree programs. In addition, in order to be considered for admission to the College of Public Health, a first-time graduate student or a student transferring from a graduate program at another university must have at least a bachelor's degree or equivalent from a regionally accredited university and must meet at least one of the following criteria:

1. Shall have earned a "B" (3.0) average or better in all work attempted while registered as an upper division student working for a baccalaureate degree, and
2. Shall have a total quantitative-verbal GRE General Test score of 900 or higher, or an equivalent score on an equivalent measure approved by the Board of Regents, or
3. Shall have earned a prior graduate degree from a regionally accredited institution.

The M.S.P.H. requires at least a 3.0 GPA as an upper division undergraduate and a score of 2000 or better on the quantitative-verbal portions of the GRE General Test. In addition, an applicant must be approved by the College of Public Health Admissions Committee.

#### Requirements for Graduation —Masters Programs

Courses for both the Master of Public Health Program and the Master of Science in Public Health Program are divided into these principal categories:

- Core courses required for all students
- Courses required for each public health concentration/specialty area
- Special project or thesis
- Elective courses (MPH only)

### Master of Public Health (MPH)

Degree Requirements and Semester Credit Hours:

<b>Public Health core courses (five courses)</b> .....	<b>15</b>
Public Health Seminar .....	1
<b>Required courses for concentration</b> .....	<b>12-15</b>
(courses vary by concentration area)	

<b>Elective courses pertinent to the concentration</b> .....	<b>3-6</b>
<b>Master's project</b> .....	<b>3</b>
<b>Final comprehensive examination (covering all course work)</b>	

Total credit hours to meet Master of Public Health degree requirements:

1. For students with requisite prior public health experience/education ..... 37
2. New entrants to the field of public health must add a required supervised field experience of 1-12 hours. .... 38-49

## **Master of Science in Public Health (MSPH)**

Degree Requirements and Semester Credit Hours

<b>Public health core courses (the same five courses as for the MPH degree)</b> .....	<b>15</b>
Public Health Seminar .....	1
Required courses for specialization (courses vary by concentration area) .....	18
<b>Master's thesis</b> .....	<b>6</b>
Final comprehensive examination (covering all course work)	
<b>Total credit hours to meet Master of Science in Public Health degree requirements</b> .....	<b>40</b>

Since the Master of Science in Public Health degree involves study that is more research-oriented than that for the Master of Public Health degree, more extensive credit hours and course requirements are established for the Master of Science in Public Health degree.

## **Ph.D. Program in Public Health**

### **Requirements for Admission**

Students applying for the Ph.D. in Public Health must submit their completed applications to the Graduate Admissions Office, where the application will be assembled, and forwarded to the Academic Dean in the College of Public Health. Applicants to the doctoral program 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 basis for admission.

Applicants must meet the following minimum criteria for consideration:

A score of 1100 or better on the GRE and a grade point average of 3.0 or better is needed to be considered. Exceptional students with a bachelor's degree could be considered.

In order to be considered for admission to the Ph.D. program in public health, applicants must be prepared to register as full-time students, at least for their first full year of studies.

In order to be considered, each applicant must submit evidence of written/analytic skills to the College of Public Health. This shall take two forms:

1. A graduate level term paper, thesis, research paper of which the student was sole author, or a publication on which the student was first author; and
2. A detailed personal statement which describes why the applicant wishes to obtain a Ph.D. degree in public health. This statement must be less than five pages in length.

Applicants seeking consideration must possess the MPH, MSPH or equivalent. Applicants who hold other graduate degrees may be considered



for admission to the doctoral program, but they must complete all of the core course requirements for the MPH as prerequisites for all doctoral coursework.

Each applicant must submit at least three letters of support — one of these must be from a faculty member, qualified to supervise dissertation work in his/her own department. This faculty member must endorse the student's application, and must agree to serve as a faculty advisor, should the student be accepted.

**Requirements for Graduation — Ph.D. Program**

The Graduate School requires a minimum of 90 hours beyond a bachelor's degree. Entering students lacking a master's degree will be required to take the 5 core courses and 4 concentration courses (total 27 hours) required for all MPH students. Students who have a prior masters degree will be required to take those public health courses which have not been included in previous master's study. Doctoral students will be required to take a more advanced biostatistics course than the biostatistics core courses (PHC 6050). An additional 13 hours of doctoral level courses in the student's area of interest will be also required. The remaining 47 hours will consist of additional elective course work, research —other than disseration, and dissertation hours according to the advice of the student's committee. Doctoral level courses offered by other colleges will be used when appropriate. However, new courses will be generated by College of Public Health faculty, especially in the areas of administration and management.

**Semester Credit Hours**

Public Health core courses . . . . .	15
(five courses) or equivalent.	
Advanced biostatistics course . . . . .	3
Required courses for concentration area (minimum) or equivalent . .	12
Required doctoral level courses (minimum) . . . . .	3
Elective courses, directed research, dissertation credits. Distribution to be decided by advisory/dissertation committees.	
<b>Total . . . . .</b>	<b>90</b>

**Tools of Research.** Before a student is eligible to take the comprehensive qualifying examination, he/she must normally have completed two of those "tools of research" requirements designated by the Department/College for the particular degree program in which the student is working (i.e., two foreign languages; one foreign language and statistics; computer language and statistics). The language requirement can be fulfilled as recommended by the Graduate School. If courses are used to fulfill the "tools of research" requirement, graduate credit counting toward the degree will not be given for those courses. The choice of the particular "tools of research" that the student will undertake will be the prerogative of the student's Advisory Committee.

**Comprehensive Qualifying Exam.** Once the necessary course work is completed, the student is eligible to take the comprehensive qualifying examination over the subject matter of the major and related fields. Additionally, it should be clear that doctoral students are required to take the qualifying examination regardless of whether they have taken the comprehensive examination for the master's degree. The examination will consist of written and oral components, with the actual format to be determined by the student's Advisory Committee. Should a student fail to pass the comprehensive qualifying examination, that student should be allowed one retake of the examination on that portion of the examination required by the Advisory Committee. Failure to satisfy the Advisory Committee on the second attempt will result in the student

being dropped from the program. If the degree is not conferred within five calendar years of the comprehensive qualifying examination, the examination must be taken again.

**Final Oral Examination.** When the Dissertation Committee has carefully read the final drafts of the dissertation and finds it suitable for presentation, the Committee will complete a form requesting the scheduling and announcing of the final oral examination. The request form, along with a draft copy of the dissertation, shall be submitted via the appropriate Department Chairperson to the College Dean and the Dean of the Graduate School for approval. The announcement must be received in the Graduate School office at least two weeks prior to the scheduled oral examination. The final oral examination must be held at least three weeks before the end of the semester in which the student is to be awarded the degree.

The Chairperson of the dissertation defense examination shall be appointed by the Dean of the College and shall not be a member of the student's Dissertation Committee or the department or program in which the degree is sought. A rigorous oral examination of the doctoral candidate covering the entire dissertation will be administered by the student's Dissertation Committee before a public defense. If a student fails his/her public oral defense, the Examining Committee will report in writing the reasons for such failure.

**Admission to Candidacy.** Students may not enroll for dissertation credit until they have been admitted to candidacy. Graduate students are not eligible for candidacy until the Advisory Committee certifies that the student has successfully completed the comprehensive qualifying written and oral examinations, and in the opinion of the Committee, has demonstrated the qualifications necessary to successfully complete requirements for the degree. Following the completion of the Admission to Candidacy form, the student may enroll in Dissertation: Doctoral (7980). The Admission to Candidacy form shall be approved by the Dean of the College and forwarded to the Dean of the Graduate School for final approval.

**Grade Levels.** To remain in good standing, a graduate student must maintain a cumulative grade point average of at least 3.0. A graduate student whose cumulative grade point average falls below 3.0 will be placed on probation and must meet the college probation requirements to be reinstated in good standing. The student is responsible for meeting all requirements of their degree program.

**Teaching Proficiency.** Doctoral degrees are both research and teaching degrees. Students, therefore, will be required to demonstrate proficiency in the educational process involving items such as preparation and presentation of courses, lectures, seminars, and participation in the examination process.

**Student Committees.** An Advisory Committee shall be appointed by the Chairperson of the appropriate department or program for each student upon admission and prior to the first registration at the University of South Florida. This Committee shall advise the student on indicated subject matter deficiencies, approve the student's course of study, provide aid in choice of a major and an area of research, and supervise the written comprehensive qualifying examination. The Advisory Committee should consist of three members representing three major public health disciplines. Upon successful completion of the qualifying examination, a dissertation Committee shall be appointed for the student by the Dean of the Graduate School upon recommendation of the Chairperson of the department or program in which the degree is sought. The Dissertation Committee will approve the plan for research, read and approve the dissertation, and conduct the dissertation defense examination. The Dissertation Committee shall consist of at least five members from USF, at least

one of whom should be from outside of the College of Public Health and at least three of whom should come from the College of Public Health. At least three members of the Dissertation Committee must come from the academic area in which the major work for the degree will be done.

**Student Support.** Recognizing the different situations and needs of students in laboratory versus non-laboratory research settings, students should be fully informed by faculty of possible current and future funding problems. A list of graduate students and their sources of funding will be freely available and will be circulated to the College of Public Health faculty annually. Any questions or concerns would be appropriate for discussion at general faculty meetings.

**Dissertation.** Students in the College of Public Health must take an appropriate number of credits for dissertation: the exact number is determined by the department and/or individual requirements. At least two weeks before the end of the semester in which the candidate is to receive the degree, a candidate must submit to the Dean of the Graduate School a completed dissertation that has been signed by his Dissertation Committee. The dissertation must conform to the guidelines in the Handbook for Graduate Theses and Dissertations available in the University Bookstore. An abstract is also required. The Graduate School will not accept a dissertation after the first day of the semester unless the candidate is enrolled in the proper dissertation by the first day of the semester will not be required to register for two hours of dissertation; however, the student must have been enrolled the preceding semester for at least two hours of dissertation. Prior to College certification for the degree, the dissertation must be approved by the Dean of the Graduate School. The two copies of the dissertation will then be deposited in the University Library. Each dissertation will be microfilmed, with the student being assessed a fee for this service.

**Residency.** The minimum requirement shall be three academic years of work beyond the bachelor's degree. At least one academic year of residence must be on the Tampa campus of the University of South Florida. An academic year's residency shall be defined as a minimum of 8 hours of graduate work per term, or the Chairperson of the student's Supervisory Committee may certify that the student be considered as in full-time residence.

**Time Limitations.** The University of South Florida has definite time limits covering the following items:

1. Test scores for the Graduate Record Examination (GRE) must have been taken within five years preceding the application.
2. Acceptance to graduate standing is granted for the semester and particular program specified in the official acceptance notification. Students must validate their acceptances by enrolling that semester or reapply. In the event that students wish to change the date of entrance, they must notify the Office of Admissions of intent to do so.
3. Graduate students who have not been in the attendance during either of the two semesters immediately preceding the semester for which enrollment is desired may file a Former Student Returning Application through the Office of the Registrar. Former students returning must apply by the deadline date listed in the catalog. Any graduate degree seeking student who has not been in attendance at the University for more than two consecutive years must reapply through the Office of Admissions by the appropriate deadline.
4. Any graduate work counted toward the fulfillment of the requirement for the Ph.D. degree after admission to candidacy must be done within a seven-calendar-year period.

5. Doctoral students who receive financial support from the University, other than fellowship recipients, will hold their appointments for no more than six semesters beyond receipt of a master's degree while working toward the Ph.D.

## **Department of Community and Family Health**

### **Public and Community Health Education**

This concentration area principally serves an increasing public need for professionals trained in social health issues and in the personal health lifestyles of American society. It is the primary function of professional public health educators to help people adopt self-care practices and health lifestyles, and not only to encourage them to utilize public health services but to show them how to actively participate in the design and implementation of these services which so dramatically affect their health.

The curriculum of the Public/Community Health Education program is designed to facilitate students in acquiring relevant theoretical knowledge and practice in diverse fields of endeavor, among them, the social and behavioral sciences, communication dynamics, educational theory, and community organization.

Students entering with a bachelors degree will complete the following in addition to the core:

Concentration Area .....	12 semester hours
Electives .....	6 semester hours
Special Project .....	3 semester hours
Field Experience .....	1-12 semester hours
Comprehensive Examination	

### **Accelerated Entry to MPH Public and Community Health Education Concentration**

Beginning in the fall of 1987, eligible undergraduate students will be admitted to the College of Public Health to pursue studies in the Public and Community Health Education concentration. To be eligible for admission, applicants must have completed 90 semester hours successfully, attained a grade point average of at least 3.0 on a four-point scale, and scored a minimum of 900 (combined verbal/quantitative) on the Graduate Record Examination (GRE). This special MPH program, a revision of the undergraduate program formerly offered through the USF College of Education, allows students to earn an MPH without first possessing a baccalaureate. To be considered for the MPH degree, students complete a minimum of 60 semester hours following admission to the Public and Community Health Education concentration, perform field work, complete a special research project, and pass a comprehensive written examination. Interested students are encouraged to explore this program option during the semester they expect to complete 60 semester hours by contacting an advisor in the College of Public Health.

Applicants must also show evidence of successful completion of the following prerequisite coursework prior to admission:

- Personal health/health science
- Basic first aid
- College mathematics (through algebra with grade of "C" or better)
- Speech communication
- Technical or expository writing
- College general chemistry with laboratory
- Introductory biological science with laboratory
- Advanced biological science

- Introductory psychology
- General anthropology
- Medical anthropology
- Introductory sociology
- Educational theory and method
- Education psychology

In addition to meeting the University and college admission requirements and completing the prerequisite coursework, students must complete the following:

Required Program Introductory Courses or Equivalent Courses	14 semester hours
Required Public Health Core Courses (same as for MPH)	16 semester hours
Required Courses in Addition to the Core (same as for MPH in Public and Community Health Education)	12 semester hours
Required Content Electives in Public	12 semester hours

**Health minimum:**

Required Process Electives	4 semester hours minimum
Special Project	3 semester hours
Required Field Experience (Credits will vary depending on student background)	1-12 semester hours
Comprehensive Examination	

### **Maternal and Child Health**

The Maternal and Child Health concentration area responds to the needs of Florida's public health agencies by helping to upgrade the skills of professionals already serving in this field so that they can become more effective practitioners. The concentration area also seeks to create opportunities to encourage students who wish to work in the field. The course of study designed for both these groups —established professionals and newcomers to the area— emphasizes development of programs in maternal and child health, administration and direction of services, evaluation of existing programs and of the need for such programs in specific locations, and collaboration among public health agencies in addressing maternal and child health needs. All of these educational goals highlight the practical nature of the Maternal and Child Health curriculum and elucidate its primary mission —to prepare professional practitioners in this crucial area of public health service.

In addition to the core, students are expected to complete the following:

Maternal and Child Health	12 semester hours
Concentration Area	
Electives	6 semester hours
Special Project	3 semester hours
Field Experience	1-12 semester hours
Comprehensive Examination	

### **MPH in Maternal and Child Health/Masters in Social Work**

Social work is an essential component of maternal and child health and handicapped children's services. The major focus of care in maternal and child health is the promotion of the physical, social, and emotional well-being of women and their children and families. Services in this field are not only related to women's health and to the maternity cycle-family planning, genetic counseling, prenatal care, and intrapartum and postpartum care, but well-child supervision, case finding, diagnosis, handicapping conditions, school health,

and health services for adolescents. The combination of degrees in public health and in social work will ideally equip graduate students to prepare for careers in both social work and health settings with the ability to fill clinical, administrative, and evaluative roles which positively affect the lives of women and children in a changing society.

Students with a BA degree in Social Work and who have been admitted to the MSW program are eligible to participate in the joint program. Degree requirements must be met for the programs in Maternal and Child Health and Masters in Social Work. Field experiences and special projects are a joint effort of the departments and faculty involved.

## **Department of Epidemiology and Biostatistics**

### **Epidemiology and Biostatistics**

Epidemiology is the study of diseases as they affect populations; it involves the factors affecting disease rates and the distribution of disease in populations. As a fundamental science of preventive medicine and public health, epidemiologic research has traditionally focused on questions of disease causation through population-based studies for both infectious and chronic diseases. The range of topics now addressed by epidemiologic methods also include health promotion, disease prevention, and assessing the quality of health care. The content, methods and scientific inferences in the major epidemiologic issues of today are examined. Sources of public health statistics are utilized and statistical methods appropriate in public health research and program evaluation are studied.

In addition to the core, students are expected to fulfill the following requirements:

Concentration Area .....	12 semester hours
Electives .....	6 semester hours
Project .....	3 semester hours
Field Experience .....	1-12 semester hours
Comprehensive Examination	

## **Department of Environmental and Occupational Health**

### **Environmental Health**

The Environmental Health concentration area in the College of Public Health performs a vital function in supplying the state of Florida with professionals capable of addressing its myriad of existing and burgeoning problems in environmental health.

To reach the educational goal which will enable graduates to successfully develop, administer, and evaluate environmental health programs, MPH students are trained not only to recognize environmental hazards and their effect on health but to assess their social and economic impacts. Students also must be made cognizant of both new and existing regulations which affect the field at local, state, and national levels. They further must become acquainted with enforcement procedures and processes in environmental law and policy development.

Students seeking an MSPH specialize in any of the environmental health areas with an intense research and technical program of study. This degree program focuses on preparing students to fill leadership roles in solving or containing environmental and industrial health problems. Individualized courses of

study are determined for students with the cooperation of an advisory committee. A thesis is required in addition to the Comprehensive Examination.

In addition to the core, MPH students are expected to complete the following:

- Concentration Area ..... 12 semester hours
- Electives ..... 6 semester hours
- Special Project ..... 3 semester hours
- Field Experience ..... 1-12 semester hours  
(if needed)

Comprehensive Examination

MSPH students complete the core, 18 hours in selected areas, a thesis and Comprehensive Examination.

## **Industrial Hygiene and Safety Management**

The College's Industrial Hygiene and Safety Management concentration areas play a critical role in efforts to confront the state's serious industrial hazard problems. Only a sprinkling of professionals are now actively involved in this field in Florida, and no other industrial hygiene and safety management programs exist in the state.

The College of Public Health prepares professionals for employment in this area by offering an independent course of study for each of these concerns, one for industrial hygiene and another for safety management. Both programs are founded on a commitment to produce professionals who can help identify and reduce hazards in the workplace, as well as assist in decreasing workers' compensation costs for companies and in establishing more cost-effective policies and procedures. Study is in the areas of industrial health hazards, safety management, legal and regulatory considerations, and program evaluations.

In addition to the core, students are expected to fulfill the following:

- Concentration Area ..... 12-14 semester hours  
(Industrial Hygiene or Safety Management)
- Electives ..... 6 semester hours
- Project ..... 3 semester hours
- Required Field Placement
- Comprehensive Examination

## **Department of Health Policy and Management**

### **Health Policy and Management**

The primary aim of the Health Policy and Management curriculum is to prepare persons for leadership positions in health care delivery. Teaching goals of the health policy and management faculty are specifically designed to produce knowledgeable and well trained cadres of professional public health administrators, policy analysts and planners, and managers of traditional and alternative health care delivery systems for service in the state of Florida. The concentration area draws on the principles and techniques of the policy decision, and managerial sciences to prepare students for these leadership positions. The programs leading to the MPH and MSPH degrees focus on relevant skills and knowledge bases, including management, personnel administration, health care organizations, health economics, medical care finance and accounting, policy analysis, and program planning. To ensure that stu-

dents are exposed to the special health care problems or issues of Florida and that they learn to apply technical knowledge to these problems, they are also expected to complete a practicum or to obtain work experience in community-based health care programs.

In addition to the core, the course of study includes:

- Concentration Area ..... 15 semester hours
- Electives ..... 3 semester hours
- Project ..... 3 semester hours
- Field Experience ..... 1-12 semester hours  
(if needed)





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# COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

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The social and behavioral sciences are concerned primarily with human beings: their history, their individual behavior, their social and political institutions, and their problems. The study of man by broadly conceived methods of science contributes to an understanding of the individual in a social context.

The social and behavioral sciences deal not only with the human, but also with the humane. While the basic disciplines are dedicated to the search for truth about the human condition, the applied social sciences seek to use the knowledge gained to alleviate significant social and personal problems. The setting of the University in the rapidly expanding Tampa Bay metropolitan area provides exceptional opportunities for the development of urban related applied social science activities.

The Human Resources Institute of the College of Social and Behavioral Sciences was established to address critical issues in the human resources sector through a comprehensive program of research. By authorization of the Board of Regents, a Program of Emphasis in Human Services was established at the University of South Florida for the enhancement of selected programs, including several in the College of Social and Behavioral Sciences. Because of its balance of basic and applied programs, the college is uniquely structured to allow students to gain experience and background for future applications in human service fields, in government, in business, and in other fields of endeavor, or to pursue graduate study in several disciplines.

## Graduate Degree Programs

### Master's Degree Programs

Graduate level courses are offered in most of the social and behavioral sciences. The following Master's degrees are offered:

#### Master of Arts:

- Anthropology (ANT)
- Applied Anthropology (APA)
- Criminal Justice (CCJ)
- Geography (GPY)
- Gerontology (GEY)
- History (HTY)
- Political Science (POL)
- Psychology (PSY)
- Rehabilitation Counseling (REF)--5-year program
- Sociology (SOC)

#### Master of Public Administration (M.P.A.):

- Public Administration (PAD)

#### Master of Social Work (M.S.W.):

- Social Work (SOK)

In addition to the Master of Arts degrees offered by the College of Social and Behavioral Sciences, joint degrees are offered with the College of Educa-

tion in Social Science Education, School Psychology, and the Junior College Teacher's Program.

**Master of Science:**

- Audiology (AUD) — Post-Baccalaureate
- Audiology (AUF) — 5-year program
- Aural (Re)Habilitation (ARH) — Post-Baccalaureate
- Aural (Re)Habilitation (ARF) — 5-year program
- Speech-Language Pathology (SPP) — Post-Baccalaureate
- Speech-Language Pathology (SPF) — 5-year program

**Doctor of Philosophy**

The Doctor of Philosophy degree is offered in the following:

- Applied Anthropology (APA)
- Psychology (PSY)

These disciplines focus on both traditional scholarship and the application of knowledge to social problems.

Activities related to graduate programs within the college are located in three adjacent buildings on campus. In addition to the faculty and support staff within the College, a staff of professional technicians develop and maintain the College's diverse laboratory facilities and research equipment.

**Research Facilities**

The College of Social and Behavioral Sciences maintains a large computer laboratory that provided public access to main-frame computing for all faculty and graduate students engaged in research. Currently, the lab contains 32 terminals, a high speed printer (600 lines per minute), and a Spinwriter for printing document quality text. One remote access site is in place and plans are being made for a future remote site. All these devices interface with the mainframe computing facilities of USF's Central Florida Regional Data Center (CFRDC). These facilities include IBM 3081D24 and IBM 3033N16 central processors. CFRDC also offers access to the SUS Computing Network, which links the regional data centers at all the major state universities in Florida. The CFRDC supports various software applications, including TSO and WYLBUR for text editing and file management; SAS, SPSS, SPSSX and LISREL for statistical analysis; SCRIPT for word processing and document preparation. The College's computer lab also provides access to VM/CMS, providing a wide variety of interactive applications for up to 300 concurrent users; among the applications provided through VM/CMS is the SPIRES database management system.

**Anthropology (ANT)**

The M.A. program, initiated in 1974, was the first in the country to focus on career training for the practice of Applied Anthropology. The student pursues major studies in one of three tracks: Applied Urban Anthropology, Applied Medical Anthropology, and Public Archeology (Cultural Resources Management). In addition to core seminars in each of the four major branches of Anthropology required of all students, each track has its own specialty courses. Each student performs a full-time internship for one semester, during which he/she works on a problem mutually defined and negotiated by the student, a faculty adviser, and a professional supervisor from the agency in which the internship is conducted. By 1987, 118 graduates had been specifically trained for nonacademic employment in government and private-sector agencies and organizations. Graduates are employed in administration, program evaluation, planning, and research.

The Ph.D. in Applied Anthropology is the first such program in the country. Its primary goal is to train students for nonacademic employment in such applications as health practice and services delivery; community, regional and international development; urban planning, and design and services delivery. The program also trains those interested in teaching Applied Anthropology. Each student performs a full-time internship for two semesters, during which she/he works as a member of the professional staff of a government or private sector agency or organization engaged in problem solving in this country or elsewhere. The Ph.D. program, while independent, complements the M.A. program. The deadline for receipt of all doctoral application materials for fall admission is March 1; for admission in either spring or summer the deadline is November 1 of the preceding year.

The Center for Applied Anthropology is one of six centers in the Human Resources Institute, College of Social and Behavioral Sciences. The Center is concerned with applying anthropological knowledge, theory, method, and perspectives to problems of contemporary society. Illustrative areas of activity include human service needs assessment, program planning and evaluation, social and environmental impact assessment, and public policy analysis.

### **Requirements for the M.A. in Applied Anthropology**

In addition to general University requirements for graduate work, the following requirements apply:

The student must complete 35 semester hours of graduate course work. All students must complete the four core seminar courses, a methods course, and a selected topics course in one of the three tracks (Medical Anthropology, Urban Anthropology, Public Archaeology). Each student must complete a graduate-level statistics course, for a minimum of 3 semester hours, and two graduate-level elective courses (normally taken outside the department), for a minimum of 5 semester hours, chosen jointly by the student and his/her faculty adviser. The student also must successfully pass a comprehensive examination given in four sections, undertake directed research (internship), and write a thesis. Students in the Public Archaeology track must complete a minimum of 6 credit hours of regional problems course work in the track. Medical Anthropology and Urban Anthropology students must complete a course in Contemporary Applied Anthropology and a Regional Problems Course in the relevant track. The student must maintain a "B" average in all core seminars. Students in the M.A. program in Applied Anthropology who have completed all programmatic requirements, with the exception of the thesis, are required to register for a minimum of 2 credit hours of thesis (ANT 6971) each semester until the thesis is complete.

#### **I. Courses Required of All Students**

##### **A. Core courses**

ANT 6186 (2)	ANT 6588 (2)	ANT 6490 (2)
ANT 6676 (2)		

##### **B. Additional Requirements**

Two graduate-level courses normally taken outside the department; one graduate-level statistics course.

##### **C. ANT 6915 (4), ANT 6971 (2)**

#### **II. Additional requirements for students in the Public Archaeology Track**

ANT 6196 (3)	ANT 6198 (6)	ANT 6197 (3)
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**III. Additional course requirements for students in the Medical Anthropology or Urban Anthropology Track**

A. ANT 6706 (3), ANT 6766 (3)

B. Either:

**MEDICAL ANTHROPOLOGY**

ANT 6463 (3)                      ANT 6469 (3)

or

**URBAN ANTHROPOLOGY**

ANT 6447 (3)                      ANT 6448 (3)

**Requirements for the Ph.D. Degree**

A master's degree in Anthropology or a related discipline is required for admission to the Ph.D. program in Applied Anthropology. All students must meet general University requirements for admission to graduate study.

Typically, a student will meet the tools of research requirements with: a) quantitative/computer skills; and b) a substantive external specialization. The quantitative/computer requirement may be met by satisfactory completion of courses (a minimum of two) determined by the student's supervisory committee; the substantive external specialization by graduate-level courses (a minimum of three) outside the department in an elective area related to Applied Anthropology, to be determined by the student's supervisory committee.

Other minimum requirements include:

1. Eight structured courses within the department, including ANT 7703, 7704, 7760 (two separate offerings; one must be Advanced Quantitative Methods), ANT 7932, 7933, 7934, and 7936.
2. A two-semester full-time internship (ANT 7945) for a minimum of 6 credit hours each semester.
3. An orally defended doctoral dissertation, normally based upon some aspect of the internship. The department requires 6 credit hours of doctoral dissertation (ANT 7980). Students in the Ph.D. program in Applied Anthropology who have completed all degree requirements, with the exception of dissertation research and the resulting dissertation, are required to register for a minimum of 2 credit hours of dissertation (ANT 7980) each semester until the dissertation is completed, defended and accepted.
4. Typically, 60 hours beyond the master's degree.

**Communicology  
(AUD/AUF/ARH/ARF/SPP/SPF)**

The Master of Science degree offered through the Department of Communicology is structured to meet the preparation requirements of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence. In addition to core material, each student may elect to pursue a program of specialization in the areas of Speech-Language Pathology, Audiology, or Aural Rehabilitation.

The Speech-Language Pathology and Audiology programs are accredited by the Educational Standards Board of the American Speech-Language-Hearing Association.

Undergraduate students enroll in a five-year program terminating in the Master of Science degree in Speech-Language Pathology, Clinical Audiology or Aural Rehabilitation. Students may apply for acceptance to the M.S. degree program upon attaining junior class standing, completion of the basic departmental core curriculum with a 3.0 grade point average, submitting

cumulative GRE General Test scores of 850 or greater, and demonstrating competency in communication skills as determined by the chairperson or his/her delegate. Students may not apply for the baccalaureate degree; programs are planned through the master's degree at the time of acceptance.

Applicants holding a baccalaureate degree from an accredited college or university with appropriate prerequisite course work will be eligible for admission, if the following minimum requirements are met:

1. Submission of a cumulative score of 1000 or greater for the GRE General Test, plus a grade point average of 3.0 (A = 4.0) for the last half of undergraduate course work;
2. Submission of three satisfactory letters of recommendation for graduate study, and
3. Demonstration of competency in communication skills as determined by the chairperson or his/her delegate.

### **Requirements for the M.S. Degree in Speech-Language Pathology — Post-Baccalaureate (SPP)**

In addition to general University requirements for the master's degree, candidates must complete at least 30 semester hours of graduate credit, including sufficient course work and practicum to meet the American Speech-Language-Hearing Association's requirement for clinical certification in Speech-Language Pathology. The attainment of clinical competence determined by a minimum of GPA of 3.0 in Graduate Practicum, and the approval of a majority of the academic staff of the Department of Communicology also are required for graduation. The student with an existing bachelor's degree and appropriate prerequisites may plan his/her degree program from among the following courses with approval of the department chairperson or his/her delegate:

SPA 4250 (3)	SPA 5402 (3)	SPA 6410 (3)
SPA 4255 (3)	SPA 5550 (4)	SPA 6423 (4)
SPA 4333 (2)	SPA 5552 (4)	SPA 6505 (1-8)
SPA 4336 (2)	SPA 5557 (1-8)	SPA 6553 (3)
SPA 5150 (3)	SPA 5600 (3)	SPA 6825 (3)
SPA 5150L (1)	SPA 6106 (3)	SPA 6906 (VAR.)
SPA 5380 (1)	SPA 6231 (3)	SPA 6930 (3)
SPA 5201 (3)	SPA 6245 (3)	SPA 5210 (3)
SPA 6322 (4)	SPA 5222 (3)	SPA 5303 (4)
SPA 6401 (3)		
SPA 6910 (VAR.) or SPA 6971 (VAR.)		

### **Requirements for the Combined Undergraduate/Graduate M.S. Degree in Speech-Language Pathology (SPF)**

A minimum of 150 credits is required for the combined undergraduate/graduate M.S. program. In addition to the General Distribution requirements, degree programs will be planned from among the following courses in order to meet the preparation requirements of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence.

PSY 4931 (3)	SPA 5210 (3)	SPA 6322 (4)
SPA 3020 (4)	SPA 5222 (3)	SPA 6381 (4)
SPA 3080 (4)	SPA 5303 (4)	SPA 6401 (3)
SPA 3101 (4)	SPA 5380 (1)	SPA 6410 (3)
SPA 3110 (4)	SPA 5384 (4)	SPA 6423 (4)

SPA 3117 (4)	SPA 5402 (3)	SPA 6505 (1-8)
SPA 4050 (1-12)	SPA 5550 (4)	SPA 6553 (3)
SPA 4250 (3)	SPA 5552 (4)	SPA 6825 (3)
SPA 4255 (3)	SPA 5557 (1-8)	SPA 6906 (VAR.)
SPA 4333 (1)	SPA 5600 (3)	SPA 6930 (3)
SPA 4336 (2)	SPA 6106 (3)	SPA 5150 (3)
SPA 6231 (3)	SPA 5150L(1)	SPA 6245 (3)
SPA 5201 (3)		
SPA 6910 (VAR.) or SPA 6971 (VAR.)		

The attainment of clinical competence, determined by a minimum GPA of 3.0 in Graduate Practicum, and the approval of a majority of the academic staff of the Department of Communicology also are required for graduation.

**Requirements for the M.S. Degree in Clinical Audiology — Post Baccalaureate (AUD)**

General University requirements for graduate work must be fulfilled, and a minimum of 30 credit hours must be completed, including sufficient course work and practicum to meet the American Speech-Language Association's requirement for clinical certification in Audiology. The attainment of clinical competence, determined by a minimum GPA of 3.0 in Graduate Practicum, and the approval of a majority of the academic staff of the Department of Communicology also are required for graduation. The student with an existing bachelor's degree and appropriate prerequisites may plan a program from among the following courses with approval of the department chairperson or his/her delegate.

SPA 4333 (1)	SPA 5388 (4)	SPA 6423 (4)
SPA 5402 (3)	SPA 6505 (1-8)	SPA 4363 (4)
SPA 5557 (1-8)	SPA 6825 (3)	SPA 4336 (4)
SPA 6305 (3)	SPA 6906 (VAR.)	SPA 5132 (4)
SPA 6322 (4)	SPA 6930 (3)	SPA 5303 (4)
SPA 6381 (4)	SPA 5312 (4)	SPA 5380 (1)
SPA 6354 (3)	SPA 5384 (4)	
SPA 6910 (VAR.) or SPA 6971 (VAR.)		

**Requirements for the Combined Undergraduate/Graduate M.S. Degree in Clinical Audiology (AUF)**

A minimum of 150 credits is required for the combined program. In addition to the General Distribution requirements, degree programs are planned from among the following courses in order to meet the preparation requirements of the American Speech-Language-Hearing Association for the Certificate of Clinical Competence in Audiology:

PSY 4931 (3)	SPA 5132 (4)	SPA 6345 (3)
SPA 3020 (4)	SPA 5303 (4)	SPA 6354 (3)
SPA 3080 (4)	SPA 5312 (4)	SPA 6423 (4)
SPA 3101 (4)	SPA 5380 (1)	SPA 6505 (1-8)
SPA 3110 (4)	SPA 5384 (4)	SPA 6825 (3)
SPA 3117 (4)	SPA 5388 (4)	SPA 6906 (VAR.)
SPA 4050 (1-12)	SPA 5402 (3)	SPA 4333 (1)
SPA 6305 (3)	SPA 4336 (2)	SPA 6322 (4)
SPA 4363 (4)	SPA 6329 (2)	SPA 6381 (4)
SPA 6930 (3) or SPA 6971 (VAR.)		

The attainment of clinical competence, determined by a minimum GPA is 3.0 in Graduate Practicum, and the approval of a majority of the academic staff of the Department of Communicology also are required for graduation.

### **Requirements for the M.S. Degree in Aural Rehabilitation — Post Baccalaureate (ARH)**

General University requirements for graduate work must be fulfilled, and a minimum of 30 credit hours must be completed, including sufficient course work, practicum, and internship to meet the Florida State Department of Education certification requirements for specialization with the hearing impaired. The attainment of clinical competence determined by a minimum GPA of 3.0 in Graduate Practicum, and the approval of a majority of the academic staff of the Department of Communicology also are required for graduation. Students may plan programs with emphasis in the areas of preschool, school age, multiply handicapped, and adult hearing impaired. All teachers of the deaf programs will be planned from among courses offered by the appropriate teacher preparation areas within the College of Education, as well as from the following:

SPA 5388 (4)	SPA 6354 (3)	SPA 6401 (3)
SPA 4334 (2)	SPA 5402 (3)	SPA 6423 (4)
SPA 4030 (3)	SPA 4336 (2)	SPA 5557 (1-8)
SPA 6505 (1-8)	SPA 4363 (4)	SPA 6106 (3)
SPA 6305 (3)	SPA 6825 (3)	SPA 4930 (3)
SPA 6322 (4)	SPA 6906 (VAR.)	SPA 6326 (3)
SPA 6930 (3)	SPA 4050 (1-12)	SPA 5303 (4)
SPA 6329 (2)	SPA 5132 (4)	SPA 5380 (1)
SPA 6345 (3)	SPA 6381 (4)	SPA 5384 (4)
SPA 5312 (4)		
SPA 6910 (VAR.) or SPA 6971 (VAR.)		

### **Requirements for the Combined Undergraduate/Graduate M.S. Degree in Aural Rehabilitation (ARF)**

A minimum of 150 credits is required for the combined programs, as well as sufficient course work, practicum and internship to meet the Florida State Department of Education certification requirements for specialization with the hearing impaired. The attainment of clinical competence, determined by a minimum GPA of 3.0 in Graduate Practicum, and the approval of a majority of the academic staff of the Department of Communicology also are required for graduation. Students may plan programs with emphasis in the areas of preschool, school age, multiply handicapped, and adult hearing impaired. In addition to the General Distribution requirements, all teachers of the deaf programs will be planned to include course work from the appropriate teacher preparation areas within the College of Education, as well as from the following:

PSY 4931 (3)	SPA 4930 (3)	SPA 6345 (3)
SPA 3020 (4)	SPA 5132 (4)	SPA 5303 (4)
SPA 5312 (4)	SPA 5380 (1)	SPA 6423 (4)
SPA 3101 (4)	SPA 3110 (4)	SPA 5384 (4)
SPA 6505 (1-8)	SPA 3117 (4)	SPA 5388 (5)
SPA 6825 (3)	SPA 4040 (3)	SPA 5557 (1-8)
SPA 6906 (VAR.)	SPA 4050 (1-12)	SPA 6305 (3)
SPA 6930 (3)	SPA 4333 (1)	SPA 6106 (3)
SPA 4334 (2)	SPA 6322 (4)	SPA 4336 (3)



SPA 6326 (3)

SPA 4363 (4)

SPA 6329 (2)

SPA 6381 (4)

SPA 6910 (VAR.) or SPA 6971 (VAR.)

## **Criminal Justice (CCJ)**

The major in Criminal Justice provides student with an in-depth exposure to the total criminal justice system, including law enforcement, detention, the judiciary, corrections, and probation and parole. The program concentrates on achieving balance in the above aspects of the system from the perspective of the criminal justice professional, the offender, and society.

The objective of the graduate program in Criminal Justice is to develop a sound educational basis for professional training in one or more of the specialized areas comprising the modern urban criminal justice system.

### **Requirements for the M.A. Degree**

The Department of Criminology offers work leading to the M.A. degree in two main areas of specialization: Urban Law Enforcement Administration and Community Corrections. Additional courses of study can be tailored to suit individual student needs (pre-law, advanced graduate work, etc.).

In addition to meeting all general admission requirements of the University, each graduate applicant must submit three letters of recommendation and a letter of intent, and must have passed an acceptable undergraduate social science statistics course (CCJ 4700 or the equivalent).

**Note 1:** Individuals who wish to take courses in the graduate program as non-degree seeking students must contact the Director of Graduate Studies for the department prior to their first class appearance. Such students will usually be prohibited from enrolling in CCJ 6910.

**Note 2:** All course work counted toward the degree must have the prior approval of the Director of Graduate Studies of the Department of Criminology. Such work may include up to 6 hours from outside the department.

The Master of Arts degree is granted upon completion of one of two program options:

- (1) **THESIS OPTION:** 32 semester hours of CCJ course work, including:

CCJ 6285 (3)

CCJ 6709 (3)

CCJ 6605 (3)

CCJ 6920 (3)\*\*

CCJ 6705 (3)

CCJ 6971 (VAR.)

An oral defense of the thesis is required after the final draft of the thesis has been accepted by the candidate's supervisory committee.

- (2) **AREA PROJECT OPTION:** 35 semester hours of CCJ course work, including:

CCJ 6285 (3)

CCJ 6709 (3)

CCJ 6605 (3)

CCJ 6920 (2)\*\*

CCJ 6705 (3)

CCJ 6974 (3)

The non-thesis Area Project Option is intended primarily for in-service practitioners who aspire to an administrative position or who are currently holding such a position and who do not intend to continue their graduate education beyond the M.A. degree. Participation in the non-thesis option is by department permission only.

The project itself will concern one or more specific aspects of the candidate's chosen area of specialization so that students may apply their graduate studies and skills to practical problems directly related to their

own work and agency. Project proposals must be approved by the Director of Graduate Studies and by the student's supervisory committee. As a matter of course, projects will produce a written report in a format appropriate for explaining and sharing the project's outcomes.

Further information on any aspect of the degree program may be obtained by writing the Director of Graduate Studies, Department of Criminology, directly.

\*\* Should be taken during the first semester of the program.

## **Geography (GPY)**

### **Requirements for the M.A. Degree**

In addition to general University requirements for graduate work, all students must complete 30 credit hours in graduate Geography courses, following one of the two plans outlined below. A written and oral comprehensive examination covering the general field of Geography is required for graduation, and the student must demonstrate his ability to translate into English the pertinent scientific literature in one modern foreign language. Foreign students whose mother tongue is not English may use English as their foreign language. A computer language (such as Fortran) may be used to meet the language requirements.

#### **Thesis Program: The 30 credit hours in Geography must include:**

GEA 6195	GEO 6119	GEO 6428
GEO 5065	GEO 6209C	GEO 6971

Up to 6 credits outside the department may be elected with the approval of the student's committee and major professor. An oral defense of thesis is required.

#### **Non-Thesis Program: The 30 credit hours in Geography must include:**

GEA 6195	GEO 6209C	GEO 6945
GEO 5065	GEO 6428	GEO 6947
GEO 6119	GEO 6944	

The remaining credit hours must be approved by the student's committee and major professor, and may include up to 6 credits outside the department.

## **Gerontology (GEY)**

Gerontology is the study of the process of human aging in all its many aspects — physical, psychological, and social. In the Department of Gerontology, particular emphasis is placed upon Applied Gerontology, with the goal of educating students who in their professional careers will work to sustain or improve the quality of life of older persons. To this end, the department offers the degree of Master of Arts in Gerontology with with a thesis or non-thesis option. The primary goal of the non-thesis option. The primary goal of the non-thesis master's program is to prepare graduates for leadership positions in the planning, development, management, delivery, and evaluation of community services for older persons. The thesis option is primarily for those students who, in addition to acquiring the kinds of knowledge and skills noted above, wish to pursue a doctoral degree or who are interested in a research career.

### **Requirements for the M.A. Degree in Gerontology**

The M.A. degree requires four semesters of full-time study — or the part-time equivalent thereof — including one semester of supervised field experience for those choosing the non-thesis option. The courses in the degree program were developed specifically to meet the objectives of the

program and are offered under the Department of Gerontology. The M.A. in Gerontology requires a minimum of 38 semester hours in approved courses. Prior to beginning the program, each student will confer with a departmental adviser, who will thoroughly review the student's academic background, experience, and career interests to develop an approved individual curriculum from the available Gerontology courses. Required courses include:

GEY 5620 (3)	GEY 6500 (3)	GEY 5630 (3)
GEY 6600 (3)	GEY 6325 (3)	GEY 6450 (3)
*GEY 6455 (3)	GEY 6940 (6)	

\* Required for thesis option only.

Non-thesis majors also are required to take a minimum of 8 hours and thesis majors a minimum of 5 hours from the following:

GEY 5642 (3)	GEY 6910 (1-4)	GEY 6933 (1)
GEY 6901 (3)	GEY 6934 (2)	

There are no language requirements. However, following completion of the necessary course work, there will be a comprehensive examination designed to test the student's knowledge of and ability to integrate key concepts and information in the field of Gerontology. This examination must be taken and passed before the student begins the required field placement or the required thesis. In addition to the comprehensive examination, which must be passed by all students in the M.A. program, students electing the thesis option must successfully pass an oral examination on the thesis.

**Admission Requirements.** To be eligible for admission to the M.A. program, the applicant must:

1. hold a baccalaureate degree or its equivalent from an accredited college or university;
2. have a minimum score of 1000 on the GRE General Test, plus a minimum grade point average of 2.5 (A = 4.0) on the last half of courses taken for the bachelor's degree, or have a minimum score of 900 on the GRE General Test, plus a minimum grade point average of 3.0. Students electing the thesis option may be required to have higher scores on the Graduate Record Examination and/or a higher grade point average on the last half of the courses taken for the bachelor's degree. An M.A. in a related field from an accredited university may be accepted in lieu of undergraduate grade point requirements and Graduate Record Examination score requirements.

Applicants with significant experience and demonstrated commitment to the field of aging may be approved for admission in lieu of one or more of the above listed requirements. Special consideration may be given to students who demonstrate commitment to or experience in the field of aging.

**Note:** In addition to the University Graduate Studies application, a program application is required and should be obtained from the Department of Gerontology.

## **History (HTY)**

The Department of History offers the M.A. degree for those who desire to stop at this level or who choose to pursue the doctorate. Recipients of the M.A. degree typically apply their training in secondary schools and junior colleges, as well as in the non-academic public sector, e.g., archives, historic preservation, museums. The History Department publishes semi-annually a professional journal, *Tampa Bay History*, which encourages participation by graduate students. The department also maintains cooperative relationships

with local, state, national, and international historical organizations. The University Library houses manuscript collections, newspapers and periodicals, and government documents of special interest to historical researchers. Members of the graduate faculty in History have earned recognition as teachers, scholars, and contributors to the community.

### **Requirements for the M.A. Degree**

The Department of History offers both a thesis and a non-thesis Master of Arts degree organized around the following fields:

Field I:	American History to 1877
Field II:	American History since 1877
Field III:	Ancient History
Field IV:	Medieval History
Field V:	Early Modern Europe to 1789
Field VI:	Modern Europe since 1789
Field VII:	Latin America

The thesis program emphasizes preparation for further graduate study. The non-thesis program is designed to meet the needs of those students seeking a terminal degree at the masters level.

In addition to the general requirements of the University, a candidate is required to complete 38 credit hours in the following distribution: a 4-hour core course, 16 hours in a major field in history, 8 hours in a minor field, plus HIS 5215. Students in the thesis program will be expected to complete the remaining 8 hours in thesis credits. Non-thesis degree students must complete the remaining hours of their program in 6000 level regularly scheduled courses.

Of the 38 hours required for the Master of Arts with thesis, at least 20 must be in formal, regularly scheduled course work. For the Master of Arts without thesis, at least 28 must be in formal, regularly scheduled course work. A minimum of 16 must be at the 6000 level. Subject to the satisfaction of above requirements, courses at the 5000 level are acceptable as part of a planned degree program. In special circumstances, major advisers may approve up to 6 hours at the 4000 level with the definite understanding that additional and superior work will be required of the graduate student. The core course, HIS 6112, "Analysis of Historical Knowledge" and HIS 5215, "Historical Writing", are required of all M.A. students.

A reading proficiency in one foreign language must be demonstrated by students in the thesis degree program. A satisfactory preparation in the core course program, two fields, and the completion of a comprehensive examination are required of all M.A. students for graduation.

Students with a major field in American History and with a thesis topic that does not require use of a foreign language may substitute quantitative methods for the language requirements. The quantitative methods option will be fulfilled by successful completion with a grade of at least "B" in one of the following courses: ANT 5937 (Quantitative Methods); EDF 6407; POS 5734.

Upon admission to the graduate program, M.A. students will select an adviser in their anticipated major field of study. Students will arrange their programs and schedules of appropriate courses with the major adviser. The student, in consultation with the adviser, solicits two other members to serve on a guidance committee.

## **Political Science (POL)**

### **Requirements for the M.A. Degree**

The graduate program 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 Requirements.** Students seeking admission to the M.A. program in Political Science must satisfy all general University admissions requirements and those of the College of Social and Behavioral Sciences. They also must satisfy all of the following requirements:

1. Students must submit three letters of recommendation from individuals familiar with their academic and intellectual abilities. These letters must show that the student has the potential to do satisfactory graduate level work in Political Science and complete all requirements for the M.A. degree. These letters should address the student's writing and speaking abilities, quantitative skills, and capacity for analytic thinking.
2. Students must have a good undergraduate background in Political Science, usually requiring a bachelor's degree in Political Science or in a related field. Students with less background in Political Science, who otherwise meet requirements for admission, may be required to take additional undergraduate courses in Political Science prior to admission. The additional undergraduate courses will be specified by the Graduate Program Coordinator in consultation with the department admissions committee; the student must earn a grade of "B" or better in each of these courses.

**Course Requirements.** For instructional purposes, the graduate curriculum in Political Science has been divided into seven fields:

**Field I Political Theory**

POS 5626 (3)	POS 6247 (3)	POS 5734 (4)
POT 6706 (3)	POS 5764 (3)	POT 6007 (3)

**Field II Comparative Government and Politics**

CPO 5934 (3)	CPO 6036 (3)	CPO 6007 (3)
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**Field III International Relations**

INR 5086 (3)	INR 6036 (3)	INR 6007 (3)
INR 6107 (3)		

**Field IV American National and State Government**

POS 5094 (3)	POS 6415 (3)	POS 6045 (3)
POS 6427 (3)	POS 6095 (3)	POS 6455 (3)
POS 6127 (3)		

**Field V Urban Government and Politics**

POS 5155 (3)	URP 5131 (3)	POS 6157 (3)
URP 5132 (3)	URP 6056 (3)	

**Field VI Public Policy**

INR 6107 (3)	PUP 6538 (3)	POS 6095 (3)
URP 5131 (3)	POS 6157 (3)	URP 5132 (3)
PUP 5607 (3)	URP 6056 (3)	PUP 6007 (3)

**Field VII Law and Politics**

POS 6607 (3)	POT 5626 (3)	POS 6698 (3)
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The following non-field courses may be used as elective hours:

POS 6909 (1-3)	POS 6934 (3)	POS 6919 (VAR.)
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**Degree Requirements.** The student must complete a minimum of 36 semester hours of graduate level course work. The minimum requirements must be distributed according to the following five categories:

1. Required core (9 hours): POS 5734 (3), plus two of the following, which will determine the student's major and minor fields of study.

- POS 6706 Scope and Methods of Political Science ..... (3)  
 CPO 6007 Seminar in Comparative Politics ..... (3)  
 INR 6007 Seminar in International Relations ..... (3)  
 POT 6007 Seminar in Political Theory ..... (3)  
 POS 6045 Seminar in American Government & Politics ..... (3)  
 POS 6157 Seminar in Urban Government & Politics ..... (3)  
 PUP 6007 Seminar in Public Policy ..... (3)
2. Major field (9): 3 courses in the student's major field of study.
  3. Minor field (6): 2 courses in the student's minor field of study.
  4. Electives (Minimum 6 hours). These electives must be approved in advance by the Graduate Program Coordinator.
  5. Thesis: Minimum of 3 credits (POS 6971).
  6. Remaining hours are to be taken as thesis (no more than 6 hours total), electives, or in the major or minor field.

**Details of these minimal requirements follow:**

1. **Required Core Courses.** Students must take POS 5734 (Political Research Methods) within the first calendar year of graduate study. Also, the student must choose at least 2 of the following:

POS 6706 (3)	CPO 6007 (3)	INR 6007 (3)
POT 6007 (3)	POS 6045 (3)	POS 6157 (3)
PUP 6007 (3)		

All required core courses should be taken as early as possible in the student's M.A. degree program.

2. **Thesis.** All students must write a thesis under the direction of a thesis adviser and a thesis committee approved by the Graduate Program Coordinator. A thesis proposal must be approved by the thesis director and Graduate Program Coordinator and made a part of the student's permanent file at the time the topic is approved. Substantive changes in the proposal must be approved by the thesis director and the Graduate Program Coordinator and added to the student's permanent file as an addendum to the original proposal. The completed thesis must be defended at a formal oral defense before the thesis committee.
3. **Comprehensive Examination.** Each student must pass a written comprehensive examination covering the fields in which he/she has concentrated his/her studies. The fields in which a student will be examined must be approved by the Graduate Program Coordinator. The usual pattern will be for the student to defend the two fields selected by the student as the major and minor fields. These examinations will normally be taken before completion of the thesis and thesis defense.

During the first semester in the M.A. program, each student must develop a written plan of study in consultation with the Graduate Program Coordinator. The plan should specify how the student intends to satisfy degree requirements. A copy of the approved plan must be filed with the department. Periodic changes and updates, as necessary, may be made with the approval of the Graduate Program Coordinator. Students are responsible for initiating changes and keeping their plans of study up to date.

**M.A. Degree in International Relations**

The Department of Political Science, in cooperation with the International Studies program of the Division of Interdisciplinary Social Sciences, offers the student an opportunity to enroll in courses leading to a focus in Internation-

al Relations. Within this focus, the student may select one of three concentrations: (1) Policy and Strategic Studies; (2) Comparative Area Studies; or, (3) International Studies. A minimum of 36 credit hours will be necessary to complete this curriculum. The following is a summary of the available courses, the areas of emphasis, and proposed outline of study.

**Summary**

- A. Required Core Curriculum: 9 credits
- B. Curriculum Concentrations: Minimum of 9 credits from one of the three concentrations
- C. Electives: Minimum of 6 credits
- D. Thesis: Minimum of 3 credits, maximum of 6 credits
- E. Remaining hours in electives or area of concentration.

**Details**

**A. Required Core courses . . . . . (9 credits)**

- POS 6934 Selected Topics in Political Science:
  - Ideologies . . . . . (3)
- POS 5734 Political Research Methods . . . . . (3)
- POS 6045 Seminar in American Government & Politics . . . . . (3)

**B. Curriculum Concentrations**

- (1) Concentration in Policy and Strategic Studies . . . . . (9 credits)
  - INR 6036 Seminar in International Political Economy . . . . . (3)
  - POS 6934 Selected Topics in Political Science:
    - Comparative Military Systems . . . . . (3)

And one from the following:

- PUP 6007 Seminar in Public Policy . . . . . (3)
- CPO 6007 Seminar in Comparative Politics . . . . . (3)
- INR 6007 Seminar in International Relations . . . . . (3)
- INR 6107 American Foreign Policy . . . . . (3)

- (2) Concentration in Comparative Area Studies . . . . . (10 credits)
  - CPO 6007 Seminar in Comparative Politics . . . . . (3)
  - CPO 6036 Politics of the Developing Areas . . . . . (3)

And one from the following:

- INR 6107 American Foreign Policy . . . . . (3)
- INR 6036 Seminar in International Relations . . . . . (3)
- SSI 5934 Selected Topics in International Relations . . . . . (3)
- CPO 5934 Selected Topics in Comparative Politics . . . . . (3)
- (e.g. Latin America, Middle East, Africa, USSR)

- (3) Concentration in International Studies . . . . . (9 credits)
  - INR 6007 Seminar in International Relations . . . . . (3)
  - INR 6107 Relations American Foreign Policy . . . . . (3)

And one from the following:

- INR 6036 Seminar in International Political Economy . . . . . (3)
- INR 5086 Issues in International Relations:
  - Comparative Foreign Policies . . . . . (3)
- SSI 5934 Selected Topics in International Relations . . . . . (3)
- CPO 6036 Politics of Developing Areas . . . . . (3)

- C. Selected Electives** ..... (6 credits minimum)  
 Students may select from among these courses as they become available, or may elect other courses appropriate to the individual program.
- POS 5626 Issues in Political Philosophy & Law (e.g. Third World Socialism, Marxism in Latin America, etc.)
  - POS 6237 Issues in Political Behavior and Socialization
  - PAD 5836 Comparative Public Administration
  - HIS 6939 Seminar in History (e.g. Cuba, Western Europe, Middle East, etc.)
  - ECO 6706 International Economics
  - SSI 5934 Selected Topics (May be repeated as topics vary; topics include, for example, Soviet Defense Policy, U.S. National Security Policy, etc.).
  - ANT 6490 Seminar in Cultural Anthropology
  - GEO 6195 Seminar in Advanced Regional Geography
  - SYP 5405 Social Change
  - PHI 6425 Seminar in the Philosophy of Social Sciences
  - PHI 6706 Seminar in Philosophy of Religion
  - REL 6304 Seminar: Issues in Comparative Religion
  - REL 6317 Seminar: Studies in Eastern Religions
- D. Comprehensive Exam**  
 Students who have completed the course work are required to pass a comprehensive examination and write a thesis before graduation.
- E. Thesis** ..... (3 to 6 credits)  
 POS 6971 Thesis: Master's
- F. Remaining hours are to be taken as electives or in the area of concentration.**

### **Certificate in Political Science.**

Some students may choose to pursue a certificate program rather than the degree program. The admissions and student evaluation standards are the same as for those students in the degree program. The program offers a certificate program of 20 credits in the Policy and Strategic Studies concentration.

- A. Required Courses** ..... (at least 9 credits)
- POS 5734 Political Research Methods ..... (3)  
 or  
 POS 6934 Selected Topics in Political Science:  
     Ideologies ..... (3)  
 CPO 6036 Politics of Developing Areas ..... (3)  
 INR 6107 American Foreign Policy ..... (3)
- B. Electives**  
 The electives may be any regularly scheduled graduate courses approved by the Graduate Program Coordinator.

### **MacDill Air Force Base Program**

Responding to the specific career needs of military personnel stationed at MacDill Air Force Base, the University of South Florida has developed a special Military and Strategic Studies focus within the M.A. Degree Program in Political Science.

Students will be able to take many of the necessary courses on base during evening hours. The program draws on the expertise of the full-time facul-



ty members in the Department of Political Science and the International Studies Program.

For more information, contact the Graduate Studies Coordinator or the USF Base Representative at 840-0606 or 974-2384.

## **Psychology (PSY)**

The graduate faculty of the Psychology Department is divided into three broad program areas: Clinical, Experimental, and Industrial-Organizational. Each of these program areas offer Ph.D. level training in areas of special expertise. Members of the graduate Clinical faculty offer course work and training in the areas of Abnormal Psychology, Neuropsychology, Developmental Psychology, Behavioral Modification, Psychotherapy, Personality, Psychological Assessment, and Community Psychology. Members of the graduate Experimental faculty provide extensive research experience in the areas of Comparative Psychology, Cognitive Processes, Learning and Conditioning, Human Memory, and Perception. In addition, with faculty in Communicology, the Experimental faculty offers a specialization in Speech/Language/Hearing Sciences. Members of the graduate Industrial-Organizational faculty offer Training and Evaluation of Employees, Job Motivation and Satisfaction, Small Group Analysis, Organizational Theory, Human Factors, Organizational Change, and Evaluation.

### **Requirements for the M.A. Degree**

In addition to satisfying general University requirements for graduate work, the student must complete 30 credit hours of graduate Psychology courses. All student are required to complete two of the three quantitative methods courses (PSY 6217A, 6217B, 6217C). In addition, the student must complete the departmental core requirement in four areas (2 credit hours each):

- EXP 6058 Cognitive Psychology
- EXP 6608 Learning
- PSB 6056 Physiological Psychology
- SOP 6059 Social Psychology

plus one of the following (2 credit hours each):

- DEP 6058 Developmental Psychology
- PPE 6058 Personality
- PSY 6907 History and Systems of Psychology

The student must complete at least four of the courses listed above for the M.A. degree, and complete the fifth course during the third year of graduate study.

A research thesis, PSY 6971, is required. The student must successfully pass an oral examination covering the thesis and research courses. The Department of Psychology does not admit students seeking a terminal M.A. degree in Psychology.

In addition to the M.A. degree in Psychology, the Psychology Department and the Department of Educational Psychology in the College of Education jointly grant the M.A. degree in School Psychology (SE). (See College of Education)

### **Requirements for the Ph.D. Degree**

The Ph.D. in Psychology is offered in the fields of Clinical, General Experimental and Industrial/Organizational Psychology. Advanced doctoral level requirements are determined by the student and his/her Ph.D. committee. Assuming that the student has completed an M.A. degree in Psychology or its

equivalent, the Psychology Department requires the following in addition to the general University requirements for the Ph.D. degree:

1. The Department of Psychology requires the student to take a graduate minor. The minor meets the tools of research requirement of the Graduate School. A minor program of study, composed of work done outside the student's field of concentration and including a minimum of three appropriate level courses or their equivalent, is required by the department for admission to Ph.D. candidacy. The minor must be approved by the student's Ph.D. committee and the Department of Psychology.
2. A one-year internship in an approved clinical facility for Ph.D. students in the Clinical Psychology Program.
3. Six months of internship in approved industries or community agencies as available for Ph.D. students in the Industrial/Organizational Psychology program.

### **Public Administration (PAD)**

The Public Administration Program offers a multi-disciplinary course of study leading to the Master of Public Administration (M.P.A.). The M.P.A. degree is designed primarily to prepare men and women for successful leadership roles and management careers in the public sector. 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. Additionally, the M.P.A. degree prepares individuals for further academic study leading to the doctorate in Public Administration or the Ph.D. in Public Policy and Administration, as well as in a variety of other disciplines.

Men and women already employed in public management positions may wish to pursue the M.P.A. in order to broaden their educational backgrounds, to prepare themselves for increased job responsibilities, or to change career paths. Such in-service students currently make up the majority of the M.P.A. student body.

The Public Administration program also offers a course of study leading to a Graduate Certificate in Public Management (G.C.P.M.). This program is designed for individuals who wish to acquire knowledge of public management theory and practices, but who do not find it necessary or feasible to pursue the M.P.A. degree. Students who are admitted as regular M.P.A. degree candidates are not normally eligible for the G.C.P.M.

### **Admission Requirements for the M.P.A. Degree**

Admission to the M.P.A. program is based on an overall assessment of an applicant's potential for successfully completing the M.P.A. degree. Admission requirements are as follows:

1. Completion of a bachelor's degree from a regionally accredited university.
2. A 3.0 average for the last two years of undergraduate study or a GRE General Test score of 1000 or higher.
3. Two letters of recommendation, one of which should be from a faculty member familiar with the applicant's academic performance and potential.
4. The submission of a brief (one page) career statement, indicating how one's career goals and aspirations can be met by completing the M.P.A. degree.
5. A statement (if applicable) describing an applicant's current and/or past managerial work experience in the public sector. This statement is

especially important for "in-service" applicants who wish to secure a waiver for the internship requirement.

- 6. Approval by the M.P.A. admissions committee and, if deemed necessary, an admissions interview.

Applicants who lack the background necessary for graduate study in the M.P.A. program may be accorded provisional admission and/or be required to complete additional undergraduate courses.

**Requirements for the M.P.A. Degree**

The M.P.A. degree normally requires two academic years of full-time study. The required curriculum is 40-46 credits, varying according to a student's prior work experience. Students with appropriately documented administrative work experience commensurate with their career goals may not be required to complete an internship in a public agency. Pre-service students must complete a supervised internship. At least 24 credit hours must be at the 6000 level. A minimum of 28 credit hours must be taken in formal, regularly scheduled classes. Courses at the 5000 level are accepted for credit toward the degree. Specific course requirements consist of 15 credits in the core, 6 credits of statistics/methodology, 3 credits in economics, 12 credits in a concentrated field of study, 3 credits for a problem report, and 1 credit of colloquium. A student must receive at least a "B" in each core course and for the problem report.

- 1. **Core Courses** . . . . . (15 credits)
  - PAD 6044 Environment of Public Administration . . . . . (3)
  - PAD 6060 Public Administration Theory and Practice . . . . . (3)
  - PAD 6221 Public Budgeting . . . . . (3)
  - PAD 6307 Policy Analysis . . . . . (3)
  - PAD 6417 Public Personnel Management . . . . . (3)
- 2. **Statistics/Methodology** . . . . . (6 credits)
  - PAD 6934 Research Methods in Public Administration . . . . . (3)
  - or
  - One of the following:
    - POS 5734 Political Research Methods . . . . . (4)
    - or
    - SYA 6405 Sociological Statistics . . . . . (3)
    - or
    - ANT 5937:901 Quantitative Methods,
    - or
    - an equivalent course (with Program approval).
    - And
    - PAD 6703 Quantitative Aids for Public Managers . . . . . (3)
- 3. **Public Sector Economics** . . . . . (3 credits)
  - One of the following:
    - ECP 5614 Urban Economics . . . . . (3)
    - or
    - ECO 6505 Public Sector Economics . . . . . (3)
    - or
    - ECO 6506 Public Finance . . . . . (3)
    - PHC 6430 Health Economics . . . . . (3)
    - or an equivalent course (with Program approval).
- 4. **Fields of Concentration** . . . . . (12 credits)
  - Each student must select one of the following fields of concentration; with the approval and consent of his/her adviser and the M.P.A. Director, the

student may design an individualized course of study that best meets his/her educational needs. Three credits in each field are transferable to another field. Students can include up to 6 credits from another department/program in their concentration.

Selected courses, depending on their content, may be applicable to one or more fields of concentration. These are PAD 6934: Selected Topics in Public Administration; PAD 6935: Advanced Study in Public Administration; PAD 6907: Independent Study; and PAD 6915: Directed Research.

#### **Area I. Public Organizational Management**

Students selecting this concentration must take PAD 6101: Public Organizations and/or PAD 6105: Public Organizational Change. Additionally, each student should take 6 to 9 credits selected from the following courses:

- PAD 5606 Administrative Law
- PAD 5836 Comparative Public Administration
- PAD 6427 Public Sector Labor Relations
- PAD 6710 Computer Applications in Public Administration
- POS 6045 Seminar in American Government and Politics
- POS 6095 Seminar in Intergovernmental Relations
- POS 6127 Issues in State Government and Politics
- SYO 6545 Complex Organizations
- GEB 6735 Social, Legal, and Political Environment of Business
- MAN 6055 Human Resource Management
- MAN 6061 Organizational Theory and Measurement
- MAN 6107 Managerial Behavior
- MAN 6135 Management of Communications
- MAN 6157 Management of Professionals
- MAN 6219 Management of Organizational Development and Change
- MAN 6409 Management of Conflict
- COM 5123 Assessing Organizational Communication
- SPC 6442 Small Group Behavior
- GEY 6500 Institutional Administration
- CCJ 6405 Law Enforcement Administration
- CCJ 6455 Correctional Organization and Administration
- INP 6056 Industrial Psychology
- INP 7097 Industrial and Organizational Psychology
- ECO 6936 Collective Bargaining
- EGC 6934 Administration and Supervision in Rehabilitation
- ANT 7934 Applied Anthropology in Public and Private Organizations
- PHC 6102 Public Health Administrations
- PHC 6101 Health Care Organizations
- PHC 6180 Health Services Management
- PHC 6190 Management of Public Health Programs

#### **Area II. Budgeting and Financial Management**

Each student must take PAD 6207: Public Financial Administration and PAD 6222: Issues in Florida Budgeting and Finance. Additionally, 6 credits should be selected from the following courses:

- ACG 5325 Financial/Managerial Accounting
- ACG 5505 Nonprofit Organization Accounting
- ACG 6346 Management Accounting and Control
- ECO 6505 Public Sector Economics
- ECO 6506 Public Finance

- ECP 5614 Urban Economics
- FIN 6718 Governmental Financial Planning and Budgeting
- GEB 6705 Financial Accounting for Managers
- GEB 6725 Financial Management and Practice
- PHC 6160 Health Care Financial Management
- PHC 6430 Health Economics

**Area III. Urban Management and Planning**

Each student selecting this specialization must take PAD 5333: Concepts and Issues in Public Planning and/or PAD 5807: Administration of Urban Affairs. Additionally, 6 to 9 credits should be selected from the following courses:

- PAD 6306 Urban Policy Analysis
- URP 5131 Implementation Measures in Urban/Regional Planning
- URP 6056 City and Regional Planning
- POS 5155 Issues in Urban Government and Politics
- POS 6095 Seminar in Intergovernmental Relations
- POS 6157 Seminar in Urban Government and Politics
- SOC 6302 Community Analysis
- ENV 5614 Environmental Planning
- ANT 6447 Selected Topics in Urban Anthropology
- ECP 5614 Urban Economics
- GEY 6325 Social Policy and Planning for Gerontologists

**Area IV. Policy Analysis**

Each student selecting this specialization must take PAD 6356: Policy and Program Implementation and/or PAD 6237: Public Program Evaluation. Additionally, 6 to 9 credits should be selected from the following courses:

- PAD 5035 Issues in Public Administration and Public Policy
- PAD 5612 Administrative Regulation
- PAD 6037 Bureaucracy and Public Policy
- PAD 6306 Urban Policy Analysis
- PAD 6312 Policy Design
- URP 5131 Implementation Measures in Urban/Regional Planning
- GEY 6325 Social Policy and Planning for Gerontologists
- PUP 5607 Public Policy and Health Care
- PUP 6007 Seminar in Public Policy
- PUP 6538 Governmental Housing Policy
- CCJ 6475 Systems Analysis in Criminal Justice
- CCJ 6716 Research and Evaluation in Criminal Justice II
- PSY 7780 Program Evaluation
- HSC 6170 Health Services Planning and Evaluation
- PHC 6115 Health Policy Analysis
- HSC 6160 Principles of Health Policy and Management
- ANT 6197 Selected Topics in Public Archaeology: Cultural Resources Management Policy
- ANT 6463 Regional Problems in Medical Anthropology: Evaluation of Health Services

5. **Colloquium** ..... (1 credit)  
Each student must enroll for 1 credit (S/U) colloquium requirement (PAD 6926).
6. **Internship** .....(4-6 credits)  
Pre-service students are required to complete a supervised internship in a governmental or non-profit organization (PAD 6946). Internships provide students with the opportunity to gain valuable experience in the

public sector, thereby enhancing their academic course of study. A 4-credit internship requires a minimum of 200 hours over at least 10 consecutive weeks. A 5-credit internship requires a minimum of 250 hours over at least 10 consecutive weeks. A 6-credit internship requires a minimum of 300 hours over at least 10 consecutive weeks. The internship does not normally exceed a full semester in length (15 weeks). Internship credits must be earned while a student is in residence and before a student has completed regular course work requirements. Exceptions to this rule can only be made by the M.P.A. 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. Such students must submit a written statement of their work experience and career objectives for assessment by the M.P.A. faculty.

7. **Problem Report** ..... (3 credits)  
This report (PAD 6909) focuses on a significant administrative/policy problem confronting a public manager or agency. Upon completing the report, the student should have demonstrated an ability to identify a problem and a set of solutions, collect and analyze relevant data, and report/defend a recommended course of action intended to solve the problem. For in-service students, the problem selected for study should be outside the student's immediate work-related responsibilities. Moreover, this requirement should be completed at or near the end of the student's course of study. A minimum grade of "B" must be achieved on the problem report.
8. **Examination Requirements**  
The problem report serves as the focal point for examining the student. The student is expected to present (both verbally and in writing) his/her findings to a three-member committee and be prepared to defend them. The student also should be prepared to demonstrate competency in the core courses of study. The committee consists of at least two M.P.A. faculty and, when appropriate, a qualified person outside the M.P.A. program. The examination is normally conducted at or near the end of the student's final semester of study. Should the student fail the examination, a second examination may be taken after an additional semester of study. It is contrary to departmental policy to offer a third examination.

### **Directed Research/Independent Study**

A maximum of six credits of Directed Research (PAD 6915) and/or Independent Study (PAD 6907) may be earned toward the M.P.A. degree. Enrollment in these courses is limited to students who want to do work in an area in which no formal course is available or in an area in which they have already completed one or more formal courses. Students who enroll in Directed Research or Independent Study must describe their study/research plan on a form furnished by the M.P.A. program and obtain the signatures of the faculty member who agrees to supervise the work and the M.P.A. Director.

### **Petition to By-Pass Core Courses**

A student with significant administrative experience (five years or more) may petition the department to by-pass one or more of the core course requirements. Upon appropriate review and approval by the M.P.A. Director and his/her adviser, the student may substitute an appropriate PAD elective(s) for the core course(s) by-passed.

### **Admission Requirements for the G.C.P.M.**

Admission to the G.C.P.M. program is based on an overall assessment of the applicant's educational needs and career objectives. Applicants must hold a bachelor's degree from a regionally accredited university and should have a "B" average for the course of undergraduate study. Additionally, each applicant must complete an admissions form furnished by the Public Administration program and include as part of the application a written statement describing his/her work experience in the public sector and indicating how one's career objectives can be enhanced by completing the G.C.P.M.

### **Requirements for the G.C.P.M.**

A certificate is awarded upon the completion of 18 credit hours of study, with a 3.0 average achieved on all work attempted. Each student must take a minimum of 15 PAD credits in regularly scheduled courses; at least 9 credits must be core course credits. Independent study, directed research, and graduate colloquium credits cannot be counted toward the certificate requirements. Three credits earned in another department/program may be applied toward the certificate, providing they are relevant to the G.C.P.M. A student enrolled in the Certificate Program must take courses from at least two different full-time Public Administration program faculty members.

### **Doctoral Minor in Public Administration**

Students enrolled in doctoral level courses of study in other programs (e.g., Anthropology, Psychology, Education) can, with their program's approval, complete a minor in Public Administration. The Doctoral Minor Adviser in the Public Administration program will assist the student in the design of an appropriate course of study. The Ph.D. candidate with a minimal background in public administration is advised to enroll in one or more of the following courses:

- PAD 6044 Environment of Public Administration
- PAD 6060 Public Administration Theory and Practice
- PAD 6221 Public Budgeting
- PAD 6307 Policy Analysis
- PAD 6417 Public Personnel Management

### **Rehabilitation Counseling (REH/REF)**

The mission of Rehabilitation Counseling is to help physically, mentally, emotionally, and chemically disabled individuals return to full, rewarding, and productive lives. Rehabilitation Counselors work in a wide variety of settings, but are most commonly employed in public and private rehabilitation programs and facilities, mental health treatment settings, and substance abuse treatment settings. Some establish their own private rehabilitation case management practices or private mental health counseling practices.

Rehabilitation Counseling has roots in both the national rehabilitation movement and professional counseling movement. Training emphasizes psychological, social, medical, and vocational aspects of disability; and also the development and refinement of personal adjustment counseling skills. Graduates with an M.A. degree from the USF Department of Rehabilitation Counseling are prepared for careers as both rehabilitation specialists and mental health counselors. Special elective concentrations in substance abuse and minority rehabilitation are also offered. Other study concentrations can be arranged on an individual basis.

The Department of Rehabilitation Counseling 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). A five-year program (REF) is available to selected undergraduates, who should contact the department during their sophomore year.

The graduate program in Rehabilitation Counseling is fully accredited by the Council on Rehabilitation Education (CORE), the national accrediting body for rehabilitation counselor training programs. Upon completion of the program, graduates are eligible to sit for the national certification examination of the Commission on Rehabilitation Counselor Certification. After passing this examination, the graduate is registered with the Commission as a Certified Rehabilitation Counselor (CRC). Under Florida's Psychological Services Act, graduates with a master's degree from a recognized counseling program are eligible to sit for state licensure as Mental Health Counselors after completing the Act's work experience requirement. The graduate program offered by the Department of Rehabilitation Counseling is considered a recognized counseling program under the Psychological Services Act.

### **Requirements for the M.A. Degree**

All students applying to the Department of Rehabilitation Counseling (REH or REF) must take the GRE General Test and have these scores reported and present in their files before the departmental deadline. New students are accepted for fall and spring semesters only. The deadline for applying for admission for fall semester is March 30, and for spring semester October 15. Three letters of recommendation and a personal interview also are required. All admitted students must complete an acceptable undergraduate social science introductory statistics course or equivalent, or must complete such a course during the first semester after acceptance.

Students admitted through the Post-Baccalaureate Program (REH) must have an earned bachelor's degree. Minimum admission requirements include a total score of at least 1000 on the GRE General Test, or a "B" average during the last two years of undergraduate work, or a graduate degree from an accredited institution.

Students admitted through the five-year program (REF) must have completed 90 semester hours of work and all General Distribution requirements. Minimum admission requirements include a score of at least 1000 on the GRE General Test, or a "B" average on all work beyond 60 semester hours. Five-year program students may earn a baccalaureate degree in another major under the conditions specified in the Undergraduate Catalog.

The Department of Rehabilitation Counseling offers both a thesis and a non-thesis program. There is no language requirement; however, a comprehensive examination involving both written and practical work is required of all students.

The following 48-hour core curriculum is consistent with national certification standards for rehabilitation counselors and must be taken by all students (post-baccalaureate, five-year, thesis, and non-thesis).

EGC 5065 (4)	EGC 5850 (1)	EGC 6494 (3)
EGC 5376 (4)	EGC 6205 (4)	EGC 6727 (4)
EGC 5493 (3)	EGC 6375 (4)	EGC 6767 (4)
EGC 5725 (4)	EGC 6468 (4)	EGC 6851 (1)
EGC 6885 (8)		

### **Additional requirements for graduation include:**

**Non-thesis program:** Students in the non-thesis program must complete a minimum of 60 semester hours in the Post-Baccalaureate Program



(REH) and 150 semester hours in the Five-year Program (REF). Electives may be taken from Rehabilitation Counseling offerings or from offerings outside the department with the consent of the student's adviser.

**Thesis program:** Students in the thesis program must complete a minimum of 51 semester hours in the Post-Baccalaureate Program (48-hour core curriculum plus 3 credit hours of EGC 6971), and no less than 150 semester hours in the Five-Year Program (including 48-hour core curriculum plus 3 credit hours of EGC 6971). Additional hours to complete the minimum of 150 credit hours for students in the Five-Year Program may be elected from other Rehabilitation Counseling offerings or from related programs with the consent of the student's adviser. An oral defense of the thesis is required.

## **Social Work (SOW)**

### **Master of Social Work (M.S.W.) Degree**

The Department of Social Work offers a program leading to a Master of Social Work (M.S.W.) degree. This program was developed in accordance with the guidelines set forth by the Council on Social Work Education, the national accrediting body for social work education programs, and in accordance with the recommendations of the National Association of Social Workers. The M.S.W. program is fully accredited by the Council on Social Work Education. Dual-degree programs are available with Public Health and Gerontology.

The primary objective of the program is preparation of the graduate for professional social work practice through acquisition of specialized knowledge and skills necessary for clinical practice with individuals, families and groups. The secondary objectives of the M.S.W. program are: 1) to prepare students academically for pursuit of doctoral education in social work or related human service disciplines or professional; 2) to contribute to the needed supply of professionally trained clinical social workers in the Tampa Bay area, the state, the region, and the nation.

The M.S.W. program offers a specialized course of study in direct clinical practice. The program offers students a core curriculum, plus electives, and a supervised field experience designed to produce professionals with individual, family, and group practice skills.

The M.S.W. program is designed to produce specific competencies for clinical practice. Graduates of the M.S.W. program can reasonably be expected to demonstrate: 1) practice competency in relationship skills; 2) knowledge of the interrelationships in the biological, psychological, and sociocultural factors in human life, including the impact of disease, injury, and emotional distress and their implications for social work practice; 3) skill in methods of scientific inquiry for the purpose of advancing professional knowledge and skill; 4) basic skill in the application of a range of social work treatment methodologies for the purpose of differential diagnosis and intervention; 5) practice competency in applying a psychosocial approach to the assessment of human problems; 6) practice competency in applying a psychosocial approach to treatment of human problems through individual, family, and group modalities; 7) a basic knowledge of managerial processes in social services, including program planning, personnel management, finance, and evaluation. The M.S.W. program places great emphasis on standards of professional behavior and ethics in the practice of social work, in order to produce a competent and professionally responsible graduate.

Students admitted to the M.S.W. program will be expected to maintain a minimum GPA of 3.0, with no grade below "C" counting toward graduation. Failure to maintain the specified grade point or to exhibit responsible professional behavior may result in suspension or dismissal from the program.

Students will be admitted to the M.S.W. program once a year, with new classes starting Semester I of each academic year (August). The course of study consists of 60 credit hours taken over four semesters. Students with earned B.S.W. degrees from programs accredited by the Council on Social Work Education may be exempt from foundation courses in the first semester, but all students must earn 60 credit hours in the master's program. The curriculum is heavily sequenced and students must enroll on a full-time basis in accordance with the published schedule of the department. Failure to maintain full-time enrollment will result in dismissal from the program. All students will be required to obtain professional liability insurance prior to enrollment in field courses.

### **Admission Requirements**

1. An applicant must submit completed application forms to the Department of Social Work and to the Graduate Admissions Office by March 1 for admission the following August. It is suggested that students take the GRE by February of the year they wish to be considered for admission.
2. An applicant must have a minimum grade point average of 3.0 for the last two years of undergraduate work and/or for any graduate work completed;
3. An applicant must submit current GRE General Test scores;
4. An applicant must have previous social service related experience (minimum of one year post-undergraduate work or equivalent);
5. An applicant must provide names of previous supervisors and professor who may serve as references;
6. An applicant must interview with the Admissions Committee (with favorable action).

### **Course Requirements (non-B.S.W. students)**

<b>A. Human Behavior and Social Environment Courses</b>	
SOW 6103 .....	(3)
SOW 6104 .....	(2)
SOW 6120 .....	(5)
<b>B. Social Work Practice Courses</b>	
SOW 6346 .....	(3)
SOW 6848 .....	(2)
SOW 6342 .....	(3)
SOW 6368 .....	(3)
SOW 6362 .....	(3)
SOW 6375 .....	(3)
<b>C. Policy and Services Courses</b>	
SOW 6234 .....	(3)
SOW 6236 .....	(3)
<b>D. Social Work Research Courses</b>	
SOW 6405 .....	(3)
SOW 6433 .....	(2)
SOW 6434 .....	(2)
<b>E. Supervised Field Experience</b>	
SOW 6534 .....	(4)
SOW 6535 .....	(6)
SOW 6536 .....	(4)

**F. Additional Requirements**

Elective hours .....	(6)
<b>Summary</b>	
Foundation Courses .....	12 hours
Advanced Courses .....	28 hours
Field Courses .....	14 hours
Electives .....	6 hours
<b>Total .....</b>	<b>60 hours</b>

**Course Requirements (B.S.W. students)**

**A. Human Behavior and Social Environment Courses**

SOW 6104 .....	(2)
SOW 6120 .....	(5)

**B. Social Work Practice Courses**

SOW 6348 .....	(2)
SOW 6342 .....	(3)
SOW 6368 .....	(3)
SOW 6362 .....	(3)
SOW 6375 .....	(3)

**C. Policy and Service Courses**

SOW 6236 .....	(3)
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**D. Social Work Research Courses**

SOW 6433 .....	(2)
SOW 6434 .....	(2)

**E. Supervised Field Experience**

SOW 6534 .....	(4)
SOW 6535 .....	(6)
SOW 6536 .....	(4)

**F. Additional Requirements**

Elective hours .....	(18)
<b>Summary</b>	
Advanced Courses .....	28 hours
Field Courses .....	14 hours
Electives .....	6 hours
<b>Total .....</b>	<b>60 hours</b>

**Sociology (SOC)**

**Requirements for the M.A. Degree**

A minimum of 32 credit hours and a thesis are required for graduation.

Required courses (17 credit hours) include:

SYA 6126 .....	(3)
SYA 6305 .....	(3)
SYA 6405 .....	(4)
SYA 6505 .....	(1)
SYA 6971 .....	(6)

**Admission Requirements.** In addition to the University's GRE and GPA requirements, applicants should submit two letters of reference from previous instructors. It is advisable for an applicant to hold a baccalaureate degree which provides background in sociological theory and research methods, including statistics. All applications are evaluated by the Department's Graduate Committee. Documents are sent to the Office of Admission. Additional information is available from the Department of Sociology.

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## COOPERATIVE PROGRAMS

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### FAMU/USF Cooperative Master of Architecture Program

An eight-semester Master of Architecture program is offered jointly by the School of Architecture of Florida A&M University (Tallahassee) and the University of South Florida. Students apply to, register for, and attend classes at USF; students are admitted to FAMU in the Cooperative Program and receive the M.Arch. degree from FAMU. The FAMU/USF program is administered by an Associate Dean of the FAMU School of Architecture who is responsible for directing program activities in Tampa. Administrative offices and classes are located a short distance south of the USF Tampa campus at University Corporate Park, 10770 North 46th Street.

This Master of Architecture program is intended for students who hold a previous baccalaureate degree and who now wish to pursue the first professional degree in architecture. It is not intended for transfer students without a baccalaureate degree or for first-time college students. Transfer of graduate credits from another regionally accredited institution, or from courses taken as a non-degree-seeking student at USF, will be limited to 12 semester hours. No graduate credits towards course requirements can be given for undergraduate course work.

It is assumed that students entering the program will have already taken prerequisite courses such as calculus and physics. Students lacking these prerequisites must add these courses to curriculum requirements and will have the opportunity to take these courses upon admission to the program.

The curriculum, which is based upon the NAAB-accredited eight-semester Master of Architecture program at the FAMU School of Architecture, leads to the first professional degree, M.Arch. In recognition of the program location in one of the states large metropolitan areas and the unique opportunity this presents for studying architecture in and for an urban setting, the curriculum emphasizes urban architecture and related topics in the professional coursework as well as elective course opportunities that focus on urban issues. It is expected that this curriculum emphasis will also be reflected in the topics chosen by students for their Master's projects.

The professional content of the coursework concentrates in areas such as architectural design, graphics, history of architecture, structures, environmental technology, materials and methods of construction, theory and methods of architecture and design, professional practice, professional philosophy and ethics, building economics, architectural computer applications.

The M.Arch. degree requires approximately eight-semester or 120 semester credit hours of coursework, including a thesis or Master's project. The typical course load per semester is approximately 15 credits. Students who intent to work part-time may wish to take fewer credits per term. Students who have backgrounds in architecture or related disciplines will have their transcripts evaluated for content and course waivers may be provided. Each student, regardless of the number of courses waived in this manner, must complete a minimum of 60 semester hours in the program to be eligible for graduation. The program is concluded with a thesis or project that provides the

opportunity to undertake a study of personal interest, in-depth application of earlier course material, and to demonstrate professional competence.

## **Application to the Program**

Applicants seeking admission to the program must meet the graduate entry requirements of the School of Architecture at Florida A&M University and of the University of South Florida. To be considered for admission, applicants must:

1. Hold a bachelor's degree from a regionally-accredited institution of higher education and meet one of the following criteria:
  - a. Shall have earned a "B" average or better (3.0 on a 4.0 scale) in all work attempted while registered as an upper division student working for a bachelor's degree; or
  - b. Shall have a combined score of 1000 or better on the verbal and quantitative sections of the General Test of the Graduate Record Examination (GRE); or
  - c. Shall have earned a graduate degree from a regionally accredited institution.

(GRE scores must be submitted by all applicants regardless of which of these criteria are met.)
2. Submit a completed USF Application for Admission to Graduate School to the USF Office of Admissions, University of South Florida, Tampa, FL 33620-6900. Application forms may be obtained from the USF Graduate School, the USF Office of Admissions and the FAMU School of Architecture. Two copies of official transcripts from all post-secondary institutions attended as well as official GRE scores must be forwarded directly from the issuing agencies to the USF Office of Admissions.
3. Submit the following application materials to the Program Coordinator, FAMU/USF Cooperative M.Arch Program (University Corporate Park, 10770 N. 46th Street, Tampa, FL 33617).
  - a. Three letters of recommendation from former instructors, employers, or others in a position to assess adequately applicant's work and academic potential.
  - b. A letter of application and statement of intent regarding the applicant's educational and career objectives and choice of program.
  - c. For applicants with prior training in Architecture or related areas: Samples of student work (portfolio).
  - d. For applicants without prior architectural training: samples of other work demonstrating creative and artistic abilities and problem-solving skills.

All candidates must have a personal interview with School of Architecture advisors or faculty responsible for admissions and complete the special admissions exercise. For more program information interested students can contact the FAMU/USF Cooperative Program at 974-4031.

Deadline to apply for the program is the same as the prevailing University graduate application deadline. Contact the USF Office of Admissions for specific information.

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## COURSE DESCRIPTIONS

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Courses offered for credit by the University of South Florida are listed on the following pages in alphabetical order by college and subject area.

The first line of each description includes the State Common Course prefix and number (see below), title of the course, and number of credits. Credits separated by a colon indicate concurrent lecture and laboratory courses taught as a unit:

**PHY 3040, 3040L GENERAL PHYSICS (3:1)  
AND LABORATORY**

Credits separated by a comma indicate unified courses offered in different semesters:

**AMH 2010, 2020 AMERICAN HISTORY I, II (4,4)**

Credits separated by a hyphen indicate variable credit:

**HUM 4905 DIRECTED RESEARCH (1-5)**

The abbreviation "VAR." also indicates variable credit:

**MAT 7912 DIRECTED RESEARCH (VAR.)**

The following abbreviations are used in various course descriptions:

- GR — See Grade Point Average, minimum for good standing in this Catalog.
- PR — Prerequisite
- CI — With the consent of the instructor
- CC — With the consent of the chairperson of the department or program
- CR — Co-requisite
- Lec. — Lecture
- Lab. — Laboratory
- Dem. — Demonstration
- Pro. — Problem
- Dis. — Discussion

**The University reserves the right to substitute, not offer, or add courses that are listed in this catalog.**

### Alphabetical Listing of Departments and Programs

Course descriptions are listed by college under the following department and program headings:

<u>Department/Program</u>	<u>College</u>
Accounting	Business Administration
Administration and Supervision	Education
Adult Education	Education
African and Afro-American Studies	Social and Behavioral Sciences
American Studies	Arts and Letters
Ancient Studies (Religious Studies)	Arts and Letters
Anthropology	Social and Behavioral Sciences
Arabic (Language)	Arts and Letters
Architecture	FAMU/USF Cooperative Architecture Program
Art	Fine Arts

Arts Education	Education
Astronomy	Natural Sciences
Basic and Interdisciplinary Engineering	Engineering
Biology	Natural Sciences
Botany (Biology)	Natural Sciences
Business and Office Education	Education
Chemistry	Natural Sciences
Chemical and Mechanical Engineering	Engineering
Civil Engineering and Mechanics	Engineering
Classics	Arts and Letters
Common Body of Knowledge	Business Administration
Communication	Arts and Letters
Communicology	Social and Behavioral Sciences
Computers in Education	Education
Computer Science and Engineering	Engineering
Computer Service Courses	Engineering
Cooperative Education	University-wide courses
Content Specializations	Education
Counselor Education	Education
Criminal Justice	Social and Behavioral Sciences
Curriculum and Instruction	Education
Dance	Fine Arts
Distributive and Marketing Education	Education
Economics	Business Administration
Electrical Engineering	Engineering
Elementary Education	Education
Engineering Technology	Engineering
English	Arts and Letters
English Education	Education
Finance	Business Administration
Foreign Language Education	Education
Foundation Courses in Business (Graduate)	Business Administration
Foundations Education	Education
French (Language)	Arts and Letters
General Business Administration	Business Administration
General Foreign Languages	Arts and Letters
Geography	Social and Behavioral Sciences
Geology	Natural Sciences
Gerontology	Social and Behavioral Sciences
German (Language)	Arts and Letters
Greek (Classics)	Arts and Letters
Health Education	Education
Hebrew (Language)	Arts and Letters
Higher Education	Education
History	Social and Behavioral Sciences
Humanities	Arts and Letters
Humanities Education	Education
Human Services	Social and Behavioral Sciences
Industrial and Management Systems	Engineering
Industrial/Technical Education	Education

Information Systems and Decision Sciences	Business Administration
International Studies	Social and Behavioral Sciences
Italian (Language)	Arts and Letters
Language	Arts and Letters
Latin (Language)	Arts and Letters
Liberal Studies	Arts and Letters
Library, Media and Information Studies	Education
Linguistics	Arts and Letters
Management	Business Administration
Marine Science	Natural Sciences
Marketing	Business Administration
Mass Communication	Arts and Letters
Mathematics	Natural Sciences
Mathematics Education	Education
Measurement and Research	Education
Medical Sciences	Medicine
Medical Technology	Natural Sciences
Medicine	Medicine
Microbiology (Biology)	Natural Sciences
Music	Fine Arts
Music Education	Education, Fine Arts
Nursing	Nursing
Off-Campus Term	Social and Behavioral Sciences
Philosophy	Arts and Letters
Physical Education Elective	Education
Physical Education for Teachers	Education
Physics	Natural Sciences
Political Science	Social and Behavioral Sciences
Portuguese (Language)	Arts and Letters
Psychology	Social and Behavioral Sciences
Public Administration	Social and Behavioral Sciences
Public Health	Public Health
Reading Education	Education
Rehabilitation Counseling	Social and Behavioral Sciences
Religious Studies	Arts and Letters
Romance (Language)	Arts and Letters
Russian (Language)	Arts and Letters
Social Science Education	Education
Interdisciplinary Sciences	Social and Behavioral Sciences
Social Work	Social and Behavioral Sciences
Sociology	Social and Behavioral Sciences
Spanish (Language)	Arts and Letters
Special Education	Education
Speech Communication-English Education	Education
Theatre	Fine Arts
Women's Studies	Social and Behavioral Sciences
Zoology (Biology)	Natural Sciences



## Cross-Listing of Departments and Programs Alphabetically by College/Department/Program

<u>College/Department/Program</u>	<u>Common Course Prefixes</u>
<b>College of Arts and Letters</b>	
American Studies	AMS
Classics	CLA, CLT
Greek	GRE, GRK, GRW
Latin	LAT, LNW
Communication	COM, LIN, ORI, SED, SPC
English	AML, CRW, ENC, ENG, ENL, LAE, LIN, LIT, REA
Humanities	HUM
Language:	
General Foreign Languages	FOL
Arabic	ARA
French	FLE, FRE, FRT, FRW
German	GER, GET, GEW
Hebrew	HBR
Italian	ITA, ITT, ITW
Romance	FOW
Russian	RUS, RUT, RUW
Spanish	SPN, SPT, SPW
Liberal Studies	IDS
Linguistics	ESL, LIN, PHI, TSL
Mass Communications	ADV, FIL, JOU, MMC, PUR, RTV, VIC
Philosophy	PHH, PHI, PHM, PHP
Religious Studies	GRE, REL
Ancient Studies	CLA, HEB
<b>College of Business Administration</b>	
Accounting	ACG, TAX
Common Body of Knowledge (Graduate)	GEB
Economics	ECO, ECP, ECS, GEB
Finance	FIN, REE, RMI
General Business Administration	BUL, COC, GEB, MAN
Information Systems and Decision Sciences	COC, GEB, MNA, QMB
Management	MAN, QMB
Marketing	MAR
<b>College of Education</b>	
Administration and Supervision	EDA, EDS
Adult Education	ADE, PEP, PET
Arts Education	ARE, EDG
Business and Office Education	BTE
Computers in Education	CAP, EDF, EDG, EME
Counselor Education	EGC, SLS
Curriculum and Instruction	EDE, EDG, EDM, ESE, LAE
Distributive and Marketing Education	DEC
Elementary Education	ARE, EDE, EDG, EDS, EEC, HLP, LAE, MAE, MUE, RED, SCE, SSE

English Education	LAE
Foreign Language Education	FLE
Foundations Education	EDF, SPS
Health Education	HES
Higher Education	EDH
Humanities Education	HUM
Industrial/Technical Education	EIA, EIV, EVT
Library, Media and Information Studies	COP, LIS
Mathematics Education	CAP, MAE
Measurement and Research	EDF
Music Education	MUE
Physical Education Elective	DAA, PEL, PEM, PEN, PEQ, PET
Physical Education for Teachers	HES, LEI, PEQ, PET
Reading Education	RED
Science Education	SCE
Social Science Education	SSE
Special Education	EDG, EED, EEX, EGI, ELD, EMR, EPH, EVI
Speech Communication- English	EDG, SED
<b>College of Engineering</b>	
Basic and Interdisciplinary Engineering	EGN
Chemical and Mechanical Engineering	ECH, EMC, EML, ENU
Civil Engineering and Mechanics	CES, EAS, ECI, EES, EGM, EMA, ENV, SUR, TTE
Computer Science and Engineering	CAP, CDA, CIS, COC, COP, COT, EEL, ESI
Computer Service Courses	CAP, CDA, COC, COP
Electrical Engineering	EEL, ELR
Engineering Technology	ETE, ETG, ETI
Industrial and Management Systems	EIN, ESI
<b>College of Fine Arts</b>	
Art ARH, ART	
Dance	DAA, DAN
Music	MUC, MUG, MUH, MUL, MUN, MUO, MUS, MUT, MVB, MVK, MVP, MVS, MVV, MWW
Music Education	MUE
Theatre	THE, TPA, TPP
<b>College of Medicine</b>	
Medical Sciences	BMS, GMS
<b>College of Natural Sciences</b>	
Astronomy	AST
Biology	
Biology Courses	APB, BOT, BSC, PCB, ZOO
Botany Courses	BOT
Microbiology Courses	APB, MCB, PCB

Zoology Courses	ENY, PCB, ZOO
Chemistry	BCH, CHM, CHS
Geology	GLY, OCE
Marine Science	OCB, OCC, OCE, OCG, OCP, PCB, ZOO
Mathematics	COP, MAA, MAC, MAD, MAE, MAP, MAS, MAT, MGF, MHF, MTG, STA
Medical Technology	MLS
Physics	PHS, PHY
<b>College of Nursing</b>	
Nursing	HUN, NUR, NUU, NGR
<b>College of Public Health</b>	
Public Health	ECP, HES, HSC, NGR, PHC
<b>College of Social and Behavioral Sciences</b>	
African and Afro-American Studies	AFA, AFH, AFS, AMH, CPO, ECP, HUM, INR, PHM, PUP, SSI
Anthropology	ANT, MUH
Communicology	SPA
Criminal Justice	CCJ, CJT
Geography	GEA, GEO, MET, URP
Gerontology	GEY
History	AFH, AMH, ASH, EUH, HIS, LAH, WOH, WST
Human Services	HUS, SOW
International Studies	AFS, ASN, EUS, INR, LAS, SSI, WST
Political Science	CPO, INR, POS, POT, PUP, URP
Psychology	CBH, CLP, DEP, EXP, INP, PPE, PSB, PSY, SOP
Public Administration	PAD, URP
Rehabilitation Counseling	EGC
Social Sciences, Interdisciplinary	SSI, STA
Social Work	SOW
Sociology	SYA, SYD, SYG, SYO, SYP
Women's Studies	AFA, ANT, LIT, POS, REL, SOP, WST

### **Cross-Listing of Departments/Programs Alphabetically by Prefix**

<b>Common Course Prefix</b>	<b>Department/Programs</b>
ACG	Accounting
ADE	Adult Education
ADV	Mass Communications
AFA	African and Afro-American Studies, Women's Studies
AFH	African and Afro-American Studies, History
AFS	African and Afro-American Studies, International Studies Program
AMH	African and Afro-American Studies, History
AML	English
AMS	American Studies
ANT	Anthropology, Women's Studies

APB	Biology, Microbiology (Biology)
ARA	Arabic (Language)
ARC	Architecture
ARE	Art Education, Elementary Education
ARH	Art
ART	Art
ASH	History
ASN	International Studies Program
AST	Astronomy
BCC	Medicine
BCH	Chemistry
BMS	Medicine, Medical Sciences
BOT	Biology, Botany (Biology)
BSC	Biology
BTE	Business and Office Education
BUL	General Business Administration
CAP	Computer Service Courses, Computer Science and Engineering, Computers in Education, Mathematics Education
CBH	Psychology
CCJ	Criminology
CDA	Computer Service Courses, Computer Science and Engineering
CES	Civil Engineering and Mechanics
CHM	Chemistry
CHS	Chemistry
CIS	Computer Science and Engineering
CJT	Criminal Justice
CLA	Ancient Studies (Religious Studies), Classics
CLP	Psychology
CLT	Classics
COC	Computer Service Courses, Computer Science and Engineering, General Business Administration, Information Systems and Decision Sciences
COE	Cooperative Education
COM	Communication
COP	Computer Service Courses, Computer Science and Engineering, Library, Media and Information Studies, Mathematics
COT	Computer Science and Engineering
CPO	African and Afro-American Studies, Political Science
CRW	English
DAA	Dance, Physical Education Elective
DAN	Dance
DEC	Distributive and Marketing Education
DEP	Psychology
EAS	Civil Engineering and Mechanics
ECH	Chemical and Mechanical Engineering
ECI	Civil Engineering and Mechanics
ECO	Economics
ECP	African and Afro-American Studies, Economics, Public Health
ECS	Economics
EDA	Administration/Supervision
EDE	Curriculum, Elementary Education

EDF	Foundations, Measurement-Research, Computers in Education
EDG	Art Education, Computers in Education, Curriculum, Elementary Education, Special Education, Speech Communication-English
EDH	Higher Education
EDM	Curriculum
EDS	Elementary Education, Administration/Supervision
EEC	Elementary Education
EED	Special Education
EEL	Computer Science and Engineering, Electrical Engineering
EES	Civil Engineering and Mechanics
EEX	Special Education
EGC	Counselor Education, Rehabilitation Counseling
EGI	Special Education
EGM	Civil Engineering and Mechanics
EGN	Basic and Interdisciplinary Engineering
EIN	Industrial and Management Systems Engineering
EIA	Industrial and Technical Education
EIV	Industrial and Technical Education
ELD	Special Education
ELR	Electrical Engineering
EMA	Civil Engineering and Mechanics
EMC	Chemical and Mechanical Engineering
EME	Computers in Education
EML	Chemical and Mechanical Engineering
EMR	Special Education
ENC	English
ENG	English
ENL	English
ENU	Chemical and Mechanical Engineering
ENV	Civil Engineering and Mechanics
ENY	Zoology (Biology)
EPH	Special Education
ESE	Curriculum
ESI	Industrial and Management Systems Engineering, Computer and Engineering
ESL	Linguistics
ETE	Engineering Technology
ETG	Engineering Technology
ETI	Engineering Technology
EUH	History
EUS	International Studies Program
EVI	Special Education
EVT	Industrial/Technical Education
EXP	Psychology
FIL	Mass Communications
FIN	Finance
FLE	Foreign Language Education, French (Language)
FOL	General Foreign Languages
FOW	Romance (Language)
FRE	French (Language)
FRT	French (Language)
FRW	French (Language)

GEA	Geography
GEB	Common Body of Knowledge, Economics, General Business Administration, Information Systems & Decision Sciences
GEO	Geography
GER	German (Language)
GET	German (Language)
GEW	German (Language)
GEY	Gerontology
GLY	Geology
GMS	Medical Sciences, Medicine
GRE	Greek (Classics), Religious Studies
GRK	Greek (Classics)
GRW	Greek (Classics)
HBR	Hebrew (Language)
HEB	Ancient Studies (Religious Studies)
HES	Health Education, Physical Education for Teachers, Public Health
HIS	History
HLP	Elementary Education
HSC	Medicine, Public Health
HUM	African and Afro-American Studies, Humanities, Humanities Education
HUN	Nursing
HUS	Human Services
IDS	Liberal Studies, Off-Campus Term
INP	Psychology
INR	African and Afro-American Studies, International Studies Program, Political Science
ITA	Italian (Language)
ITT	Italian (Language)
ITW	Italian (Language)
JOU	Mass Communications
LAE	Curriculum, Elementary Education, English, English Education
LAH	History
LAS	International Studies Program
LAT	Latin (Language)
LEI	Physical Education for Teachers
LIN	Communication, English, Linguistics
LIS	Library, Media and Information Studies
LIT	English, Women's Studies
LNW	Latin (Classics)
MAA	Mathematics
MAC	Mathematics
MAD	Mathematics
MAE	Elementary Education, Mathematics, Mathematics Education
MAN	Foundation Courses in Business (Graduate), General Business Administration, Management
MAP	Mathematics
MAR	Marketing
MAS	Mathematics
MAT	Mathematics
MCB	Microbiology (Biology)
MEL	Medicine
MET	Geography

MGF	Mathematics
MHF	Mathematics
MLS	Medical Technology
MMC	Mass Communication
MNA	Information Systems and Decision Sciences
MTG	Mathematics
MUC	Music
MUE	Elementary Education, Music Education
MUG	Music
MUH	Anthropology, Music
MUL	Music
MUN	Music
MUO	Music
MUS	Music
MUT	Music
MVB	Music
MVK	Music
MVP	Music
MVS	Music
MVV	Music
MVW	Music
NGR	Nursing, Public Health
NUR	Nursing
NUU	Nursing
OCB	Marine Science
OCC	Marine Science
OCE	Geology, Marine Science
OCG	Marine Science
OCP	Marine Science
ORI	Communication
PAD	Public Administration
PCB	Biology, Marine Science, Microbiology (Biology), Zoology (Biology)
PEL	Physical Education Elective
PEM	Physical Education Elective
PEN	Physical Education Elective
PEP	Adult Education
PEQ	Physical Education Elective, Physical Education for Teachers
PET	Physical Education Elective, Physical Education for Teachers, Adult Education
PHH	Philosophy
PHI	Linguistics, Philosophy
PHM	African and Afro-American Studies, Philosophy
PHP	Philosophy
PHS	Physics
PHY	Physics
POR	Portuguese (Language)
POS	Political Science, Women's Studies
POT	Political Science
POW	Portuguese (Language)
PPE	Psychology
PSB	Psychology
PSY	Psychology
PUP	African and Afro-American Studies, Political Science

PUR	Mass Communications
QMB	Information Systems and Decision Sciences, Management
REA	English
RED	Elementary Education, Reading Education
REE	Finance
REL	Religious Studies, Women' Studies
RMI	Mass Communications
RTV	Mass Communications
RUS	Russian (Language)
RUT	Russian (Language)
RUW	Russian (Language)
SCE	Elementary Education, Science Education
SED	Communication, Speech Communication-English Education
SLS	Counselor Education
SOP	Psychology, Women's Studies
SOW	Human Services, Social Work
SPA	Communicology
SPC	Communication
SPN	Spanish (Language)
SPS	Foundations
SPT	Spanish (Language)
SPW	Spanish (Language)
SSE	Elementary Education, Social Science Education
SSI	African and Afro-American Studies, International Studies Program, Social Sciences Interdisciplinary
STA	Mathematics, Social Sciences Interdisciplinary
SUR	Civil Engineering and Mechanics
SYA	Sociology
SYD	Sociology
SYG	Sociology
SYO	Sociology
SYP	Sociology
TAX	Accounting
THE	Theatre
TPA	Theatre
TPP	Theatre
TSL	Linguistics
TTE	Civil Engineering and Mechanics
URP	Geography, Political Sciences, Public Administration
VIC	Mass Communications
WOH	History
WST	History, International Studies Program, Women's Studies
ZOO	Biology, Marine Science, Zoology (Biology)



## Course Level Definition

### Graduate 5000-5999 Senior/Graduate Level

#### Level 6000-Up Graduate Level

## Architecture

### **ARC 5055 ARCHITECTURAL COMPUTER TECHNOLOGY (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. Computer programming for analysis of problems for which no prepared software exists. (Prerequisite: INTRO COMPUTERS, ARC 5136 GRAPHICS II)

### **ARC 5060 ARCHITECTURAL DESIGN I (5)**

Sensory studies (light, color, sound, texture), anthropometric studies, functional analysis (activities and their relationships), visual analysis (scale, architectural components) of a small personal space. Documentation (drawings, diagrams, models) of selected building environments. Study and documentation of a well-known architect's vocabulary, philosophy and style. Theories of scale and personal environment.

### **ARC 5061 ARCHITECTURAL DESIGN II (5)**

Study of cultural, social, political, religious, economical, physical (climate, topography, vegetation, architectural context), and technical determinants of buildings. Analysis of activities, behavioral needs, life styles based on observation and user interviews. Use of various diagrammatic representation techniques for the organization and analysis of problem and user requirement information.

### **ARC 5062 ARCHITECTURAL DESIGN III (5)**

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, and meaning/imagery. Building technology (awareness of structural organization, services networks, construction processes and materials. Aspects of human behavior as design determinant. (Prerequisites: ARC 5061 DESIGN II; ARC 5216 THE BUILDING ARTS; ARC 5136 GRAPHICS II; ARC 5556 STRUCTURES I; ARC 5715 ARCH. HISTORY I, ARC 5467 MATERIAL & METHODS OF CONSTRUCTION I; ARC 5686 ENV. TECHNOL. I)

### **ARC 5064 ARCHITECTURAL DESIGN V (5)**

PR : ARC 5063 and CI. 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.

**ARC 5065 ARCHITECTURAL DESIGN VI****(5)**

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: ARC 5064 DESIGN V)

**ARC 5116 GRAPHICS I****(3)**

Basic (freehand) drawing and visual perception. Orthographic, oblique, and perspective projection. Line, texture, shape, volume, value, color, space. Media: graphite, colored pencils, inks, felt tip marker. Visual perception and visual/verbal communication skills. Freehand drawing as a problem-solving tool.

**ARC 5129 GRAPHICS II****(3)**

PR: ARC 5116. Mechanical drawing coupled with the continuance of freehand drawing as the basic tools for the communication of ideas in a two-dimensional format, the use of standard drafting equipment and media. The representation of environmental objects using mechanical drawing in orthographic, oblique, and perspective projection. Three-dimensional model-making.

**ARC 5132 GRAPHICS III (ADVANCED ARCHITECTURAL PRESENTATION/COLOR THEORY)****(3)**

Media, techniques and (physical and psychological) strategies of state-of-the-art architectural presentations. Communication and marketing of personal skills, office capabilities, and specific architectural work. Color theory. The use of color as a tool for the communication of ideas in two- and three-dimensional format, and the use of color in the built environment. (Prerequisite: ARC 5136 GRAPHICS II)

**ARC 5216 THE BUILDING ARTS****(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 specializations of the experts involved in the process, and in the various academic courses that prepare the architect for his work.

**ARC 5256 DESIGN METHODS****(3)**

PR: Calculus; ARC 5061. Survey of major schools of thought in design theory, methods of design and problem-solving, and design research. 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.

**ARC 5424 INTRODUCTION TO BUILDING ECONOMICS****(3)**

PR: ARC 5256; ARC 5055. The assessment of economic performance of building projects. Fundamentals of economic evaluation. Methods, data types and sources for estimating initial cost of building projects; the use of cost data manuals and other estimating tools. Measures and techniques for assessing future (in-use) costs and economic performances of buildings.

**ARC 5464 MATERIALS AND METHODS OF CONSTRUCTION III****(3)**

Design, construction, and performance of building materials, components, and building assemblies. In-depth analysis of the performance

of construction details and assemblies of selected buildings in relation to climate, use, production and construction techniques and processes, and craftsmanship on the part of builders and architects. The analysis of problems identified in these buildings, and the development of solutions to these problems. The sensitive use of materials in response to the physical setting and social environment. Understanding the organization of the body of knowledge about building materials and details, and the development of skills in locating, organizing, evaluating and using that information. (Prerequisite: ARC 5469 MAT. & METH. OF CONSTR. II)

**ARC 5467 MATERIALS AND METHODS CONSTRUCTION I (3)**

Qualitative overview of properties and limitations of the most common materials used in building construction, and their place and performance in the context of buildings. Emphasis is on the use of materials in contemporary building but reference is made to how materials and their uses have changed through history. The primary focus is on the interface between the interior and the exterior of a building — the exterior enclosure.

**ARC 5469 MATERIALS AND METHODS OF CONSTRUCTION II (3)**

This course continues the exploration of how buildings and their parts respond to the forces of their environment. Introduction to the standards of drafting expected in an architectural office. Standard building details and assemblies. The design of construction details and their representation in a partial set of construction drawings of a building for which the student has designed the enclosure details. Specifications. Building codes; barrier-free design. Visits to buildings, construction sites, suppliers and producers of material and building components. (Prerequisite: ARC 5467 MATER. & METH. CONSTR. I, ARC 5556 STRUCTURES I)

**ARC 5556 ARCHITECTURAL STRUCTURES I (3)**

Structural concepts and principles of behavior of structural elements and systems. Principles of statics; principles of mechanics of materials. Relationships to architectural design. compatibility of the building structure with various other building systems: spatial, functional, circulatory, environmental, constructional. Element and system configuration.

**ARC 5561 ARCHITECTURAL STRUCTURES III (3)**

Introduction to the concepts and theories of structural analysis and design in reinforced concrete; practical application in building structures. Fundamentals of prestressed concrete. Introduction to the behavior of continuous beams and frames. Fundamentals of wind and earthquake design. (Prerequisite: ARC 5585 STRUCT. II)

**ARC 5585 ARCHITECTURAL STRUCTURES II (3)**

Truss analysis. Deflection theory. Properties of materials. Analysis and design of timber and steel elements and systems. Selection of beams in wood and steel, based on moment, shear, and deflection. Analysis and selection of wood and steel columns. Selection of steel bar joists. Differentiation among basis structural materials on the basis of physical properties. "Framing-out" of plans in timber and steel, using rational spans. (Prerequisites: ARC 5556 STRUCTURES I)

**ARC 5686 ENVIRONMENTAL TECHNOLOGY I (3)**

PR: Physics. Exploration of the climatic response in the built environment. Lessons from historic settlements and shelter patterns. Climatic factors influencing design. Passive design methodology and human thermal comfort. Climatic zones. Natural ventilation, passive heating and cooling.

Energy systems. Understanding of the basic principles of passive design and integration in contemporary design. Community and energy use.

**ARC 5687 ENVIRONMENTAL TECHNOLOGY II (3)**

The technical problems associated with providing a thermal envelope and control systems for human habitation and comfort in a variety of climates throughout the U.S. Heating, cooling and airconditioning technology. The functions performed by the various environmental services, and the human factors that necessitate those functions. General concepts for the design of such services and systems, and quantitative measures by which their performance may be evaluated. Energy economy in buildings. (Prerequisite: ARC 5686 ENV. TECH. I)

**ARC 5715 ARCHITECTURAL HISTORY I (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.

**ARC 5745 ARCHITECTURAL HISTORY II (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.

**ARC 5931 SPECIAL STUDIES (3-5)**

Description of these courses will vary from term to term. Check with the Program Office for the current description.

**ARC 5931L ARCHITECTURAL DESIGN FOR TRANSFER STUDENTS (5)**

A comprehensive and thorough review of the principles of design and the problem solving process. Analysis of methodologies used by respected designers, understanding of this material, translation and synthesis with abstract three dimensional thinking will be emphasized. Review of the nature of materials, structural principles, building systems, scale, programming for user needs will be combined with pertinent design theory and methodology to enable the student to create spatial solutions to architectural problems of an appropriate level of complexity. Restricted to Majors. Not available on a S/U basis. Not cross-linked. Prerequisites: ARC 5062 DESIGN III; ARC 5216 THE BUILDING ARTS; ARC 5136 GRAPHICS II; ARC 5556 STRUCTURES I; ARC 5715 ARCH. HISTORY I; ARC 5467 MATERIALS & METHODS OF CONSTRUCTION I)

**ARC 6279 ARCHITECTURAL PROFESSIONAL PRACTICE (3)**

A survey of various aspects of the practicing architectural firm. Business organization, administration and management in architectural firms. Project management; overview of various project delivery and phasing techniques. Information management systems and resources.

**ARC 6345 ARCHITECTURAL DESIGN VII (5)**

Design of multi-purpose, complex building project at an urban scale, applying all relevant criteria and professional standards, e.g. as they would be applied to NCARB professional licensing examination in design. Com-

prehensive documentation and presentation of the project. (Prerequisite: ARC 5065 DESIGN VI; ARC 5424 BLD. ECON.; ARC 5561 STRUCT. III; ARC 5464 MATER. & METH. OF CONSTR. III; ARC 5688 ENVIR. TECHN. III)

**ARC 6971 MASTER'S PROJECT (3)**

The Master's Project represents the most significant project in the student's academic preparation for a career in architecture, and the demonstration of the student's ability to synthesize learned skills into a convincing independent work of professional quality. The Master's Project will typically be a major design project, although the format of a more traditionally academic thesis is also possible. In either case, the student will work with a committee composed of advisors of his/her choice in selecting the topic of the project, organizing and carrying out the work in an independent and self-paced manner. The outcome should be an original project which demonstrates the student's academic and professional competence according to the state of the art. (Prerequisite: ARC 6974 Progr./RESEARCH/MASTER'S PROJ. PLANNING)

**ARC 6974 PROGRAMMING, RESEARCH; MASTER'S PROJECT PLANNING (3)**

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 and 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 should have prepared an acceptable master's project proposal which will allow them to proceed with the master's project during the following term. (Prerequisite: ARC 5065 DESIGN VI)

## College Of Arts & Letters

### AMERICAN STUDIES

Chairperson: *J.B. Moore*; Distinguished Professor: *R.B. Nye*; Professors: *D.R. Harkness, J.B. Moore*; Associate Professors: *R.A. Banes, R.E. Snyder*; Assistant Professor: *P.J. Brewer*; Other Faculty: *R.C. O'Hara, J.A. Parrish, S.A. Zylstra*.

**AMS 6254 U.S.A.: A DECADE IN DEPTH (3)**

PR: Graduate standing. Open to non-majors. An example would be The Thirties: Inter-related Aspects of American Life from the Stock Market Crash to Pearl Harbor. May be repeated, up to 6 credit hours.

**AMS 6805 MAJOR IDEAS INFLUENCING AMERICAN CIVILIZATION (3)**

PR: Graduate standing. Open to non-majors. Examination of such concepts as individualism, freedom and liberalism as embodied in literature, politics, religion, architecture, economics, science and technology.

- AMS 6901 DIRECTED READINGS IN AMERICAN STUDIES** (1-3)  
PR: Graduate standing. Open to non-majors. Guided reading designed to expand a student's knowledge in a particular area of interest. May be repeated up to 4 credit hours.
- AMS 6915 DIRECTED RESEARCH** (VAR.)  
PR: G.R. Master's level. Repeatable. (S/U only).
- AMS 6934 SPECIAL TOPICS IN AMERICAN STUDIES** (1-3)  
PR: Graduate standing. Open to non-majors. Variable titles offered periodically on topics of special interest to American Studies students. May be repeated up to 4 credit hours.
- AMS 6938 SEMINAR IN AMERICAN STUDIES** (3)  
PR: Graduate Standing. Open to Non-majors. Advanced research in interdisciplinary fields and topics determined by the instructor. May be repeated with permission of Graduate Director.
- AMS 6940 INTERNSHIP IN AMERICAN STUDIES** (1-3)  
PR: Graduate standing, majors. A structured, out-of-class learning experience providing first hand, practical training in American Studies-related professional careers in the community. Repeatable. (S/U only.)
- AMS 6971 THESIS: MASTER'S** (VAR.)  
Repeatable. (S/U only.)

## ANCIENT STUDIES (See Religious Studies)

### Classics

*Chairperson:* A.L. Motto; *Professor:* A.L. Motto; *Associate Professor:* J.D. Noonan; *Assistant Professor:* Sara R. Mandell; *Other Faculty:* J.R. Clark, W.H. Murray, J.F. Strange, G.K. Tipps.

### Greek

- GRW 5905 DIRECTED READING** (1-4)  
Departmental approval required.

### Latin

- LNW 5900 DIRECTED READING** (1-4)  
Departmental approval required. (S/U only)
- LNW 5934 SELECTED TOPICS** (4)  
Study of an author, movement or theme. May be repeated up to 12 credit hours.
- LNW 6325 ROMAN ELEGIAC POETS** (3)  
PR: Graduate standing. Readings in Catullus, Propertius, Tibullus. Study of technique and tradition in Roman lyric poetry.
- LNW 6365 ROMAN SATIRE** (3)  
PR: Graduate standing. Readings in the Satyricon of Petronius, Seneca's Apocolocyntosis, the satires of Horace, Juvenal, and Martial. Study of the nature of satire and of the tradition and art of formal verse satire.
- LNW 6505 ROMAN PHILOSOPHY** (3)  
PR: Graduate standing. Readings in the philosophic writings of Cicero, Seneca, and Lucretius, together with an examination of Stoic, Epicurean, and Eclectic thought.

- LNW 6655 HORACE** (3)  
PR: Graduate standing. Readings in the Odes and Epodoes of Horace; study of the Ode's tradition.
- LNW 6665 VERGIL** (3)  
PR: Graduate standing. Readings in the Aeneid, the Eclogues, and the Georgics.
- LNW 6910 SUPERVISED RESEARCH** (3)  
PR: Graduate standing. Departmental approval required.
- LNW 6940 SUPERVISED TEACHING** (3)  
PR: Graduate standing. Departmental approval required.

## COMMUNICATION

*Chairperson:* A.P. Bochner; *Professors:* A.P. Bochner, P.J. Newcombe, R.J. Schneider; *Associate Professors:* D.A. Carter, K.N. Cissna, B.F. Downs, C.J. Jablonski, N.C. James, L.S. Pettegrew, D.T. Porter; *Assistant Professor:* M.L. Vanderford; *Other Faculty:* D.H. Smith

- COM 5123 COMMUNICATION ASSESSMENT IN ORGANIZATIONS** (3)  
PR for undergraduates, COM 3120 or Ci; graduates, Ci. A study of the means by which the communication specialist intervenes in organizational behavior. An emphasis is placed on gathering and analyzing organizational communication data.
- COM 6001 INTRODUCTION TO GRADUATE STUDY IN COMMUNICATION** (3)  
Required of all M.A. candidates. An introduction to the aims and methodologies of the graduate discipline of communication: its relationship to the adjacent arts and sciences; bibliographical resources; methods of research; and a brief survey of the historical development of the field with emphasis on current issues in theory, research, and practice.
- COM 6121 COMMUNICATION THEORY IN ORGANIZATIONS** (3)  
A study of communication theory and behavior within organization settings: role of communication, communication climates, communication networks, leadership.
- COM 6312 RESEARCH METHODS IN COMMUNICATION** (3)  
Critical examination of research design, procedures, and reporting of empirical studies in communication.
- COM 6400 COMMUNICATION THEORY** (3)  
PR: COM 6001. An examination of communication theory through selected reading in the works of major theorists past and present.
- ORI 5145 ORAL INTERPRETATION OF DRAMATIC LITERATURE II** (3)  
PR: ORI 4140. A study of selected pre-modern dramas with special emphasis on problems of interpretation for oral performance.
- ORI 5210 ORAL INTERPRETATION OF CHILDREN'S LITERATURE** (3)  
PR: ORI 3000 or Ci. A study of the theories and practice in the oral interpretation of poetry and narrative fiction for children with special emphasis on classical and modern literature.

- ORI 6148 ORAL INTERPRETATION OF THE PLAYS OF SHAKESPEARE** (3)  
PR: ORI 3000 or Cl. A study of selected plays of Shakespeare from the point of view of the oral interpreter.
- ORI 6350 LITERARY ADAPTATION FOR ORAL INTERPRETATION** (3)  
Composition and adaptation of literary materials for oral presentation. An investigation of approaches to various genres: poetry, fiction, and non-fiction.
- ORI 6410 HISTORY AND THEORIES OF ORAL INTERPRETATION** (3)  
A study of the history, critical writings, uses, and developments of the art of oral interpretation, with analysis of the principles and practices.
- ORI 6930 COMMUNICATION AESTHETICS** (3)  
This course examines the historical evolution of the aesthetic dimension of communication as performance in terms of major concepts and theorists from Plato to the present.
- SED 6943 GRADUATE INSTRUCTION METHODS** (3)  
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credits per student. (S/U only.)
- SPC 5335 NONVERBAL COMMUNICATION** (3)  
PR: Senior standing and Cl. A survey of scientific and pragmatic research in nonverbal behavior relating to communication.
- SPC 5912 RESEARCH** (1-4)  
PR: Senior or graduate standing and Cl.
- SPC 5933 SELECTED TOPICS** (1-4)  
PR: Senior or graduate standing. Undergraduates must have minimum GPA 3.0, 15 hours of core requirements, 9 elective hours completed and Cl.
- SPC 6149 COMMUNICATION: ANALYSIS AND MEASUREMENT** (3)  
Analysis and measurement of communication, including the theory and application of selected instruments and techniques for measuring and observing communication.
- SPC 6231 RHETORICAL THEORY** (3)  
Historical development of rhetorical theory from Plato to contemporary theorists with emphasis upon the evolution of trends and concepts in rhetorical theory.
- SPC 6391 SEMINAR INTERPERSONAL COMMUNICATION** (3)  
Study of theory and research related to interpersonal communication.
- SPC 6442 THEORY AND RESEARCH IN SMALL GROUP COMMUNICATION** (3)  
PR: SPC 3441. Study of contemporary theories and research relating to communication in small group settings.
- SPC 6515 THEORIES OF ARGUMENT** (3)  
An examination of argumentative theory through the medium of selected reading in the works of major theorists past and present. In addition, selected examples from the argumenative persuasion of each historical period will be examined and analyzed for the purpose of correlating theory with practice.



- SPC 6545 PERSUASION** (3)  
PR: SPC 3513. Study of contemporary theories and research in persuasion.
- SPC 6610 HISTORY AND CRITICISM OF AMERICAN PUBLIC ADDRESS** (3)  
Criticism of selected speeches and speakers of American public address, studied against a background of political, social and intellectual issues.
- SPC 6682 THEORIES OF RHETORICAL CRITICISM** (3)  
The study of theoretical perspectives in rhetorical criticism. The application of criticism to selected rhetorical situations.
- SPC 6903 DIRECTED READINGS** (1-4)
- SPC 6913 DIRECTED RESEARCH** (VAR.)  
PR: GR. Master's level. Repeatable. (S/U only.)
- SPC 6934 SELECTED TOPICS IN COMMUNICATION** (1-4)
- SPC 6971 THESIS: MASTER'S** (VAR.)  
Repeatable. (S/U only.)

## ENGLISH

*Chairperson:* W.T. Ross; *Professors:* J.P.W. Rogers (DeBartolo Chair in the Liberal Arts), J.G. Bentley, L.R. Broer, J.R. Clark, S.M. Deats, H.A. Deer, I. Deer, R.F. Dietrich, F.J. Fabry, S.R. Fiore, W. Garrett, J.S. Hatcher, E.F. Henley, J.P. Hinz, E.W. Hirshberg, J.J. Iorio, D.L. Kaufmann, H.C. Kiefer, J.B. Moore, W.E. Morris, J.A. Parrish, Jr. (Emeritus), R.S. Pawlowski, W.D. Reader, W.T. Ross, S.J. Rubin, W.H. Scheuerle, E.E. Smith, D.A. Wells; *Associate Professors:* R.E. Chisnell, R.M. Figg III, R.E. Hall, M.C. Harmon, W.J. Heim, M.G. Ochshorn, G.A. Olson, R.D. Wyly, Jr. *Assistant Professors:* R.M. Baum, A.G. Bryant, P.J. Collins, R.L. Hewitt, F.T. Mason, E.A. Metzger, J.M. Moxley, P.J. Sipiora, N.J. Tyson, J.D. Walther, F.J. Zbar.

- AML 6017 STUDIES IN AMERICAN LITERATURE TO 1860** (3)  
PR: Graduate standing. Selected focused studies in American literature before 1860; the Puritans, Franklin, Cooper, Irving, Poe, Emerson, Hawthorne, Melville, and others. May be retaken with different subject matter three times.
- AML 6018 STUDIES IN AMERICAN LITERATURE — 1860 TO 1920** (3)  
PR: Graduate standing. Selected focused studies in American literature: Whitman, Twain, Howells, James, Crane, Dreiser, and others. May be retaken with different subject matter three times.
- AML 6027 STUDIES IN MODERN AMERICAN LITERATURE** (3)  
PR: Graduate standing. Modern American drama, poetry, fiction, and literary criticism; authors include Faulkner, Hemingway, Fitzgerald, O'Neill, Anderson, Wolfe, Cummings, Frost, and Eliot. May be retaken with different subject matter three times.
- ENC 6319 SCHOLARLY WRITING FOR PUBLICATION IN ENGLISH STUDIES** (3)  
PR: Graduate standing. Methods of writing and publishing scholarly articles, monographs, and textbooks in rhetoric and composition, literary scholarship and criticism.

**ENC 6336 RHETORICAL DIMENSIONS OF COMPOSITION (3)**

PR: Graduate standing. Examines the evolving relationship between rhetoric and composition from antiquity to the present.

**ENC 6700 STUDIES IN COMPOSITION THEORY (3)**

PR: Graduate standing. Major theories and models of composing. Selected theorists include Rohman, Emig, Sommers, Flowers, and Hayes. May be taken 3 times with different subject matter.

**ENC 6720 STUDIES IN COMPOSITION RESEARCH (3)**

PR: Graduate standing. 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. May be taken 3 times with different subject matter.

**ENC 6740 THEORY AND DEVELOPMENT OF WRITING PROGRAMS (3)**

PR: Graduate standing. 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.

**ENG 6009 BIBLIOGRAPHY FOR ENGLISH STUDIES (3)**

PR: Graduate standing. Detailed study of bibliographies of cultural milieus, genres, periods, and authors. Consideration of the profession's standards and procedures for publishing scholarly research. In addition to library research, the student will also submit one scholarly article of publishable quality.

**ENG 6017 STUDIES IN STYLE (3)****(Advanced Composition for Teachers)**

PR: Graduate standing. Poetics, rhetoric, dramatic style, prose style, short fiction, the novel, and the essay. May be retaken with different subject matter three times.

**ENG 6018 SCHOLARSHIP AND CRITICISM (3)**

PR: Graduate standing. Selected focused study of research approaches to English. May be retaken with different subject matter once.

**ENG 6916 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**ENG 6939 GRADUATE SEMINAR IN ENGLISH (3)**

PR: Consent of graduate adviser. May be retaken with different subject matter to a maximum of six hours.

**ENG 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

**ENG 7916 DIRECTED RESEARCH (VAR.)**

PR: GR. Ph.D. level. Repeatable. (S/U only.)

**ENG 7939 DOCTORAL SEMINAR (3)**

PR: Admission to Ph.D. Program. This seminar provides intensive small-group discussion as well as shared and individual guided research in a student's area of doctoral specialty. Repeatable up to six credit hours.

**ENG 7980 DISSERTATION: DOCTORAL (VAR.)**

PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

**ENL 6206 STUDIES IN OLD ENGLISH (3)**

PR: Graduate standing. A study of Old English language, prose style, poetry. May be retaken with different subject matter three times.

**ENL 6216 STUDIES IN MIDDLE ENGLISH (3)**

PR: Graduate standing. Selected focused studies in language and in various authors and writings, 1100-1500; Chaucer, the Pearl poet, Everyman, ballads, drama. May be retaken with different subject matter three times.

**ENL 6227 STUDIES IN SIXTEENTH-CENTURY BRITISH LITERATURE (3)**

PR: Graduate standing. Selected focused studies in sixteenth-century British literature; Shakespeare, Sidney, Spenser, Marlow, and others. May be retaken with different subject matter three times.

**ENL 6228 STUDIES IN SEVENTEENTH-CENTURY BRITISH LITERATURE (3)**

PR: Graduate standing. Selected focused studies in British literature, 1600-1660; Bacon, Donne, Johnson, Herbert, Milton, and others. May be retaken with different subject matter three times.

**ENL 6236 STUDIES IN RESTORATION AND EIGHTEENTH-CENTURY BRITISH LITERATURE (3)**

PR: Graduate standing. Selected focused studies in Restoration-Eighteenth-Century British literature: Dryden, Defoe, Pope, Swift, Fielding, Sheridan, Johnson, Boswell, and others. May be retaken with different subject matter three times.

**ENL 6246 STUDIES OF THE ENGLISH ROMANTIC PERIOD (3)**

PR: Graduate standing. A study of pre-Romantic and Romantic prose, fiction, nonfiction, and poetry. May be retaken with different subject matter three times.

**ENL 6256 STUDIES IN VICTORIAN LITERATURE (3)**

PR: Graduate standing. A study of Victorian poetry, Victorian fiction, Victorian non-fictional prose, and Victorian drama. May be retaken with different subject matter three times.

**ENL 6276 STUDIES IN MODERN BRITISH LITERATURE (3)**

PR: Graduate standing. A study of Irish and English drama, the modern novel, poetry, criticism, and the short story. May be retaken with different subject matter three times.

**LAE 6375 PROBLEMS IN COLLEGE ENGLISH INSTRUCTION: COMPOSITION (3)**

PR: Graduate standing. An examination of the objectives of freshman English and an investigation of current techniques for achieving those objectives, emphasizing the problems of developing critical reading and the techniques of expository writing at the college level.

**LAE 6389 PROBLEMS IN COLLEGE ENGLISH INSTRUCTION: LITERATURE (3)**

PR: Graduate standing. 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 that will teach college English teachers the variety and importance of literary techniques and their relevance to subject matter.

**LAE 6392 PRACTICE IN TEACHING COMPOSITION (1)**

In semester I required of and open only to Teaching Assistants new to U.S.F.'s Freshman English program. Gives practical guidance in preparing to teach composition. Meets once a week for three hours. (S/U only.)

**LAE 7376 PROBLEMS IN ADVANCED ENGLISH INSTRUCTION OF COMPOSITION (3)**

PR: Admission to the Ph.D. program in English. 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.

**LAE 7390 PROBLEMS IN ADVANCED ENGLISH INSTRUCTION AND SCHOLARLY RESEARCH (3)**

PR: Ph.D. Candidacy. This course provides closely supervised training in upper-level college English instruction and experience with professional research. Experience in the lecture, seminar discussion, examining, evaluation, conferences, directing undergraduate research, course development, use of secondary materials, publication procedure, and colation.

**LIN 5107 HISTORY OF THE ENGLISH LANGUAGE (3)**

PR: Senior or Graduate standing. The course will trace the history of the English language from its beginnings in continental Europe, through the Anglo-Saxon and Middle English periods, the Renaissance, and the Nineteenth Century, to the present day with emphasis on both the structural development of the language and the political, social, and intellectual forces that determined this development.

**LIT 6096 STUDIES IN CONTEMPORARY LITERATURE (3)**

PR: Graduate standing. Drama, poetry, fiction, and literary criticism; authors to be studied include Ionesco, Thomas, Miller, T. Williams, Beckett, Camus, and Burgess. May be retaken with different subject matter three times.

**LIT 6105 STUDIES IN CONTINENTAL LITERATURE (3)**

PR: Graduate standing. General areas include the Renaissance, the Enlightenment, the Novel in Europe, the Romantic Movement on the Continent, and Classical Comedy. May be retaken with different subject matter three times.

**LIT 6934 SELECTED TOPICS IN ENGLISH STUDIES (1-6)**

PR: Graduate standing. Current topics offered on a rotating basis include The Nature of Tragedy; The Nature of Comedy and Satire; The Nature of Romanticism and Classicism; and The Nature of Myth, Allegory, and Symbolism. Other topics will be added in accordance with student demand and instructor interest.

**HUMANITIES**

*Chairperson:* S.L. Gaggi; *Professors:* C.B. Cooper, S.L. Gaggi, T.B. Hofman, H. Juergensen, G.S. Kashdin (Emeritus), E.M. MacKay (Emeritus), D. Rutenberg, L.L. Shackson (Emeritus); A.J. Sparks; S.A. Zylstra.

**HUM 6412 STUDIES IN THE HUMANITIES OF INDIA (4)**

PR: Graduate standing. Examples from the arts and letters of India and the relationship of these arts to the Hindu and Buddhist philosophy-religions.

**HUM 6414 STUDIES IN THE HUMANITIES OF CHINA (4)**

PR: Graduate standing. Examples from the arts and letters of China; their relationship to Taoism, Confucianism and other Chinese philosophies; Western influences on twentieth century Chinese arts and letters.

**HUM 6415 STUDIES IN JAPANESE ARTS AND LETTERS (4)**

PR: Graduate standing. Examples from the arts and letters of Japan, their relationship to Zen Buddhism and other Japanese philosophy-religions; Western influences on twentieth century Japanese arts and letters.

**HUM 6453 STUDIES IN AMERICAN ARTS AND LETTERS I (4)**

PR: Graduate standing. Case studies in the arts and letters of the United States.

**HUM 6456 STUDIES IN AMERICAN ARTS AND LETTERS II (4)**

PR: Graduate standing. Case studies in the arts and letters of the United States.

**HUM 6465 STUDIES IN LATIN AMERICAN ARTS AND LETTERS (4)**

PR: Graduate standing. Analysis of selected Latin American works of art in their cultural context. Repeatable once with change of content.

**HUM 6475 STUDIES IN CONTEMPORARY ARTS AND LETTERS (3)**

PR: Graduate standing. Concentration on major artists and recent trends. Repeatable once with change of content.

**HUM 6493 STUDIES IN CLASSICAL ARTS AND LETTERS (3)**

PR: Graduate standing. Examples from the arts and letters of ancient Greece and their relationships to Aegean myths, religions and philosophies. Classical Greek influences on later cultures. Repeatable once with change of content.

**HUM 6494 STUDIES IN MEDIEVAL ARTS AND LETTERS (3)**

PR: Graduate standing. Studies in medieval philosophies, visual arts, music, literature and architecture, and their inter-relationships. Repeatable once with change of content.

**HUM 6495 STUDIES IN RENAISSANCE ARTS AND LETTERS (3)**

PR: Graduate standing. Masterpieces and major artists of the Renaissance in Continental Europe and England. Repeatable once with change of content.

**HUM 6496 STUDIES IN ENLIGHTENMENT ARTS AND LETTERS (3)**

PR: Graduate standing. Studies in painting, sculpture, music, literature, and architecture in relation to philosophical determinism and political absolutism. Repeatable once with change of content.

**HUM 6497 STUDIES IN NINETEENTH CENTURY ARTS AND LETTERS (3)**

PR: Graduate standing. 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. Repeatable once with change of content.

**HUM 6909 INDEPENDENT STUDY (VAR.)**

Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**HUM 6915 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**HUM 6934 SELECTED TOPICS IN HUMANITIES (1-3)**

Each topic is a course of study in a subject not covered by a regular course.  
May be repeated for credit with change of content.

**HUM 6971 THESIS: MASTERS (1-3)**

In consultation with an adviser the student plans, organizes, and writes a thesis on a topic in interdisciplinary arts and ideas. (S/U only.)

**FOREIGN LANGUAGES**

*Director:* R.A. Preto-Rodas; *Professors:* C.W. Capsas, E.F. McLean, E.J. Neugaard, R.A. Preto-Rodas, C.E. Scruggs; R.A. Stelzmann; *Associate Professors:* C.J. Cano, R.A. Cherry, Jr., W.H. Grothmann, W.R. Hampton, D. Ierardo, V.E. Peppard, J.C. Tatum; *Assistant Professors:* M. Esformes, A.J. Hechiche, C.M. Probes.

**FOL 5906 DIRECTED STUDY (1-3)**

PR: FOL 4200 or equivalent.

**French****FLE 6829 GRADUATE INSTRUCTION METHODS (1-4)**

Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of four credits per student. (S/U only.)

**FRE 5425 ADVANCED WRITTEN EXPRESSION (3)**

PR: FRE 4421, or equivalent. Course is designed to give advanced training in free composition in French.

**FRE 5566 CONTEMPORARY FRANCE (3)**

PR: FRE 3500 or equivalent or graduate standing. 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.

**FRE 6910 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**FRE 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

**FRW 5222 CLASSICAL PROSE AND POETRY (3)**

PR: FRW 4101. Emphasis on Malherbe, LaFontaine, Boileau, Descartes, and Pascal.

**FRW 5226 20TH CENTURY POETRY AND THEATRE (3)**

PR: FRW 4101. Valery, Claudel, Anouilh, Montherland, Sartre, Ionesco.

**FRW 5286 THE 20TH CENTURY NOVEL (3)**

PR: FRW 4100. Proust, Gide, Mauriac, Malraux, Camus, Robbe-Grillet.

**FRW 5310 CLASSICAL DRAMA (3)**

PR: FRW 4101. Corneille, Moliere, and Racine.

**FRW 5415 LITERATURE OF THE MIDDLE AGES (3)**

PR: FRW 4100 or 4101. Major genres, including epics, Arthurian romances, drama and lyric poetry. Reading in modern French translation.

**FRW 5425 LITERATURE OF THE RENAISSANCE (3)**

PR: FRW 4100 or 4101. A study of Renaissance French humanism including Rabelais, Montaigne, and Pleiade poets.

**FRW 5445 18TH CENTURY LITERATURE (3)**

PR: FRW 4100. The classical tradition and the new currents of thought in the Age of Enlightenment.

**FRW 5530 PRE-ROMANTICISM (3)**

PR: FRW 4100 or 4101. The precursors of romanticism. Emphasis on Rousseau, Bernardin de St. Pierre, Chenier, and Chateaubriand.

**FRW 5535 ROMANTICISM AND EARLY REALISM (3)**

PR: FRW 4101. A study of the romantic and early realistic movements with emphasis on Lamartine, Vigny, Musset, Hugo and Balzac.

**FRW 5556 NATURALISM AND REALISM (3)**

PR: FRW 4100 or 4101. A detailed study of realism and naturalism with emphasis on Flaubert, Zola, les Goncourt, Maupassant, and Daudet.

**FRW 5934 SELECTED TOPICS (1-3)**

PR: Upper-level or graduate standing. Study of an author, movement or theme.

**FRW 6315 SEMINAR ON CLASSICAL DRAMA (3)**

PR: Graduate standing. A study of the works of Corneille, Racine, or Moliere.

**FRW 6405 OLD FRENCH (3)**

PR: Graduate standing. An introduction to the Old French language and literature. Readings from representative texts. Required of all M.A. candidates.

**FRW 6416 MEDIEVAL LITERATURE (3)**

PR: Graduate standing. A study in depth of Old French literature of the Middle Ages.

**FRW 6938 GRADUATE SEMINAR (3)**

Topics vary. May be repeated.

## German

**GER 5845 HISTORY OF THE GERMAN LANGUAGE (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.

**GER 6908 INDEPENDENT STUDY (VAR.)**

Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**GEW 5475 20TH CENTURY LITERATURE TO 1945 (3)**

A study of major styles in German literature from 1900 to WWII with emphasis on Hauptmann, Schnitzler, Hofmannsthal, George Rilke, Kaiser, Heym, Trakl, Thomas Mann, Hesse, Kafka, Benn, Brecht.

**GEW 5489 20TH CENTURY LITERATURE 1945 TO PRESENT (3)**

Study of major trends in German literature since WWII with emphasis on Borchert, Frisch, Durrenmatt, Boll, Uwe, Johnson, Grass, Aichinger, Eich Enzensberger, Bachmann.

**GEW 5515 THE ENLIGHTENMENT (3)**

Selected dramas and critical writings by Lessing, Wieland, Kant.

- GEW 5545 ROMANTICISM** (3)  
Jenaer circle and Heidelberger circle; the late romantic period, the writers between Classicism and Romanticism.
- GEW 5555 REALISM** (3)  
Selected works by Grillparzer, Grabbe, Buchner, Hebbel, Heine, Immerman, Stifter, Keller, Meyer, Storm, Raabe, Hulshoff, and Morike.
- GEW 5600 GOETHE** (3)  
Selected novels, poems: Werther, Wahlverwandschaften, Wilhelm Meister, Westostlicher Divan.
- GEW 5603 FAUST** (3)  
Sources, form, content, and literary significance of Urfaust and Faust.
- GEW 5610 SCHILLER** (3)  
Selected dramas, philosophical and aesthetical writings.
- GEW 5934 SELECTED TOPICS** (1-3)  
PR: Upper-level or graduate standing. Study of an author, movement or theme.
- GEW 6915 DIRECTED RESEARCH** (VAR.)  
PR: GR. Master's level. Repeatable. (S/U only.)
- GEW 6934 SELECTED TOPICS** (1-3)  
Study of an author, movement or theme.

### Italian

- ITW 6910 DIRECTED RESEARCH** (VAR.)  
PR: GR. Master's level. Repeatable (S/U only.)

### Romance

- FOW 6805 BIBLIOGRAPHY** (1)  
PR: Graduate standing. Research methods. Includes familiarity with major journals and bibliographies, with a practicum. (S/U only.)

### Spanish

- SPN 5567 CONTEMPORARY SPAIN** (3)  
PR: SPN 3500 or equivalent or graduate standing. 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.
- SPN 5795 (formerly SPN 5790) PHONOLOGY AND PHONETICS** (3)  
PR: SPN 3300. A study of the Spanish sound system.
- SPN 5845 HISTORY OF THE SPANISH LANGUAGE** (3)  
Traces the development of Spanish from its Latin origins to the present.
- SPN 6940 GRADUATE INSTRUCTION METHODS** (1-3)  
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of three credits per student. (S/U only.)
- SPW 5245 THE PICARESQUE NOVEL** (3)  
Realistic prose-fiction of the Renaissance and Golden Age.
- SPW 5315 (formerly SPW 5313) GOLDEN AGE OF DRAMA** (3)  
PR: SPW 4100. Lope de Vega, Alarcon, Tirson, Calderon, and others.



- SPW 5405 (formerly SPW 5400) MEDIEVAL LITERATURE (3)**  
PR: SPW 4100 or equivalent. 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*.
- SPW 5485 (formerly SPW 5482) POST CIVIL WAR LITERATURE (3)**  
PR: SPW 4101. The drama and novel since 1936.
- SPW 5535 ROMANTICISM (3)**  
PR: SPW 4101. Poetry and drama of the first half of the 19th century.
- SPW 5555 REALISM (3)**  
PR: SPW 4101. Prose fiction of the 19th century.
- SPW 5605 THE QUIJOTE (3)**  
Cervantes' masterpiece *Don Quijote de la Mancha*.
- SPW 5725 GENERATION OF 1898 (3)**  
PR: SPW 4101. The major figures of the period and their main followers.
- SPW 5726 GENERATION OF 1927 (3)**  
PR: SPW 4101. A study of Vanguard literature in Spain between 1918 and 1936.
- SPW 5755 MEXICAN LITERATURE (3)**  
PR: SPW 4130. Major writers of all genres. Emphasis on modern writers.
- SPW 5765 LITERATURE OF ARGENTINA AND URUGUAY (3)**  
PR: SPW 4131. Emphasis on the gaucho theme and contemporary prose fiction.
- SPW 5775 CARIBBEAN LITERATURE (3)**  
PR: SPW 4130. Emphasis on contemporary Cuban and Puerto Rican literature.
- SPW 5934 SELECTED TOPICS (3)**  
PR: Upper-level or graduate standing. Study of an author, movement or theme.
- SPW 6910 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- SPW 6936 GRADUATE SEMINAR (3)**  
Topics vary. May be repeated.
- SPW 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)

## LINGUISTICS

*Professors:* R.W. Cole, R.C. O'Hara; *Associate Professors:* J.C. Caffisch, Sr., J.B. Camp, C.J. Cargill-Vroman.

- LIN 6081 INTRODUCTION TO GRADUATE STUDY IN LINGUISTICS (3)**  
Required of all M.A. candidates. 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.

- LIN 6108 STUDIES IN ENGLISH LANGUAGE AND LINGUISTICS (3)**  
 PR: LIN 4100 and LIN 4370, or C.I. An advanced study of the origin, historical development and contemporary structure of British and American English in its social and cultural milieu, with emphasis upon modern techniques for linguistic analysis and description.
- LIN 6110 DIRECTED RESEARCH (VAR.)**  
 PR: GR. Master's level. Repeatable. (S/U only.)
- LIN 6117 HISTORY OF LINGUISTIC THOUGHT (3)**  
 Survey of the development of language study in the West from Antiquity to the present. Classical and medieval theories of language; origins of traditional grammar; rationalist linguistic theory and philosophical grammar, and an examination of the origin of contemporary linguistic controversies.
- LIN 6128 HISTORICAL LINGUISTICS (3)**  
 An advanced survey of the principles and methodology of historical linguistics.
- LIN 6139 TOPICS IN THEORETICAL LINGUISTICS (3)**  
 Offerings will include current issues in any area of linguistic theory.
- LIN 6146 COMPARATIVE LINGUISTICS (3)**  
 The principles and methodology of comparative linguistics, focusing upon a major Indo-European subfamily, such as Romance, Germanic, or Balto-Slavic.
- LIN 6240 PHONOLOGICAL DESCRIPTION (3)**  
 Analysis of the phonological component of a grammar, its role and formal structures. The generative model is compared to taxonomic descriptions. Theory and data-solution problems.
- LIN 6377 THE STRUCTURE OF A SPECIFIC LANGUAGE (3)**  
 Analysis of the linguistic structures of both common and uncommon languages. May be repeated up to six credit hours with change in content/title.
- LIN 6380 SYNTACTIC DESCRIPTION (3)**  
 Analysis of syntactic descriptions of various languages through data-solution problems in co-occurrence relations, agreement, permutation, conjoining, and embedding. Feature grammars and other models are discussed.
- LIN 6405 CONTRASTIVE ANALYSIS (3)**  
 PR: LIN 4377. Comparison and contrast of the structures of American English with corresponding structures in selected foreign languages.
- LIN 6407 APPLIED LINGUISTICS (3)**  
 Analysis of the phonological, morphological and syntactic features of English as a basis for linguistic application to problems of English language acquisition by non-native speakers.
- LIN 6425 FORMAL STYLISTICS (3)**  
 Studies in the relationship between the development of language study and literary criticism; developments in modern linguistic theory and their application to problems of aesthetics, literary structure, and style.
- LIN 6601 SOCIOLINGUISTICS (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.

- LIN 6715 LANGUAGE ACQUISITION (3)**  
PR: LIN 3010, LIN 4377 or CI. A survey of current research and theory in the processes of normal language acquisition and development.
- LIN 6810 SEMIOTICS (3)**  
PR: CI. Introduction to kinesics and paralinguistics; the linguistic structure of gesture, proxemics, and other significant areas of nonverbal communication and signaling behavior.
- LIN 6820 STUDIES IN SEMANTICS (3)**  
Selected problems in the area of meaning and the relationship between linguistic structure and cognition. Mappings of presupposition, kinship fields, emotive concepts, and other problems are surveyed. Theories such as Fodor-Katz, Chomsky, Ross-Lakeoff-McCawley, and others are contrasted.
- LIN 6908 INDEPENDENT STUDY (VAR.)**  
Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)
- LIN 6932 SELECTED TOPICS (1-4)**  
Content will depend upon instructor's interests and students' needs. Such topics and neurolinguistics, bilingualism, and discourse analysis may be taught.
- LIN 6940 GRADUATE INSTRUCTION METHODS (1-4)**  
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of four credits per student. (S/U only.)
- LIN 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)
- PHI 6226 LANGUAGE AND NATURE (3)**  
Introduction to the principles of the logic of natural languages, including semantic analysis of logical relations between selected syntactic structures (active/passive, raising, case relations, etc.); logical dominance in semantic structure; application of logic to questions of linguistic meta-theory.
- PHI 6228 LANGUAGE AND LIMIT (3)**  
Introduction to the principles of the logic of natural languages, including semantic analysis of logical relations between selected syntactic structures (active/passive, raising, case relations, etc.); logical dominance in semantic structure; application of logic to questions of linguistic meta-theory.
- TSL 6371 METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE I (3)**  
Analysis of the methods of teaching English pronunciation and structure to speakers of other languages.
- TSL 6372 METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE II (3)**  
PR: TSL 6371. Analysis of the methods of teaching English reading and listening comprehension and composition to speakers of other languages.
- TSL 6945 INTERNSHIP (1-6)**  
PR: TSL 6371 and TSL 6372. 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. May be repeated up to six credit hours. (S/U only.)

## MASS COMMUNICATIONS

*Chairperson:* Donna L. Dickerson; *Professors:* M.R. Garcia, R.L. Kerns, M. Lucoff, E.L. Sasser; *Associate Professors:* D.S. Bagley III, T.M. Counts, D.L. Dickerson, W.G. Fudge; *Assistant Professors:* K.F. Brown, J.L. Ghiotto, N.C. James, E.F. Katz, L.Z. Leslie; *Instructors:* R.W. Friedman, K. Storr; *Lecturers:* W.F. Moyse, D. Togie, Jr.; *Professor Emeritus:* W.E. Griscti, A.M. Sanderson; *Courtesy Professors:* W.M. Brady, R.B. Brown, R.J. Haiman, P.A. Kemp, W.A. Morse, D.B. Rochelle, K.D. Stanton, D.R. Walbolt, J.E. Young.

### **ADV 6503 MEDIA AND MARKET ANALYSIS (3)**

An advanced study of the demographic, geographic, and social-psychographic descriptions of media and markets to analyze mass media audiences, costs and uses to aid in solving marketing communications problems for advertisers.

### **ADV 6602 ADVERTISING MARKETING DECISIONS (3)**

A study of managerial problems in planning, controlling, and evaluation of advertising with emphasis on the decisions concerning products, pricing, competitive positioning, distribution and promotion.

### **JOU 6107 ADVANCED URBAN AFFAIRS REPORTING (3)**

Problems and methods of reporting urban affairs, including municipal government and politics: city, county and state. Research/analyses of current issues.

### **JOU 6191 SEMINAR: CONTEMPORARY NEWSPAPER PROBLEMS (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.

### **MMC 6303 INTERNATIONAL COMMUNICATIONS SEMINAR (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.

### **MMC 6401 MASS MEDIA STRUCTURES (3)**

The study of mass communications theories, structures, influences, and their relationships to institutions in American society.

### **MMC 6421 RESEARCH METHODS IN MASS COMMUNICATIONS (3)**

The theory and practice of quantitative, historical, and critical research methods, and their applications to the study of mass communication. Emphasis on experimental and survey research, statistical analysis, and evaluation of data. May be repeated up to 9 credit hours.

### **MMC 6605 PUBLIC OPINION AND THE MASS MEDIA (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.

### **MMC 6612 SEMINAR: GOVERNMENT AND THE MEDIA (3)**

PR: MMC 4200 or equivalent. Interrelationships of the media and government at the judicial, executive and legislative levels. Focus is on legal

limitations and privileges of the medial theory and philosophy of the First Amendment; research procedures in court and administrative agency documents.

**MMC 6900 DIRECTED READING IN MASS COMMUNICATIONS (1-3)**

PR: CI and permission of graduate adviser. Readings in specialized areas of Mass Communications as agreed to by the instructor and the student by contract. May be repeated up to 3 credit hours. (S/U only.)

**MMC 6910 INDIVIDUAL RESEARCH IN MASS COMMUNICATIONS (1-3)**

PR: CI and permission of graduate adviser. 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. May be repeated up to 3 credit hours. (S/U only.)

**MMC 6921 MASS COMMUNICATIONS SEMINAR (1)**

PR: Admission to the Graduate Program. The discussion of current projects in Mass Communications research among graduate students and faculty. May be repeated up to 3 credit hours. (S/U only.)

**MMC 6936 SELECTED TOPICS IN MASS COMMUNICATIONS (3)**

Courses designed to meet current, specific topics of interest to students and instructors.

**MMC 6945 PROFESSIONAL PRACTICUM (3)**

PR: minimum of 12 graduate hours in Mass Communications. Practicum will consist of placement with a media related organizations selected by the student and approved and supervised by the graduate adviser. (S/U only.)

**MMC 6971 THESIS: MASTER'S (VAR.)**

Repeatable. May be taken for varying credit in successive semesters up to 6 credit hours. (S/U only.)

**PUR 6603 PUBLIC RELATIONS COUNSELING (3)**

Relationship of the public relations counselor to the client or employer; counseling in corporate, non-profit and governmental organizations; writing and presenting PR programs of the client; management and operation of counseling firms.

**PUR 6604 STANDARDS OF PUBLIC RELATIONS PRACTICE (3)**

Historical perception of ethical practice; the professional's role as advocate for the client and ombudsman between the client and his public; codes of conduct; administrative and statutory law governing the practice; progress towards professional status.

**RTV 6400 HISTORY AND CRITICISM OF BROADCASTING (3)**

The origin and development of broadcast programming stressing how radio and television content affect social, cultural, and political values. Study will also include critical examination of broadcast aesthetics and those factors which determine program form and function.

**RTV 6702 TELECOMMUNICATIONS AND PUBLIC POLICY (3)**

An exploration of the emerging problems of telecommunications policy, especially the regulation of news systems of communications, and the development of communications policy in a post-industrial age.

**VIC 6005 SEMINAR IN VISUAL COMMUNICATIONS (3)**

Development of message preparation in the integration of visual and verbal images, emphasis on the management and planning of still

photography, video, film, graphic design, and typography in effective communication.

## PHILOSOPHY

Chairperson: W.H. Truitt; Professors: J.P. Arton, J.A. Gould, L.L. McAlister, K. Shrader-Frechette, B. Silver, W.H. Truitt, R.C. Weatherford, K. Wiredu, Professor Emeritus: C.H. Chen; Associate Professors: J. Beil-Waugh, J.A. Bell, R.N. Taylor; Courtesy Associate Professor: M. Myerson; Courtesy Professor: Stephen Turner.

### PHH 6938 SEMINAR IN THE HISTORY OF PHILOSOPHY (3)

PR: Graduate standing or CI. A seminar in the history of philosophy. The instructor will determine the subject matter. Variable titles: Ancient, Modern, Recent, Contemporary. Repeatable up to 12 credit hours.

### PHI 5135 SYMBOLIC LOGIC (3)

PR: PHI 3100 or CI. Mathematical treatment of formal logic, including methods of proof, quantification, the logic of relations and an introduction to properties of deductive systems.

### PHI 5225 PHILOSOPHY OF LANGUAGE (3)

PR: Eight hours of philosophy, major in linguistics, or CI. An examination of semantical, 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.

### PHI 5913 RESEARCH (1-4)

PR: CI. Individual research supervised by a faculty member. Approval slip from instructor required.

### PHI 5934 SELECTED TOPICS (1-3)

PR: CI. Selected topics according to the needs of the student. Approval slip from instructor required.

### PHI 6105 SEMINAR IN LOGIC (3)

PR: Graduate standing or CI. Foundations and basic problems of logic. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

### PHI 6305 SEMINAR IN EPISTEMOLOGY (3)

PR: Major in philosophy or psychology and CI. An analysis of recent and contemporary problems of knowledge. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

### PHI 6405 SEMINAR IN THE PHILOSOPHY OF NATURAL SCIENCE (3)

PR: Graduate standing or CI. A study of the nature and status of physical theories, some basic problems associated with scientific methodology, and the philosophical implications of modern science. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

### PHI 6425 SEMINAR IN THE PHILOSOPHY OF SOCIAL SCIENCES (3)

PR: Eight hours of philosophy or CI. Philosophic issues arising in the social sciences; value assumptions, laws and the theories, models, etc. Seminar format.

**PHI 6506 SEMINAR IN METAPHYSICS (3)**

PR: Graduate standing or CI. An analysis of fundamental religious concepts in terms of contemporary philosophy. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

**PHI 6605 SEMINAR IN ETHICS (3)**

PR: Graduate standing and CI. Advanced study of the problems of moral philosophy. May be repeated up to 9 credit hours.

**PHI 6706 SEMINAR IN PHILOSOPHY OF RELIGION (3)**

PR: Graduate standing or CI. An analysis of fundamental religious concepts in terms of contemporary philosophy. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

**PHI 6808 SEMINAR IN AESTHETICS (3)**

PR: Graduate standing or CI. An analysis of fundamental special problems of aesthetics; value, perception, communication, technique, context. This course, may be taken more than once for credit with CI and departmental approval. Seminar format.

**PHI 6908 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**PHI 6934 SELECTED TOPICS (1-3)**

PR: Graduate standing and CI. Selected topics according to the needs of the student. Approval slip from instructor required.

**PHI 6945 GRADUATE INSTRUCTION METHODS (1-3)**

Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of three credits per student. (S/U only.)

**PHI 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

**PHM 6105 SEMINAR IN SOCIAL PHILOSOPHY (3)**

PR: Graduate standing or CI. A detailed study of the philosophical theories of society, class societies (Capitalism), advanced technocracy (all types). This course may be taken more than once for credit with CI and departmental approval. Seminar format.

**PHM 6305 SEMINAR IN POLITICAL PHILOSOPHY (3)**

PR: Graduate standing or CI. An examination of the main political philosophies. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

**PHM 6406 SEMINAR IN THE PHILOSOPHY OF LAW (3)**

PR: Graduate standing or CI. A study of the metaphysical, ethical and epistemological bases of law. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

**PHM 6506 SEMINAR IN PHILOSOPHY OF HISTORY (3)**

PR: Graduate standing or CI. The analysis of language and logic of historical explanation, historical idealism, historical materialism, positivism, and historical sociology. This course may be taken more than once for credit with CI and departmental approval. Seminar format.

## RELIGIOUS STUDIES

*Chairperson:* W.C. Tremmel; *Coordinator of Ancient Studies:* A.M. Gessman; *Professors:* A.M. Gessman, W.M. Shea, J.F. Strange, W.C. Tremmel; *Associate Professors:* D.J. Fasching, N. Katz, M.G. Mitchell; *Visiting Instructors:* R. Akers, C. Kilgore; *Other Faculty:* J.S. Hatcher, E.E. Smith.

### **REL 6035 PROSEMINAR: THE GRADUATE STUDY OF RELIGION (3)**

PR: Graduate standing in the Department of Religious Studies. An introduction to and research methods used in Religious Studies proper and those borrowed from 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, and historiography.

### **REL 6196 RELIGION AND MODERNIZATION (3)**

This course will explore the unique characteristics of 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.

### **REL 6126 RELIGION IN AMERICA (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. May be retaken with different subject matter twice. Open to non-majors.

### **REL 6175 RELIGION, ETHICS AND PUBLIC POLICY (3)**

This tutorial will explore the relation between religion, ethics the social sciences and social policy. Problems of ideological conflict and ethical relativism will be examined, as well as possible religious and theoretical foundations for a normative ethics of social change.

### **REL 6447 LIBERATION THEOLOGY (3)**

This course will provide a critical examination of Third World, Black American and Feminist Liberation Theologies of the Christian tradition.

### **REL 6248 STUDIES IN THE GOSPELS (3)**

An examination in detail of a select problem in Gospel research such as the Synoptic Problem, the social world of earliest Palestinian Christianity as inferred from the documents, life of Jesus research, or structural criticism of gospel narrative. May be retaken with different subject matter twice.

### **REL 6285 STUDIES IN BIBLICAL ARCHAEOLOGY (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.

### **REL 6318 RELIGION AND CULTURE OF THE EAST (3)**

This course examines some of the most important religious literature of the Asian World — Hindu, Buddhist, Taoist, Confucian — attempting to understand each classical expression within its own historical and cultural context.

### **REL 6325 RELIGION AND CULTURE OF THE WEST (3)**

This course examines some of the most important religious literature of the Western World - Jewish, Christian, and Islamic - attempting to under-



stand each classical expression within its own historical and cultural context.

**REL 6327 SEMINAR: ANCIENT RELIGIONS AND LITERATURES (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. May be retaken with different subject matter three times.

**REL 6347 BUDDHISM AND POLITICS IN CONTEMPORARY ASIA (3)**

Attention will be paid to Buddhist scriptures to discern the religion's inherent social concerns, followed by detailed analyses of methodological controversies surrounding Buddhism's interactions with society. Case studies of Sri Lanka, Thailand, Burma, Tibet and Japan will conclude the class's deliberations. Prerequisite or concurrent enrollment in REL 6318.

**REL 6426 20TH CENTURY THEOLOGIANS (3)**

An examination of certain modern theologians representing theological movements such as liberal Protestantism, Catholic modernism, fundamentalism, liberation theologies, etc. and Jewish reaction to modernity such as orthodoxy, conservatism, and reconstruction, etc. May be retaken with different subject matter once.

**REL 6906 INDEPENDENT STUDY (1-3)**

PR: Graduate standing, Master's Level. Independent study in which the student must have a contract with the instructor.

**REL 6911 DIRECTED RESEARCH (1-3)**

PR: Graduate standing, Master's Level. Individual guidance in concentrated reading in a carefully delimited area of religious studies research skills. Repeatable. Majors only.

**REL 6921 COLLOQUIUM (1)**

The departmental colloquium is held at least three times each semester in order to bring all religious studies, faculty and graduate students together to discuss the research of a particular student, faculty member or guest scholar. May be repeated up to 6 credit hours. (S/U only.)

**REL 6938 SPECIAL TOPICS IN RELIGIOUS STUDIES (2-4)**

PR: Graduate standing. Open to non-majors. Variable titles offered periodically on topics of special interest. May be retaken with different subject matter twice.

**REL 6940 GRADUATE INSTRUCTION METHODS (1-4)**

Offered primarily for the supervision of Graduate Teaching Assistants. Variable credits. (S/U only.)

**REL 6971 THESIS, MASTER'S (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

## College Of Business Administration

### ACCOUNTING/LAW

*Director:* R.J. West; *Professors:* R.G. Cox, D.M. Dennis, C.W. Dungan, R.M. Keith, G.H. Landen, J.L. Smith, W.L. Stephens, R.J. West; *Associate Professors:* J.F. Bussman, J.R. Fellows, L.C. Harris, K.L. Hooks, G. Laursen,

J.R. Martin, J.E. Moon, W.H. Parrott, J.D. Siebel, G.F. Whittaker; *Assistant Professor*: T.J. Engle; *Distinguished Lecturer*: J.P. Donis.

**ACG 5205 ADVANCED ACCOUNTING (4)**

PR: ACG 3112. Accounting for business combinations, preparation of consolidated financial statements, home office and branch operations, accounting for international operations and partnerships.

**ACG 5325 FINANCIAL/MANAGERIAL ACCOUNTING (3)**

This course provides students in the M.S. in Management program a basic knowledge of financial and managerial accounting in both the public and private sectors. The course concentrates on the uses and limitations of accounting data for planning, control, and other decision making activities.

**ACG 5505 NONPROFIT ORGANIZATION ACCOUNTING (3)**

PR: ACG 2011. Application of accounting principles and theory of governmental units and nonprofit institutions. Available to majors and Master of Business Administration students.

**ACG 5805 CONTEMPORARY ACCOUNTING THOUGHT (3)**

PR: Intermediate Accounting II or equivalent. An in-depth coverage of selected topics in accounting. Emphasis is placed on current significant developments that have taken place in the profession which the student should have for a well-rounded background in accounting but have not been exposed to in previous courses. Available to majors and non-majors.

**ACG 5935 SELECTED TOPICS IN ACCOUNTING (1-3)**

PR: Cl. To allow advanced undergraduate students and graduate students to research and study contemporary and emerging topics in the field. May be repeated up to 6 credit hours.

**GEB 6706 MANAGEMENT ACCOUNTING AND CONTROL (3)**

PR: GEB 6705. The relevancy and limitation of cost information in: (1) planning and controlling current operations; (2) special decisions and long-range planning; (3) inventory valuation and income determination. Not available for credit for graduate students in the Master of Accountancy program.

**ACG 6346 MANAGEMENT ACCOUNTING AND CONTROL (3)**

PR: 20 semester hours of accounting or Cl. Measurement, interpretation, planning, and control of costs by means of predetermined standards, and variance analysis. Use of accounting and statistical information in preparing budgets and controlling operations.

**ACG 6405 SYSTEMS THEORY AND QUANTITATIVE APPLICATIONS (3)**

PR: ACG 3401 or equivalent. The design and operation of contemporary accounting systems including the relevance of data processing and statistical methods to the system of financial information and control.

**ACG 6636 CONTEMPORARY ISSUES IN AUDITING (3)**

PR: ACG 4651. This course involves a critical analysis of a number of current issues in auditing including: independence, theory of evidence, reporting, quality control, and public oversight of the profession.

**ACG 6875 DEVELOPMENT OF ACCOUNTING THOUGHT (3)**

PR: 20 semester hours of accounting or Cl. A study and evaluation of the development and evolution of current account theory and measurement concepts. The definition of accounting objectives and goals and the development of measurement models.

- ACG 6905 INDEPENDENT STUDY (VAR.)**  
Independent Study in which student must have a contract with an instructor. Repeatable (S/U only.)
- ACG 6915 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- ACG 6936 SELECTED TOPICS IN ACCOUNTING (1-4)**  
PR: CC. The course content will depend on student demand and instructor's interest. May be repeated up to 6 hours.
- ACG 7156 SEMINAR IN FINANCIAL ACCOUNTING (3)**  
PR: ACG 6875 or CI. This course will investigate advanced research and methodological issues in financial accounting. It will focus primarily on research which uses financial information in contexts external to the firm.
- ACG 7356 SEMINAR IN MANAGEMENT ACCOUNTING (3)**  
PR: ACG 6346 or CI. Review and critical analysis of management accounting foundation with emphasis on the current research methods in organizational behavior aspects and multiple criteria decision methods.
- ACG 7415 SEMINAR IN ACCOUNTING INFORMATION SYSTEMS (3)**  
PR: ACG 6405 or CI. Review and critical analysis of major topics and research methods in accounting information systems.
- ACG 7646 SEMINAR IN AUDITING (3)**  
PR: ACG 6636 or equivalent, or CI. 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.
- ACG 7876 HISTORICAL DEVELOPMENT OF ACCOUNTING THOUGHT (3)**  
PR: CI. Historical development of accounting thought and practice.
- ACG 7936 SEMINAR ON SPECIAL TOPICS IN ACCOUNTING (3)**  
PR: CI. Coverage of particular topics of interest to doctoral faculty and students during any given semester.
- ACG 7980 DISSERTATION IN ACCOUNTING (1-21)**  
PR: Completion of comprehensive exams and CI. Research for and writing of a dissertation on an accounting topic. (S/U only.)
- TAX 5015 FEDERAL TAXES II (3)**  
PR: TAX 4001. Advanced study of the federal income tax structure. Special topics and the concept of taxable income as it applies primarily to business enterprises.
- TAX 5405 TAXATION OF TRUSTS AND ESTATES (3)**  
PR: TAX 4001 and Admission to the M.Acc. Program. A study of income tax problems involving trusts and estates and beneficiaries, including simple and complex trusts, distributable net income, and grantor trusts. Planning and business aspects of trusts and estates are emphasized.
- TAX 6065 FEDERAL TAX RESEARCH, PLANNING, PROCEDURE (3)**  
PR: TAX 4001, TAX 5015. A study of the development of tax law and its implication in business decisions. Tax research, tax planning and tax procedure are emphasized, along with relevant computer applications.

**TAX 6105 ADVANCED CORPORATE TAXATION (3)**

PR: TAX 4001, TAX 5015. A study of advanced income tax problems involving corporations, including organization, operation, distributions, and liquidations. Topics include "S" Corporations, collapsible corporations, personal holding companies, accumulation of earnings, and acquisition and disposition of corporations. The planning and business aspects of corporate transactions are emphasized.

**TAX 6205 ADVANCED PARTNERSHIP TAXATION (3)**

PR: TAX 4001, TAX 5015. 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.

**TAX 6445 ESTATE PLANNING (3)**

PR: TAX 4001, TAX 5015. A study of the income, estate, and gift tax problems involving estate planning, including a study of tax and non-tax motivations, estate analysis, probate, wills, revocable trusts, irrevocable trusts, concurrent ownership, and the marital deduction. Practical applications include case studies involving will and trust drafting and the hands-on use of a computer estate planning software package.

**TAX 6505 U.S. TAXATION OF FOREIGN ENTITIES (3)**

PR: TAX 4001, TAX 5015. A study of the income taxation of foreign entities investing or doing business in the United States, with an emphasis on tax planning.

**TAX 7067 SEMINAR IN TAXATION (3)**

PR: TAX 6065 or CI. An introduction to current trends in academic tax research and the various methodologies being used in such research.

## **COMMON BODY OF KNOWLEDGE**

### **(for M.B.A. degree program)**

*Faculty listed under department offering course.*

**GEB 6705 FINANCIAL ACCOUNTING FOR MANAGERS (3)**

PR: Graduate standing. Study of (1) accounting concepts and standards applicable to presentation of financial information to interested users, (2) structure, uses and limitations of financial statements and (3) measurement systems related to income determination and asset valuation. Discussion of internal and external influences on accounting decisions.

**GEB 6716 MICROECONOMIC ANALYSIS (3)**

PR: Graduate standing. Study of the theories of economic behavior in the market system and an appreciation of the role of economic organizations in achieving private and social goals. Topics covered: consumer behavior, demand analysis, factor markets, theories of production and cost.

**GEB 6717 MACROECONOMIC ANALYSIS (3)**

PR: GEB 6716. A study of the interaction of aggregate demand and supply in the determination of output, employment, prices, wage, and interest rates.

**GEB 6725 FINANCIAL MANAGEMENT (3)**

PR: GEB 6705 and GEB 6716. The study of processes, decision structures, and institutional arrangements concerned with the utilization and acquisition of funds by a firm. The course will include the management of the asset structure and the liability structure of the firm under both certain

and risky situations and considering the problems of time and the decision makers preferences. The financial decision processes will include and recognize the international as well as domestic aspects of financial management.

**GEB 6735 SOCIAL, LEGAL, AND POLITICAL ENVIRONMENT OF BUSINESS (3)**

PR: 12 hours of MBA Foundation Courses. 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.

**GEB 6745 MARKETING MANAGEMENT (3)**

PR: GEB 6716. 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.

**GEB 6756 STATISTICAL METHODS FOR MANAGEMENT (3)**

PR: College algebra. A study of probability and statistics as applied to administrative problems of choice estimation and prediction under conditions of uncertainty.

**GEB 6757 QUANTITATIVE METHODS OPERATIONS MANAGEMENT (3)**

PR: Graduate standing, college algebra. Principles and concepts of production operation management and management science. The study and application of management science techniques to problems in production operation management environment.

**GEB 6775 MANAGEMENT INFORMATION SYSTEMS (3)**

A study of the analysis and application of management informatin systems; the impact of computers on decision making; the utilization of computer languages, statistical packages, research and business analysis.

**GEB 6836 THE MANAGEMENT PROCESS (3)**

PR: Graduate standing. 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.

**GEB 6895 BUSINESS POLICY AND STRATEGY (3)**

PR: Capstone course to be taken in final semester of program. Advanced study of business decision-making processes under conditions of risk and uncertainty, including integrating analysis and policy formation at the general management level.

**FIN 7808 ADVANCED MICRO FINANCE (3)**

PR: GEB 6725, FIN 6804, ECO 5424 or Departmental approval. The study of advanced theoretical and empirical works in finance primarily relating to financial institutions and markets.

**FIN 7817 FINANCIAL MARKETS (3)**

PR: GEB 6725, FIN 6246, FIN 6804 or Departmental approval. The study of advanced theoretical and empirical works in finance primarily relating to financial decisions at the level of the firm.

**FIN 7930 SELECTED TOPICS IN FINANCE (3)**

PR: FIN 7808, QMB 7566 or Departmental approval. Two consecutive semesters (three credits each) of in-depth studies of selected topics of current issues on the frontiers of financial thought. May be repeated.

**FIN 7935 FINANCE RESEARCH SEMINAR (3)**

PR: At least one semester of FIN 7930. 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 the idea and research methodology for the doctoral dissertation. May be repeated.

**FIN 7980 DISSERTATION IN FINANCE (VAR.)**

PR: Completion of comprehensive examinations and Departmental approval. Research and writing of a dissertation on a topic in finance.

**FINANCE**

*Chairperson:* P. Kares; *Lykes Professor of Banking and Finance:* James L. Pappas; *Professors:* A. Beenhakker, S.E. Bolten, R.G. Cox, R.L. Meyer, A. Schwartz, G. Trivoli; *Associate Professors:* S. Bulmash, S. Kapplin, S. Long, R.J. Rivard, K.F. Wieand; *Assistant Professor:* S. Besley.

**FIN 6246 ADVANCED MONEY AND CAPITAL MARKETS (3)**

PR: Macroeconomic Analysis or equivalent. The study of the role of financial markets in the economy. The course will investigate and analyze the effects and relationship between financial theory, financial institutions, and financial markets and their interactions and impacts on the economy. It includes the study of flow of funds, interest rate determination, and the pricing of capital assets.

**FIN 6375 FINANCIAL PLANNING FOR HEALTH ORGANIZATIONS (3)**

PR: Financial/Managerial Accounting. An examination of tools and techniques of financial management in the administration of Health Care Organizations. Cannot be taken for credit by students who have taken GEB 6725.

**FIN 6446 FINANCIAL POLICY (3)**

PR: GEB 6725 or CI. A case study approach to financial policy and strategy with an emphasis on major financial decisions in the area of external financing, mergers, acquisitions, recapitalization, and reorganization.

**FIN 6605 INTERNATIONAL FINANCIAL MANAGEMENT (3)**

PR: Financial Management or equivalent. The course provides a foundation for the understanding and appreciation of financial management of international business. The subject areas covered relate to: international finance, multinational business finance, and financial market theory.

**FIN 6718 GOVERNMENTAL FINANCIAL PLANNING BUDGETING (3)**

PR: Basic understanding of accounting and CI. A thorough investigation of planning, budgeting, and control for government, including: Budgeting procedures and methods for services and capital improvements (e.g., zero base budgeting); estimating local revenues and expenditures; methods of financing capital facilities, debt financing and administration; measures of efficiency and effectiveness; and management of cash.

**FIN 6804 THEORY OF FINANCE (3)**

PR: Financial Management or CI. 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.

**FIN 6816 INVESTMENTS (3)**

PR: Financial Management. 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.

**FIN 6906 INDEPENDENT STUDY (VAR.)**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**FIN 6915 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**FIN 6934 SELECTED TOPICS IN FINANCE (1-4)**

PR: Graduate standing and CI. A variable credit course depending upon the scope and magnitude of the work required. Includes special lecture series.

## **ECONOMICS**

*Chairperson:* D. Bellante; *Professors:* D. Bellante, G. Brunhild, T.D. Curtis, H.S. Dye, J.S. DeSalvo, W.J. Herman, J.W. Rowe, Jr., E.W. Shows; *Associate Professors:* J.P. Cooke, T.A. Deyak, E.J. Ford, E.A. Hanni, M.G. Herander, G.H. Mellish, R.J. Murphy, P. Porter, R.L. Pupp, R.M. Wilson; *Assistant Professors:* C.A. Green, C. Kogut, E.L. Rankin, J.G. Specne, C.R. Thomas

**ECO 5407 ECONOMIC PROGRAMMING AND CONTROL (3)**

PR: GEB 3121, MAC 2224 or CI. Analysis of economic structures by quantitative models and policy selection by optimization procedures. Preference functions and certainty equivalence. Deterministic and stochastic linear economic models. Dynamic and chance-constrained programming.

**ECO 5424 ECONOMETRICS I (3)**

PR: ECO 3203 or GEB 6717 and GEB 3121 or GEB 6756, or CI. Theory and use of multiple regression to estimate relationships in casual models, to analyze economic behavior and to forecast the outcome of economic disturbances. Use of standard software packages. Estimation and interpretation of regression equations.

**ECO 5425 ECONOMETRICS II (3)**

PR: ECO 5424. Advanced econometric techniques; model building, estimation and forecasting; design and execution of individual research projects.

**ECO 6115 MICROECONOMICS (3)**

PR: ECO 3101 or GEB 6716. Advanced analysis of microeconomic behavior of consumers, producers, and resource suppliers. Topics covered: general concept of scarcity, conceptual models of demand, production, cost, and the firm and market organization.

**ECO 6205 MACROECONOMIC THEORY AND POLICY (3)**

PR: This course is only for Master of Accounting students. A study of the determinates of long-run economic growth paths and short-run aggregate supply and demand as they interact to determine income, employment, wages, prices, and interest rates. Contemporary policy issues are also considered.

**ECO 6206 AGGREGATE ECONOMICS (3)**

PR: ECO 3203 or GEB 6717. Advanced analysis of macroeconomic inter-relationships determining the level of income, employment, prices, interest rates and economic growth rates as well as the impact of government policy upon these variables.

**ECO 6216 MONETARY THEORY (3)**

PR: ECO 3203 or GEB 6717. Advanced discussion of the impact of the financial sector upon real and nominal economic magnitudes. The course emphasizes theoretical and empirical contributions found in the current literature as an extension of earlier work done in the field of monetary theory.

**ECO 6305 HISTORY OF ECONOMIC THOUGHT (3)**

PR: ECO 3101 or GEB 6716 or CI. Analysis of the main currents of modern economic thought during the last one hundred years.

**ECO 6433 APPLIED FORECASTING (3)**

PR: GEB 6756. Use of time series and cross sectional data for managerial control forecasting. Construction of index numbers. Extraction of time series components. Leading economic indicators, diffusion indices and intentions surveys. Cyclical fluctuations and spectral analysis. Input-output models, econometric studies and linear forecasts.

**ECO 6434 ADVANCED BUSINESS FLUCTUATION & ECONOMIC FORECASTING (3)**

PR: ECO 3203 or GEB 6717 and GEB 6756. Applications of statistical techniques to forecasting aggregate business activity, GNP and GNP components. Critical analysis of forecasting techniques and applications of forecasting methods of business decisions.

**ECO 6505 PUBLIC FINANCE (3)**

PR: ECO 3101 or GEB 6716. Examination of the role of the public sector and its contribution to economic welfare. Tax and expenditure policies are examined in relation to their effects on resource allocation and income distribution.

**ECO 6506 SEMINAR IN PUBLIC FINANCE (3)**

Contemporary public finance problems will be studied within a seminar format.

**ECO 6525 PUBLIC SECTOR ECONOMICS (3)**

(No credit for Economics or Business Administration students.) Introduction to the price system and the allocation of resources. Market failure and the economic role of government.

**ECO 6537 ECONOMICS OF CONFLICT (3)**

PR: ECO 6115 or GEB 6716. Stress is placed upon the possible economic warfare and conflict embodied in theories of imperfect competition. The techniques for conflict resolution are analyzed, with emphasis upon bargaining theory, decision theory, and forms of collusion.



- ECO 6706 INTERNATIONAL TRADE: THEORY AND POLICY** (3)  
PR: ECO 3101 or GEB 6716. A theoretical analysis of the causes of international trade including comparative advantage, Heckcher-Ohlin theorem and more recent theories. Other topics include international trade policy, economic integration, trade problems of developing countries and the role of multinational corporations in world trade.
- ECO 6716 INTERNATIONAL MONETARY ECONOMICS** (3)  
PR: ECO 3203 or GEB 6717. An advanced analysis of international macroeconomic relationships. Foreign exchange market, international monetary system, balance of payments and adjustments. Macroeconomic policy in an open economy. International transmission of economic disturbances.
- ECO 6906 INDEPENDENT STUDY** (VAR.)  
Independent study in which student must have a contract with an instructor. Repeatable (maximum of 6 hours). (S/U only.)
- ECO 6917 DIRECTED RESEARCH** (VAR.)  
PR: GR. Master's level. Repeatable (maximum of 6 hours.) (S/U only.)
- ECO 6936 SELECTED TOPICS IN ECONOMICS** (1-4)  
PR: Graduate standing and CI. The course content will depend on student demand and instructor's interest.
- ECO 6971 THESIS: MASTER'S** (VAR.)  
Repeatable. (S/U only.)
- ECP 5405 INDUSTRIAL ORGANIZATION** (3)  
PR: ECO 3101 or GEB 6716. The economics of industrial organization. The study of the behavior of firms and the implications of such behavior on economic performance. The relationship between structure of industry and performance.
- ECP 5406 SEMINAR IN INDUSTRIAL ORGANIZATION** (3)  
PR: ECP 5403. Contemporary industrial organization problems will be discussed in a seminar format.
- ECP 5614 URBAN ECONOMICS** (3)  
PR: ECO 3101 or GEB 6716. The economics of urban areas including analysis of their growth and development as well as intraurban location patterns. Advanced economic analysis of urban problems.
- ECP 5624 REGIONAL ECONOMICS** (3)  
PR: ECO 3101 or GEB 6716. Economic analysis of the geographical allocation of scarce resources within and among regions. Topics discussed are: location of households and firms, interregional migration of labor and capital, regional growth and development, methods of regional analysis, and regional policy.
- ECP 6205 MANPOWER ECONOMICS SEMINAR** (3)  
PR: ECO 3101 or GEB 6716 or ECO 6115. This course is designed to provide the student with a background in labor demand and supply topics, unemployment and manpower programs, discrimination in the labor market, labor market institutions, and labor force statistics.

**ECP 6238 THE ECONOMICS OF COLLECTIVE BARGAINING (3)**

Not open to those who have had ECP 4232. The economic theory and the process of negotiating a collective bargaining agreement will be examined in detail. Both the private and public sector will be studied.

**ECP 6705 ADVANCED MANAGERIAL ECONOMICS (3)**

PR: ECO 6115 or GEB 6716 and GEB 6756. Advanced study of decision-making in households, firms and not-for-profit institutions. Topics cover demand, production and cost, organizational goals, and efficiency vs. effectiveness.

## **INFORMATION SYSTEMS AND DECISION SCIENCES**

*Chairperson:* J.S. Hodgson; *Professor:* S.J. Birkin; *Associate Professors:* H.C. Allen, R.A. Boggs, M.E. Cohen, T.E. Johnson, J.M. Pipkin, P.J. Pyburn, M.J. White; *Assistant Professors:* J. E. Blanton, T.C. Harrington, R.R. McGrath, R.J. Minifie, A.J. Waltz; *Instructors:* S. Moore.

**GEB 6758 APPLIED BUSINESS FORECASTING (3)**

PR: GEB 6756 or equivalent. Logic and application of quantitative forecasting, techniques to problems in business.

**GEB 6759 APPLIED DATA ANALYSIS FOR BUSINESS (3)**

PR: GEB 6756 or equivalent. As study of multi-variate data analysis techniques and their applications to problems and systems in business.

**GEB 6760 MANAGERIAL STATISTICS (3)**

PR: GEB 6756. Techniques for statistical decisions under incomplete information. Prior probabilities, likelihoods and revised probabilities. Loss functions, Bayesian decision rules. Sequential decision strategies. Optimal decision revision.

**ISM 6123 SYSTEMS ANALYSIS AND DESIGN (3)**

PR: GEB 6775 or equivalent; COBOL I or other approved language. This course includes the foundations and methodologies for analysis of existing systems; the design, development, and implementation of new systems.

**ISM 6127 DECISION SUPPORT SYSTEMS ANALYSIS AND DESIGN (3)**

PR: ISM 6123, GEB 6756, GEB 6757. Analysis and design of systems that integrate computer models, data bases and the decision maker into an effective decision system. Emphasis is on decision maker's needs and human/machine compatibility.

**ISM 6217 DATABASE ADMINISTRATION (3)**

PR: ISM 6123 or equivalent. Advanced principles of Database Administration. Database Organization Models. Disaster Planning for Database Files.

**ISM 6225 DISTRIBUTED INFORMATION SYSTEMS (3)**

PR: ISM 6123. Analysis, design, implementation and management of distributed information systems and networks.

**ISM 6305 MANAGING THE INFORMATION SYSTEM FUNCTION (3)**

PR: ISM 6123 or equivalent. An advanced study of information system management including system planning, project selection and management, and organizational information management policies.

**ISM 6325 INFORMATION SYSTEMS CONTROL (3)**

PR: ISM 6123 or equivalent. An advanced study of information system control and its application in system design and system management.

**ISM 6405 DECISION SUPPORT SYSTEMS (3)**

**APPLICATIONS-COMPUTER ASSISTED DECISION MAKING**

PR: GEB 6725, GEB 6756, GEB 6757. Study of the principles of decision making and the human computer alliance with hands-on computer-assisted decision making for an organizational environment. Case studies and/or management games using micro-computers.

**ISM 6456 MICROCOMPUTERS IN MANAGEMENT (3)**

PR: ISM 6123. Analysis, design, implementation and management of small business systems/microcomputer systems.

**ISM 6905 INDEPENDENT STUDY (1-6)**

Independent Study as directed by designated faculty. Repeatable. (S/U only.)

**ISM 6930 SELECTED TOPICS IN MIS (1-6)**

Selected topics in MIS. Repeatable.

**ISM 7120 INFORMATION REQUIREMENTS ANALYSIS (3)**

PR: GEB 6775 COBOL. This course will provide the student with: (1) an understanding of the theoretical foundation for analyzing problem situations and determining information requirements, (2) the skill requirements and the tools of the systems analyst, and (3) alternative methods of developing computer-based information systems.

**ISM 7140 SYSTEMS DEVELOPMENT METHODOLOGIES (3)**

PR: ISM 6120. The objective of this course is to provide the student with a realistic view of the application of the tools and techniques of systems development.

**ISM 7231 FILE ACCESS METHODS & SYSTEMS (3)**

**SOFTWARE FOR APPLICATION DEVELOPMENT**

PR: COBOL. An information system, viewed as a user application process interacting with data in a particular hardware/software environment, is analyzed to provide insights into various file access alternatives and advantages.

**ISM 7422 BUSINESS APPLICATIONS OF ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS (3)**

Theory, concepts, methodologies, and interrelationships of artificial intelligence, expert systems, and decision process. Research and discussion of the history, fundamental concepts, current trends, state-of-the-art procedures, and future potential involved with the subject area.

**ISM 7441C COMPUTER-BASED APPLICATIONS IN OPERATIONS MANAGEMENT (3)**

PR: Intro to MIS and Intro to OM. Introduction to applications of computer technology in manufacturing and operations management. Focus on the design and implementation of applications to support the operations manager.

**ISM 7905 INDEPENDENT STUDY (VAR.)**

Independent study in which student must have a contract with an instructor. May be repeated up to 6 credit hours. (S/U only.)

- ISM 7910 MIS RESEARCH SEMINAR I** (3)  
PR: Functional area courses. 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. May be repeated up to 6 credit hours.
- ISM 7911 MIS RESEARCH SEMINAR II** (3)  
PR: ISM 7910. Review of the methodological issues present in MIS Research. A major component will be the preliminary design of a research project that might be expected to develop into the students dissertation proposal. May be repeated up to 6 credit hours.
- ISM 7930 SELECTED TOPICS IN MIS** (1-3)  
Selected topics in MIS. May be repeated up to 9 credit hours.
- ISM 7931 DIRECTED RESEARCH** (VAR.)  
PR: Graduate Ph.D. level. May be repeated up to 6 credit hours. (S/U only.)
- ISM 7980 PH.D. DISSERTATION** (VAR.)  
May be repeated up to 21 credit hours. (S/U only.)
- MAN 6557 SIMULATION OF ADMINISTRATIVE SYSTEMS** (3)  
PR: GEB 6836. A study of manual and computer simulation techniques and their application to administrative problem solving. The course emphasizes model design and construction; data collection and analysis; model validation; and implementation problems.
- MAN 6569 QUANTITATIVE APPLICATIONS FOR MANAGEMENT DECISIONS** (3)  
PR: GEB 6756 and GEB 6757. The integration of quantitative approaches and management science tools into the decision making process at various organizational levels and in various organizational settings involved in the production and dissemination of goods and services.
- QMB 7565 RESEARCH METHODS I** (3)  
A course in research strategies, design, analysis and measurement for business research.
- QMB 7566 RESEARCH METHODS II** (3)  
A course in research analysis and measurement focusing on multivariate statistical analysis techniques.

## MANAGEMENT

*Chairperson:* J. Koehler; *Professors:* A.C. Bartlett, R.E. Dutton, M. Karlins, H.M. Schroder; J.J. Sherman, K.R. Van Voorhis, T.L. Wheelen; *Associate Professors:* G.A. Balfour, C.F. Cohen, J. Jermier, D.R. Kenerson, J.T. Knippen, J. Koehler, R.L. Nixon, L. Rousch, W.K. Schilit, J.P. Vincelette, R.M. Walsh; *Assistant Professors:* N. McIntosh, C.E. Michaels; *Lecturer:* E. Hargis.

- MAN 5714 URBAN MANAGEMENT** (3)  
The applicability of business management theories and practices to problem solving in the public sector. A formal theory of organization is used to compare and contrast private and public sector decision environments.
- MAN 6305 HUMAN RESOURCE MANAGEMENT** (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.

**MAN 6204 ORGANIZATIONAL THEORY AND MANAGEMENT (3)**

PR: GEB 6836 or CI. The identification and measurement of variables that influence the effectiveness of public and private organizations, including the assessment of managerial skills, organizational behavior, control systems, and work design.

**MAN 6107 MANAGERIAL BEHAVIOR (3)**

PR: GEB 6836 or CI. A laboratory approach to the understanding of patterns of interpersonal and inter-group behavior that are significant for the managerial role. Topics include perception expectation, motivation, leadership styles, decision making, conflict and competition.

**MAN 6135 MANAGEMENT OF COMMUNICATION (3)**

Communication as management is the focus of this course. Examined are the process, nature, and variables that comprise organizational communications.

**MAN 6266 MANAGEMENT OF PROFESSIONALS (3)**

PR: GEB 6836 or CI. Organizational behavior of professional employees is investigated through available theories and concepts. Concentration is placed on the manager's role, especially that of matching organizational demands with individual talents and expectations.

**MAN 6289 THE MANAGEMENT OF ORGANIZATIONAL DEVELOPMENT AND CHANGE (3)**

PR: GEB 6836 or CI. This course should be taken simultaneously with or following MAN 6204. 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.

**MAN 6403 LABOR RELATIONS LAW (3)**

A survey of the various legal constraints applicable to the employer-employee relationship. Included are such areas as collective bargaining, civil rights, and fair labor standards. Also offered under Economics.

**MAN 6411 LABOR — MANAGEMENT RELATIONS (3)**

An examination of the historical, legal, and behavioral aspects of organizational conflict as well as methods of conflict resolution. Particular emphasis on collective bargaining and management of labor relations.

**MAN 6601 INTERNATIONAL MANAGEMENT (3)**

PR: GEB 6836 or CI. A study of the characteristics of the international and multinational company, environmental constraints, personnel and labor relations factors, and strategic planning and policies.

**MAN 6905 INDEPENDENT STUDY (VAR.)**

Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**MAN 6911 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**MAN 6930 SELECTED TOPICS (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.

**MAN 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

- MAN 7205 ORGANIZATION THEORY (3)**  
PR: MAN 7225 or CI. Interdisciplinary overview of theory and research on macro organizational variables affecting organizational design and effectiveness. Focus on relationships between org. Structure and dynamics of human behavior.
- MAN 7225 RESEARCH ELECTIVE IN MANAGEMENT (3)**  
PR: GEB 6836, Research Methods I and II or equivalent. Parametric & non-parametric statistics required. Research: Methods for organization analysis and management; design; sample selection; data collection; interpretation & presentation of results.
- MAN 7245 ORGANIZATIONAL BEHAVIOR (3)**  
PR: MAN 7205 or CI. Behavioral concepts and practices in organizations. Emphasis on individual groups, intragroup and intergroup development & actions; organization; socialization; motivation; values; performance; communication effectiveness.
- MAN 7285 ORGANIZATIONAL DEVELOPMENT (3)**  
PR: MAN 7205 or CI. Theory and research relating to management efforts to design and implement continual developmental activities to alter climate and improve productivity and effectiveness in dynamic organizations.
- MAN 7355 MANAGERIAL ASSESSMENT AND DEVELOPMENT (3)**  
PR: MAN 7205 or CI. Theoretical foundations of measurement of managerial performance and development. Analysis of research on competence, style, ratings and performance.
- MAN 7900 DIRECTED READINGS IN MANAGEMENT (3)**  
PR: MAN 7245 and MAN 7285 or CI. Advanced reading program from selected areas in Management under supervision of faculty member, requiring written contract describing requirements, prior to registration. Repeatable with changing topics.
- MAN 7910 DIRECTED RESEARCH IN MANAGEMENT (3)**  
PR: MAN 7245 and MAN 7285 or CI. Advanced directed research program in a specific area of Management under supervision of a management faculty member. Repeatable as topics vary.
- MAN 7930 SELECTED TOPICS IN MANAGEMENT (3)**  
PR: MAN 7245 and MAN 7285 or CI. A flexible format to offer specialized courses in management not available in regular curriculum. Repeatable as topics vary.
- MAN 7932 SEMINAR IN MANAGEMENT (3)**  
PR: MAN 7245 and MAN 7285 or CI. Critical examination of problems and issues relevant to contemporary management such as productivity improvement, environmental constraints, etc. Repeatable as topics vary.
- MAN 7935 SEMINAR IN STRATEGIC MANAGEMENT (3)**  
PR: CC. Introduces basic theoretical issues and empirical research in strategic management.
- MAN 7980 GRADUATE DISSERTATION (21)**  
PR: Successful completion of preliminary exams; successful completion of Field Exams in each Major and Secondary field and advancement to candidacy for Ph.D. program in Management. Dissertation. Repeatable. (S/U only.)

## GENERAL BUSINESS ADMINISTRATION

*Faculty listed under department offering course.*

### **BUL 5665 LAW AND THE ACCOUNTANT (3)**

PR: BUL 3112 or CI. A comprehensive study of commercial law as it affects the practice of accounting.

### **GEB 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

### **MAN 5806 ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT COUNSELING (1-3)**

Small business management consulting to an on-going firm or development of a business plan for a new enterprise. Emphasis on developing consulting skills and recognizing implications of entrepreneurs capabilities and attitudes for success.

## MARKETING

*Chairperson:* P.J. Solomon; *Professors:* R.L. Anderson, D.M. Lambert, T.E. Neff, D.C. Sleeper, P.J. Solomon; *Associate Professors:* S.A. Baumgarten, A.J. Bush, W.A. DeBord, J.S. Hensel, D.J. Ortnau, M.B. Stamps, H.H. Towery; *Assistant Professors;* E.W. Boatwright, R.P. Bush.

### **MAR 6216 LOGISTICS AND PHYSICAL DISTRIBUTION MANAGEMENT (3)**

PR: GEB 6745 or CI. 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, case analysis.

### **MAR 6158 INTERNATIONAL MARKETING MANAGEMENT (3)**

PR: GEB 6745. 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 upon problem-solving within an international context.

### **MAR 6336 PROMOTIONAL MANAGEMENT (3)**

PR: GEB 6745. 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.

### **MAR 6406 SALES MANAGEMENT (3)**

PR: GEB 6745. 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.

### **MAR 6616 RESEARCH FOR MARKETING MANAGERS (3)**

PR: GEB 6745, GEB 6756, GEB 6775. 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, project.

- MAR 6646 MARKETING STRATEGY (3)**  
 PR: GEB 6745. A study of strategic marketing planning and problem-solving process 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.
- MAR 6907 INDEPENDENT STUDY (VAR.)**  
 Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)
- MAR 6916 DIRECTED RESEARCH (VAR.)**  
 PR: GR. Master's level. Repeatable. (S/U only.)
- MAR 6936 SELECTED TOPICS IN MARKETING (1-4)**  
 PR: CI. The content and organization of this course will vary according to the interests of the faculty and students involved in any given term. May be repeated when subjects differ.
- MAR 7555 CONSUMER BEHAVIOR THEORY (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.
- MAR 7635 ADVANCED MARKETING RESEARCH: DESIGN AND TECHNIQUE (3)**  
 PR: QMB 7565, QMB 7566 or CI. 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.
- MAR 7667 MARKETING MODELS AND STRATEGY APPLICATIONS (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 that are necessary to develop and implement marketing decision support system.
- MAR 7787 MARKETING THEORY AND THOUGHT (3)**  
 PR: Graduate Standing and CI. An intensive study of marketing concepts and theories from 1900 to present. Emphasis will be placed on the development of theory as well as predictions of future theoretical developments.
- MAR 7910 INDEPENDENT STUDY IN MARKETING (3)**  
 This course permits a doctoral student to pursue research in a specific area under the direct supervision of a faculty member. May be repeated up to 6 credit hours. (S/U only.)
- MAR 7930 ADVANCED SEMINAR IN MARKETING (3)**  
 Broad readings within the field of marketing; an intensive survey and analysis of current marketing problems, their significance, evaluation and probable outcome; suggestions of possible future empirical research directions and investigations.
- MAR 7931 SEMINAR ON SELECTED MARKETING TOPICS (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 re-



search; or international marketing. This course may be repeated for credit when topics vary.

**MAR 7980 PH.D. DISSERTATION (VAR.)**

PR: Successful completion of preliminary exams; successful completion of field exam in each major and secondary field; and advancement to candidacy for Ph.D. program in marketing. Directed research. (S/U only.)

## College of Education

### ADULT AND VOCATIONAL EDUCATION

*Chairperson:* R. Hill; *Professors:* W.P. Danenburg, F.F. Johnson; *Associate Professors:* W.E. Blank, D.B. Briscoe, R.G. Cantor, C.H. Collier, R. Hill, W.B. James, R.E. Palmer, G.P. Patterson, C. Welter; *Assistant Professor:* M.K. Manthei-Everhart; *Visiting Associate Professor:* D. Wilder; *Visiting Assistant Professors:* B. Combee, K. Ellard, A. Kerns, R. Hicks; *Visiting Instructors:* E. Gallagher, J. Grisham, J. Scaglione; *Other Faculty:* K. Childress, F. Gallivan, J. Osborn, S. Stokes.

### CHILDHOOD/LANGUAGE ARTS/READING EDUCATION

*Chairperson:* M.W. Olson; *Professors:* L.C. Greabell, S. Forseth-Helton, R. Linder, J. Long, A.J. Loew, L. McClellan, M. Mann, D.D. Neville, E.F. Searls; *Associate Professors:* G.B. Barkholz (also in Library, Media & Information Studies), B.K. Clarke, F.W. Freshour, F.S. Goforth, P. Hanley, S. Homan, J.P. Klesius, J. Linder, M.W. Olson, H.P. Pfof, J.T. Polito, C. Spillman, G.M. Towery; *Assistant Professors:* N. Anderson, W. Kasten, L. Marlow, C.J. Schwartz, J. Swarzman.

### CURRICULUM AND INSTRUCTION

*Chairperson:* J.T. Bullock; *Professors:* J.T. Bullock, R.E. Johnson, H.G. Kark, J.B. Kase-Polisini, B.K. Lichtenberg, D.R. Lichtenberg, R.L. Loveless, L.E. Monley, E.R. Phillips, D.J. Publisi, H.E. Steiner, A.M. Troutman, A.E. Uprichard, W.W. West; *Associate Professors:* H.C. Bryant, P.V. Czyzewski, M.S. Holland, B.J. Kazanis, J.W. Levy, F.L. Prince, A. Unruh; *Assistant Professor:* B.S. Spector.

### EDUCATIONAL LEADERSHIP

*Chairperson:* D.E. Orlosky; *Professors:* W.F. Benjamin, J.C. Bondi, P.E. McClendon, D.E. Orlosky, D.D. Peterson, D.M. Purdom, A. Shapiro, L. Tuttle, M.G. Villeme, J. Wiles; *Associate Professors:* L.P. Cleary, J.L. Hunt, L.T. Karns, T.W. Keene, R.F. Pride, K. Snyder; *Courtesy Faculty:* R. Anderson.

### EDUCATIONAL MEASUREMENT & RESEARCH

*Chairperson:* J.L. Mazur; *Professors:* R.C. Blair, B.W. Hall, W.G. Katzenmeyer, J.L. Mazur, J.L. Robinson, D.E. Stone, R.E. Wilk; *Associate Professors:* L.M. Carey, G. Hutchcraft; *Assistant Professor:* C. Hines.

### INSTRUCTIONAL COMPUTING

*Chairperson:* J.L. Mazur; *Professors:* C. Engle, A. Trontman; *Associate Professor:* F. Briet; *Assistant Professor:* G. Tubb.

## MUSIC EDUCATION

*Chairperson:* V. Jennings; *Professors:* V.A. Bridges, V. Jennings; *Assistant Professors:* C. Doane, S. Hodge.

## PHYSICAL EDUCATION

*Chairperson:* H.A. Hoffman; *Professors:* L.E. Bowers, R. Heeschen, H.A. Hoffman, S.E. Klesius, C.D. Smith; *Professor Emeritus:* M.E. Crickenberg; *Associate Professors:* B.L. Beasley, W.D. Hall, H. Weinberg, J.F. Young.

## PSYCHOLOGICAL AND SOCIAL FOUNDATIONS

*Chairperson:* J. Barnard; *Professors:* E.C. Anderson, J. Barnard, D.E. Bostow, W.W. Burley, J.C. Dickinson, J.C. Follman, O.G. Geiger, E.V. Johanningmeier, E.B. Kimmel, D.L. Lantz, S.H. Silverman; *Professor Emeritus:* B.O. Smith, C. Weingartner; *Associate Professors:* W.T. Bridges, D.L. Carroll, G.H. Kincaid, H.M. Knoff, R. Mumme.

## SCHOOL OF LIBRARY AND INFORMATION STUDIES

*Director:* R. Grover; *Professors:* J.K. Gates, R. Grover, J.A. McCrossan, F.C. Pfister, A.G. Smith; *Associate Professors:* G.R. Barkholz, J.M. Knego, T.C. Wilson; *Assistant Professors:* L.G. Chrisman; *Courtesy Associate Professor:* Y.L. Ralston.

## SPECIAL EDUCATION

*Chairperson:* A.J. Mauser; *Professors:* H.F. Boyd, R.C. Dwyer, B. Lax, A.J. Mauser, S.P. Singh, D.D. Sisk; *Associate Professors:* R. Cline, E. Guetzloe, C.D. Lavelly, J.A. Merica, H.A. Sproles; *Visiting Faculty: Professor:* J. Platt; *Courtesy Faculty: Professors:* W.C. Rhodes, J. Barnard, S. Richardson; *Assistant Professor:* L. Sherry; *Other Faculty:* L. Bowers, F. Cannella, P. Comer, J. Forrestal, D. Higgins, D. Kimes, B. King, S. Klesius, D. Miller, R. Simches, T. Stokes, S. Sykes, C. Wooley.

## ADMINISTRATION SUPERVISION

### EDA 6061 PRINCIPLES OF EDUCATIONAL ADMINISTRATION (3)

Educational administration as a profession. Consideration of organization, control, and support of the educational system.

### EDA 6106 ADMINISTRATIVE ANALYSIS AND CHANGE (3)

Change and change strategies in formal and informal organizations are foci. Students will develop change strategies and will apply them to selected situations.

### EDA 6192 EDUCATIONAL LEADERSHIP (3)

PR: Graduate standing. Administration course that addresses change, influences, and planning systems. The course also examines personnel functions for administrators.

### EDA 6195 POWER AND POLITICS IN EDUCATION (3)

The nature and power and its use, its relationship to political processes and their use in policy-making are foci of this course. Students will study and develop educational policies.

- EDA 6232 SCHOOL LAW (3)**  
Basic essentials of school law. A review of court decisions affecting American education, with emphasis on Florida State Statutes.
- EDA 6242 SCHOOL FINANCE (3)**  
PR: EDA 6061 or Cl. Financial support of public education by local, state, federal sources, with emphasis on Florida; introduction to educational budgeting.
- EDA 6243 SCHOOL FISCAL RESOURCE ALLOCATION (3)**  
PR: Cl. Concepts and practices in allocation and accountability of financial resources in the schools. Use of PPBS and zero-based techniques, school-based management models.
- EDA 6262 PLANNING EDUCATIONAL FACILITIES (3)**  
PR: Cl. Problems in the planning, construction, and use of educational facilities. Visitation and/or evaluation of selected schools.
- EDA 6503 THE PRINCIPALSHIP (3)**  
PR: Graduate standing. Organization and administration of a school. Emphasis on the competencies necessary for leadership and management by principal as the administrator and instructional leader.
- EDA 6910 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- EDA 6931 CASE STUDIES IN SCHOOL ADMINISTRATION (3)**  
PR: EDA 6061 or Cl. Case studies to help prospective administrators understand administrative problems, propose feasible solutions, and evaluate courses of action. The course develops skill in decision making.
- EDA 6945 ADMINISTRATION PRACTICUM (3-8)**  
PR: Completion of a significant amount of the student's program. Field experiences in school systems for the purpose of identifying and analyzing educational problems. Application of concepts developed in the student's program of the solution of these problems.
- EDA 7222 ADMINISTRATION OF SCHOOL PERSONNEL POLICIES AND PRACTICES (3)**  
PR: Certification in Administration/Supervision or Cl. Administration of school personnel policies and practices relating to professional staff, supporting staff, and students.
- EDA 7233 LEGAL DIMENSIONS OF SCHOOL ADMINISTRATION (3)**  
PR: EDA 6263 or Cl. Historical perspective in law and education with in-depth reviews of case law showing the evolution of courts as educational policy makers.
- EDA 7247 ADVANCED SCHOOL FINANCE (3)**  
PR: EDA 6242 or Cl. Advanced treatment of school finance. Development, implementation, and evaluation of financial resource and allocation systems. Emphasis is on intradistrict allocation.
- EDS 6050 PRINCIPLES AND PRACTICES OF EDUCATIONAL SUPERVISION (3)**  
Principles and practices of instructional supervision including role definitions of supervision, analysis of role conflict, needs assessments, supervising the planning of instruction, and observing the delivery of instruction.

**EDS 6131 CLINICAL SUPERVISION (3)**

Designed to train administrators, supervisors, and peer teachers in observing and diagnosing teacher classroom performance, write remedial plans, conduct post observation conferences, and evaluate performance.

**EDS 6239 PROBLEMS IN SUPERVISION (3)**

PR: EDS 6050 or CI. The analysis of instructional problems in schools. Emphasis of the course is directed to supervisory tasks, case studies, and the application of problem solving techniques and strategies.

**EDS 7130 TEACHER EVALUATION: PROCESS AND INSTRUMENTS (3)**

Examine procedures for establishing content validity, reliability, norms and predictive validity of teacher evaluation systems; and, to examine the psycho/metric qualities of selected instruments.

**ADULT EDUCATION****ADE 6080 ADULT EDUCATION IN THE UNITED STATES (4)**

A study of the adult education movement in the United States from its beginnings to the present life long learning enterprise it has become. Economic and cultural factors of the past are examined with a view toward implications for the future.

**ADE 6160 PROGRAM MANAGEMENT IN ADULT EDUCATION (3)**

This course examines methods for establishing a productive adult education program; and the principles and procedures involved in designing, organizing, operating, and evaluating comprehensive adult education programs.

**ADE 6161 CURRICULUM CONSTRUCTION IN ADULT EDUCATION (4)**

Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation. It concentrates on basic principles affecting the planning of Adult Education activities, including an overview of the human forces that both impinge and motivate human behavior in an adult learning environment.

**ADE 6166 CURRICULUM CONSTRUCTION: ADULT EDUCATION (4)**

Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation.

**ADE 6197 ADULT BASIC EDUCATION (4)**

An overview of adult basic education with emphasis on current issues and problems of curriculum and instruction in program development and emphasis on culturally different adults.

**ADE 6360 METHODS OF TEACHING ADULT EDUCATION (3)**

An exploration of different methods, techniques, and materials available to help adults learn. Concentration will be on the process of designing effective learning experiences for adults and developing the competencies of self-directed learning.

**ADE 6370 TRAINERS IN BUSINESS AND INDUSTRY (3)**

A study of trainers in business and industry and acquisition of several key competencies required to this role.

**ADE 6380 ADMINISTRATION OF LOCAL ADULT EDUCATION PROGRAMS (4)**

A study of the organization, selection of personnel, assignment of duties and responsibilities, and establishment of policies and procedures to accomplish the objectives of the local program within the federal, state, and local requirements.

**ADE 6385 THE ADULT LEARNER (3)**

This course investigates the physiological and psychological changes in the adult life span and the implications these have for adult learning capabilities. The course focuses on the identification of principles of adult learning, differences between adults and youths as learners, and a review of research on adult learning.

**ADE 6387 SUPERVISION OF LOCAL ADULT EDUCATION PROGRAMS (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.

**ADE 6946 PRACTICUM IN ADULT EDUCATION (2-6)**

A problem-centered field study in the local community, school, government, office, social agency, business or industry.

**ADE 7185 COMMUNITY EDUCATION AND PROGRAM DEVELOPMENT (4)**

Examines the sociological and economical forces affecting community education programs and activities. Also the concept of lifelong learning and its relationship to the development of community educational programs is examined.

**ADE 7388 ADULT DEVELOPMENT AND LEARNING (3)**

PR: ADE 6385, or equivalent. This is an advanced in-depth study of the distinctive characteristics of adult life and adult learning.

**ADE 7910 DIRECTED RESEARCH IN ADULT EDUCATION (1-4)**

PR: Advanced graduate level. Directed research on topics related to adult education.

**ADE 7937 SEMINAR IN ADULT EDUCATION (1-4)**

PR: Graduate level or CI. Seminar in advanced topics in Adult Education.

**ADE 7947 ADVANCED INTERNSHIP: ADULT EDUCATION (2-4)**

PR: Advanced graduate level only. Supervised field experiences in an approved agency, educational, or institutional adult education setting. (S/U only.)

## **ART EDUCATION**

**ARE 6262 MANAGEMENT DESIGN FOR ART INSTITUTIONS (3)**

Principles of administration and supervision of art programs in the school.

**ARE 6706 BASIS OF INQUIRY INTO ARTISTIC MIND (3)**

PR: ARE 6844 or CI. Literature and research in art education. An in-depth study of the current basis of inquiry into artistic mind including a multi-disciplined review of literature and an inquiry project.

**ARE 6844 EXPERIENTIAL AND THEORETICAL BASIS OF ARTISTIC MIND (3)**

Past and contemporary philosophies and practices in art education.

**ARE 6906 INDEPENDENT STUDY: ART EDUCATION (1-6)**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**ARE 6944 FIELD WORK IN ART EDUCATION (1-4)**

For students with degree-seeking status. Supervised participation in activities related to art education in community centers, nonschool arts program, planned workshop and research.

**BUSINESS AND OFFICE EDUCATION****BTE 5171 CURRICULUM CONSTRUCTION: BUSINESS EDUCATION (3)**

Curriculum scope, the process of planning and organizing instructional programs with emphasis in task analysis and process evaluation.

**BTE 5245 PROGRAM MANAGEMENT: BUSINESS EDUCATION (3)**

Organization, coordination, and budgeting of adult, cooperative, and special programs.

**BTE 6385 IMPROVEMENT OF METHODS OF TYPEWRITING INSTRUCTION (3)**

PR: EDF 6431, EDF 6481 or CI. Research-based study of methodology and psychology of teaching typewriting. Includes techniques for developing specialized instructional materials and equipment for the exceptional student.

**BTE 6386 THEORIES OF BASIC BUSINESS & ACCOUNTING INSTRUCTION (3)**

PR: Methods of Teaching or equivalent, EDF 6481 or CI. This course contains a research-based study of theory and methodology in teaching basic business and accounting subjects. The course is available to majors and non-majors and for credit and non-credit workshops and seminars.

**BTE 6387 RESEARCH IMPLICATIONS FOR SHORTHAND PEDAGOGY (3)**

PR: EDF 6481 or CI. Research-based study of methodology and prognosis in the teaching of shorthand as a language skill. Available for credit and non-credit workshops and seminars.

**BTE 6944 PRACTICUM: BUSINESS EDUCATION (3-6)**

A problem-centered field study in the local community, school, government, office, social agency, business or industry.

**COUNSELOR EDUCATION**

*Chairperson:* V.J. Drapela; *Professors:* W.K. Bott, V.J. Drapela, D.G. Ferguson, E.E. Panther; *Associate Professor:* C.M. Story; *Assistant Professor:* D. Anderson.

**EGC 5101 HUMAN RELATIONS SKILLS IN GUIDANCE (4)**

PR: EGC 4001 or CI. Introduction to the theory of human relations dynamics and development of skills required for effective interpersonal relations. Lecture sessions and laboratory training.

**EGC 6006 PRINCIPLES AND ORGANIZATION OF GUIDANCE (4)**

Required first course for majors in guidance and counseling; an elective for students in other programs. Guidance as a profession; its philosophical framework; its scope and functions; its organization and administration in various settings.

**EGC 6105 COMPARATIVE GUIDANCE AND COUNSELING (3)**

PR: CI. Study of guidance theories and practices in selected foreign countries as compared with the American guidance model. Evaluation of foreign guidance through critical analysis of primary sources. For example: guidance philosophy and practice in countries of the Soviet Bloc, Western Europe, and Latin America.

**EGC 6225 APPRAISAL PROCEDURES IN GUIDANCE (4)**

PR: EDF 6431, EGC 6006. A study of test and non-test techniques of appraisal with emphasis on the use of standardized test data in guidance programs and the use of the individual case study approach.

**EGC 6306 INFORMATION SERVICE AND CAREER GUIDANCE (4)**

PR: EGC 6006. Study of the information service in guidance as it relates to the total life style and career development. Theories dealing with career planning. Application of educational, vocational, and personal-social information resources to lifelong human development.

**EGC 6435 COUNSELING THEORIES AND PRACTICES (4)**

PR: EDF 6354 and EGC 6006. Nature of the counseling process with emphasis on major theoretical approaches, supervised practice, and application. Focuses upon working with adolescents and adults; includes attention to (a) philosophic bases of helping relationships and (b) consultation theory and practice.

**EGC 6464 COUNSELING SERVICE IN ELEMENTARY SCHOOLS (4)**

PR: EDF 6354 and EGC 6006. Nature of the counseling process with emphasis on major theoretical approaches, supervised practice, and application. Focuses upon working with elementary age children, and consultations with parents and teachers.

**EGC 6472 COUNSELING SPECIAL POPULATION GROUPS (3)**

PR: EGC 6435 or EGC 6464. Application of counseling theory to work with clients from special population groups, e.g., ethnic minorities, women reentering the labor force, and older persons. Each student will select a specific population group for supervised research.

**EGC 6509 GROUP THEORY AND PRACTICUM:  
ELEMENTARY SCHOOLS (4)**

PR: EGC 6464. Experiential study of group structures, group dynamics, methodology, and leadership models applicable to counseling and guidance in the elementary schools. Skill building through supervised practicum in leading groups of elementary school children.

**EGC 6510 GROUP THEORY AND PRACTICUM:  
ADOLESCENTS AND ADULTS (4)**

PR: EGC 6435. Experiential study of group structures, group dynamics, methodology, and leadership models applicable to counseling adolescents and adults. Skill building through supervised practicum in leading groups of adolescents or adults.

- EGC 6830 PRACTICUM IN ELEMENTARY GUIDANCE COUNSELING AND CONSULTING** (4)  
 PR: CC. Supervised counseling experiences for integration of knowledge and skills gained in didactic study. Focus is upon working with elementary age children, parent and teachers. (S/U only.)
- EGC 6835 PRACTICUM IN SECONDARY SCHOOL GUIDANCE COUNSELING** (4)  
 PR: CC. Supervised counseling experiences for integration and application of knowledge and skills gained in didactic study. Focus is upon working with adolescents and adults. (S/U only.)
- EGC 6905 INDIVIDUAL STUDY** (1-4)  
 PR: CI. Independent study, research and experience relating to guidance and pupil personnel services under the supervision of a member of the Counselor Education faculty. May be repeated for a maximum of four hours.
- EGC 6935 SEMINAR IN GUIDANCE** (1-2)  
 PR or CR: EGC 6006, CI. Significant issues in the field of guidance; topics for discussion will vary according to needs and interests of students. May be repeated for credit for a maximum of four hours. (S/U only.)
- EGC 6948 INTERNSHIP IN SCHOOL GUIDANCE** (6)  
 PR: CC. Field experience involving one semester of full-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. (S/U only.)
- EGC 7437 ADVANCED COUNSELING: THEORIES AND PRACTICUM** (5)  
 PR: CC. 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.
- EGC 7446 CONSULTATION AND SUPERVISION: THEORIES AND PRACTICUM** (5)  
 PR: CC. 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.
- EGC 7894 ADVANCED INTERNSHIP IN COUNSELOR EDUCATION** (2-8)  
 PR: CC. Supervised field experiences in an approved agency, educational institution or industrial setting: counseling, consulting, supervision, applied research, administration, and evaluation of counseling/guidance services. Repeatable up to eight semester hours. (S/U only.)
- EGC 7935 ADVANCED SEMINAR IN COUNSELOR EDUCATION** (2)  
 PR: CI. Seminar for advanced graduate students in counselor education. Issues and trends in Guidance and Counseling will be studied and discussed. May be repeated for two additional credit hours. (S/U only.)



## CURRICULUM AND INSTRUCTION

**EDE 6205 SCHOOL CURRICULUM: ELEMENTARY (3)**

PR: EDG 4620. Designed to examine the organization, curriculum, and instruction of the elementary school with special emphasis on the nature of the student served in elementary schools. Open to all education graduate students.

**EDE 6320 PROJECT T.E.A.C.H. (3)  
(TEACHER EFFECTIVENESS AND CLASSROOM HANDLING)**

PR: Post-Baccalaureate status. 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.

**EDE 6321 PROJECT P.R.I.D.E. (3)  
(PROFESSIONAL REFINEMENTS IN DEVELOPING EFFECTIVENESS)**

PR: Post-Baccalaureate Status. Topics in academic questioning techniques, non-verbal communication, motivating changes in behavior, managing critical incidents in the classroom and analyzing typical classroom practices for positive or negative impact.

**EDE 6322 TEACHING THROUGH LEARNING CHANNELS (3)**

PR: Post-Baccalaureate Status. Focus on the area of teaching effectiveness in the cognitive domain and skill training on the identification and use of student learning channel strengths; analysis of curriculum based on learning channels to identify the skills necessary to complete learning tasks; the development of alternative strategies to meet the needs of all students.

**EDF 6281 WORKSHOP AND CONFERENCE DESIGN (3)**

PR: CI. Covers the knowledge and skills required to design, conduct and/or administer, and evaluate both workshops and conferences to meet the educational and organizational goals.

**EDG 5626 CURRICULUM AND INSTRUCTION (3)**

A study of a systematic approach to making curriculum and instructional decisions in the classroom.

**EDG 5925 EDUCATION WORKSHOP (1-4)**

Workshop for the improvement of the curriculum of an elementary or secondary school. Open only to teachers in service. Complete faculty participation required. (S/U only.)

**EDG 6285 SCHOOL CURRICULUM IMPROVEMENT (3)**

PR: Workshop for the improvement of the curriculum of an elementary or secondary school. Open only to teachers in service. Complete faculty participation required.

**EDG 6415 PROJECT P.R.I.D.E. (3)**

Topics in academic questioning techniques, non-verbal communication, motivating changes in behavior, managing critical incidents in the classroom and analyzing typical classroom practices for positive or negative impact.

**EDG 6416 PROJECT T.E.A.C.H. (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.

**EDG 6417 TEACHING THROUGH LEARNING CHANNELS (3)**

Focus on the area of teaching effectiveness in the cognitive domain and skill training on the identification and use of student learning channel strengths; analysis of curriculum based on learning channels to identify the skills necessary to complete learning tasks; the development of alternative strategies to meet the needs of all students.

**EDG 6627 FOUNDATIONS OF CURRICULUM AND INSTRUCTION (3)**

PR: EDG 4620 or 5206. An introductory course in curriculum and instruction at the graduate level, basic to all specialized courses in the field. Emphasis on foundations, design, basic concepts, and theory and trends of curriculum from early childhood through secondary levels. The course is open to all graduate students.

**EDG 6693 PROBLEMS IN CURRICULUM AND INSTRUCTION: ELEMENTARY (1-3)**

PR: EDG 4620. 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.

**EDG 6694 PROBLEMS IN CURRICULUM AND INSTRUCTION: MIDDLE SCHOOL (1-3)**

PR: EDG 4620. 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.

**EDG 6695 PROBLEMS IN CURRICULUM INSTRUCTION: SECONDARY (1-3)**

PR: EDG 4620. 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.

**EDG 6906 INDEPENDENT STUDY (VAR.)**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**EDG 6931 SELECTED TOPICS IN EDUCATION (1-4)**

PR: Graduate standing and CI. Each topic is a course under the supervision of a faculty member. The title and content will vary according to the topic.

**EDG 6947 THESIS: MASTER/EDUCATION SPECIALIST (VAR.)**

For students in M.A. and Ed.S. programs requiring a thesis. This project is a culminating, integrating experience which aims at relating theory to practice. Repeatable. (S/U only.)

**EDG 6971 THESIS: MASTER/EDUCATION SPECIALIST (VAR.)**

For students in M.A. and Ed.S. programs requiring a thesis. This project is a culminating, integrating experience which aims at relating theory to practice. Repeatable. (S/U only.)

**EDG 7325 ANALYSIS OF TEACHING (3)**

PR: EDG 6627 or CI. Develops skills in systematic observation. Study and development of related research design models.

**EDG 7667 ANALYSIS OF CURRICULUM AND INSTRUCTION (3)**

PR: EDG 6627. A study of various theoretical frameworks for analyzing curriculum and instruction. Emphasis on rational models of curriculum inquiry.

**EDG 7692 ISSUES IN CURRICULUM AND INSTRUCTION (3)**

PR: EDG 6627. Identification and analysis of major problems and issues in curriculum and instruction. Critical examination of efforts to deal with these issues.

**EDG 7910 DIRECTED RESEARCH (VAR.)**

PR: GR. Ph.D. level. Repeatable. (S/U only.)

**EDG 7931 SELECTED TOPICS (1-4)**

PR: CC. Selected topics in advanced Education. May be repeated for credit to a maximum of 12 hours.

**EDG 7937 GRADUATE SEMINAR (1-4)**

PR: CC. Seminar in advanced Education. May be repeated for credit to a maximum of 12 hours.

**EDG 7980 DISSERTATION: DOCTORAL (VAR.)**

PR: Must be admitted to Doctoral Candidacy. Repeatable (S/U only.)

**EDM 6235 SCHOOL CURRICULUM: MIDDLE (3)**

PR: EDG 4620. Designed to examine the organization, curriculum, and instruction of the middle school with special emphasis on the nature of the student served in the middle school. Open to all education graduate students.

**ESE 6215 SCHOOL CURRICULUM: SECONDARY (3)**

PR: EDG 4620. Designed to examine the organization, curriculum, and instruction of the secondary school with special emphasis on the nature of the student served in the secondary school. Open to all education graduate students.

**ESE 6906 INDEPENDENT STUDY: SECONDARY EDUCATION (1-6)**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**LAE 5137 CURRICULUM EVALUATION IN SECONDARY ENGLISH (3)**

PR: Certification in English or Mass Communications. Examination of new evaluation policies and procedures relating to curricula in English in the secondary school.

**SSE 5644 ECONOMIC DECISION-MAKING FOR TEACHERS (3)**

This course provides teachers with information on business operation and decision making skill development in resolving economic/business problems. (S/U only.)

**DISTRIBUTIVE AND MARKETING EDUCATION**

**DEC 5175 PROGRAM MANAGEMENT: DISTRIBUTIVE EDUCATION (3)**

Organization, coordination, and budgeting of adult, cooperative, and special programs.

**DEC 5185 CURRICULUM CONSTRUCTION: (3)****DISTRIBUTIVE EDUCATION**

Curriculum scope, the process of planning and organizing instructional programs with emphasis on task analysis and process evaluation.

**DEC 6945 PRACTICUM: DISTRIBUTIVE EDUCATION (3-6)**

A problem-centered field study in the local community, school, government, office, social agency, business, or industry.

**EDUCATIONAL LEADERSHIP****EDA 6192 EDUCATIONAL LEADERSHIP (3)**

Administration course that addresses change, influences, and planning systems. The course also examines personnel functions for administrators.

**EDA 6195 POLICY DEVELOPMENT (3)**

Contemporary research on diffusion of innovations, political power in policy decision making. Role of establishing educational policies.

**EDA 6503 GENERAL ORGANIZATION PRINCIPALSHIP (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.

**ELEMENTARY EDUCATION****ARE 6358 ART FOR THE ELEMENTARY SCHOOL (3)****TEACHER**

Exploration of various materials and techniques in relationship to current theories about art and the intellectual, creative, emotional and esthetic growth of children.

**EDE 6305 CREATIVE TEACHING IN THE (3)  
ELEMENTARY SCHOOL**

Creative processes in the teaching of visual arts, music, dance, and drama to elementary school pupils.

**EDE 6906 INDEPENDENT STUDY: ELEMENTARY/EARLY (1-6)  
CHILDHOOD EDUCATION**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**EDG 6935 SEMINAR IN CURRICULUM RESEARCH (1-3)**

PR: EDF 6481. Critical evaluation of current research and curriculum literature, design and analysis of individual research topics leading to satisfaction of research requirements.

**EDS 6930 PROBLEMS IN SUPERVISION (3)**

PR: EDF 6481 or equivalent and EDS 6050. Problems in supervising for curriculum improvement within the elementary school.

**EEC 6261 ADVANCED PROGRAMS IN EARLY (3)  
CHILDHOOD EDUCATION**

PR: EDF 6431, EEC 4203 or Ci. A study of innovative curriculum designs in Early Childhood Education, with emphasis given to related research.

**EEC 6405 HOME-SCHOOL-COMMUNITY INTERACTION (3)  
IN EARLY CHILDHOOD EDUCATION**

PR: EDF 6431, EEC 4203 or CI. An intensive study of the roles of parents, teacher aides, and community agencies involved in the education of the young child.

**EEC 6406 SOCIAL GROWTH IN CHILDHOOD (3)**

PR: Admission to College of Education. A study of the principal factors that influence the social development of young children with particular emphasis upon those cultural influences that affect both child development and the educational programs for the young child.

**EEC 6705 INTELLECTUAL GROWTH IN CHILDHOOD (3)**

Intellectual development of the normal child with particular emphasis on the studies of Jean Piaget and how they relate to curriculum for children, ages 0-8. Child study through observation required.

**EEC 6926 WORKSHOP IN EARLY CHILDHOOD EDUCATION (3)**

Individual problems and innovations related to methods and materials of instruction in early childhood.

**LAE 6301 LANGUAGE LEARNING IN CHILDHOOD (3)**

PR: Graduate standing in the College of Education. The study of research that has been used to assess the language behavior of normal children. Attention will also be given to the application of selected research methodology to understanding linguistics behavior of children.

**LAE 6315 TEACHING WRITING IN THE ELEMENTARY CLASSROOM (3)**

PR: LAE 4314 or LAE 4355 or LAE 4642 or CI. A study of the development of writing, its functions, conventions and processes and instructional strategies to be used across the elementary curriculum. Emphasis is placed on products generated by students. This course is available to majors and non-majors.

**LAE 6415 LITERATURE AND THE LEARNER (3)**

This course is designed to acquaint adults with the nature, scope and uses of literature for instructional, information and recreational purposes. The implication of current theory, significant research and issues in literature study will be investigated and examined as they relate to the learner.

**LAE 6616 TRENDS IN LANGUAGE ARTS INSTRUCTION (3)**

PR: LAE 4314 or equivalent or CI. A study of significant concepts, emerging trends, research and instructional techniques for implementation and utilization of language arts in all areas of the curriculum.

**LAE 7617 THEORIES AND PATTERNS OF ADVANCED LANGUAGE ARTS INSTRUCTION (3)**

PR: LAE 6616 or equivalent. This course is organized to present new research findings and theories relating to language patterns and contemporary programs for teaching language arts.

**LAE 7746 APPLICATIONS OF THEORIES TO THE DEVELOPMENT OF LANGUAGE ARTS PROGRAMS (3)**

PR: LAE 6616 or equivalent; and LAE 7617. This course is designed to apply research finding and theories for developing and organizing instructional improvement of the language arts.

**LAE 7747 LITERATURE PROGRAM DESIGN (3)**

PR: EDF 6481, LAE 6415, or LAE 6336 or CI. Advanced graduate standing. Investigation and analysis of the research in literature instruction and the application of the findings to the development of literature programs.

**MAE 6116 CURRENT TRENDS IN ELEMENTARY MATHEMATICS EDUCATION (3)**

PR: MAE 4310 or equivalent. Philosophy, content and process of qualitative instruction in modern mathematics in elementary school programs.

**MAE 6548 ADVANCED DIAGNOSIS AND TREATMENT OF LEARNING DISABILITIES IN SCHOOL MATHEMATICS (3)**

PR: MAE 4310 or equivalent. Study of the symptoms, etiologies and consequences of children's learning disabilities in mathematics; study and guided application of theoretical models used in diagnosis and treatment; supervised conduct of a case study.

**MAE 6549 ADVANCED PRACTICUM IN DIAGNOSIS AND TREATMENT OF LEARNING DISABILITIES IN SCHOOL MATHEMATICS (1-6)**

PR: MAE 6548. Supervised conduct of a case study with a student experiencing learning difficulties in mathematics. Procedures used and reporting practice employed developed in MAE 6548 reviewed and extended.

**RED 6116 CURRENT TRENDS IN ELEMENTARY READING INSTRUCTION (3)**

PR: RED 4310 or equivalent course. Study of approaches, materials, and procedures in Elementary Reading instruction, with emphasis on pertinent research. Not for undergraduates, nor to be used as a first course in Reading.

**SCE 6616 TRENDS IN SCIENCE INSTRUCTION (3)**

PR: SCE 4310. Topics in the biological and physical sciences appropriate for teaching in excellent elementary school programs. Analysis of modern curriculum materials used in presenting science as a process in inquiry.

**SSE 6617 TRENDS IN SOCIAL STUDIES INSTRUCTION (3)**

PR: SSE 4313. Crucial concepts drawn from the social sciences. Analysis of the problems approach. Students will select an area of independent study on an advanced level.

**ENGLISH EDUCATION**

*Faculty: M.S. Holland, H.G. Karl, W.W. West.*

**LAE 5932 SELECTED TOPICS IN THE TEACHING OF ENGLISH (3)**

PR: Certification in English and/or Mass Communications and approval of graduate adviser. Investigation of topics of special interest to the student and 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 adviser.

**LAE 6336 NEW PERSPECTIVES ON THE TEACHING OF LITERATURE IN SECONDARY SCHOOLS (3)**

PR: Certification in English or Mass Communications. Survey of recent investigation into adolescents' perception of and responses to literature and implications for organization and presentation of literature curricula.

**LAE 6345 TEACHING WRITTEN COMPOSITION (3)**

Techniques for motivating, guiding, correcting, and evaluating student writing. Available as OU (Open University-Television) with CI.

**LAE 6637 CURRENT TRENDS IN SECONDARY ENGLISH EDUCATION (3)**

Curricular patterns and instructional practices in secondary English.

**LAE 6644 CURRENT TEACHING OF THE ENGLISH LANGUAGE (3)**

Application of recent techniques of language study to classroom teaching of English, especially in relation to current textbooks.

**FOREIGN LANGUAGE EDUCATION**

*Faculty:* A. Bagley.

**FLE 6665 CURRENT TRENDS IN SECONDARY LANGUAGE EDUCATION (3)**

PR: Foreign language fluency and CI. Curricular patterns and instructional practices in the teaching of secondary foreign languages.

**PSYCHOLOGICAL AND SOCIAL FOUNDATIONS OF EDUCATION**

*Faculty:* E.C. Anderson, J.W. Barnard, J.A. Battle, D.E. Bostow, W.T. Bridges, W.W. Burley, D.L. Carroll, J.C. Dickinson, J.C. Follman, O.G. Geiger, E.V. Johannigmeier, E.B. Kimmel, G.H. Kincaid, H.M. Knoff, D.L. Lantz, R. Mumme, S.H. Silverman.

**EDF 5136 ADOLESCENCE (4)**

Study of the educational, intellectual, personality, physical, social and vocational factors in adolescence and their importance for school personnel.

**EDF 5285 PROGRAMMED INSTRUCTION AND TEACHING MACHINES (3)**

Principles for programming in the several academic subjects.

**EDF 5672 AMERICAN DEMOCRACY AND PUBLIC EDUCATION (3)**

Interdependence of the public school and democracy in the United States and the responsibility of the school in fostering and strengthening basic democratic principles.

**EDF 6120 CHILD DEVELOPMENT (4)**

PR: EDF 6211 or CI. Educational, emotional, hereditary, intellectual, social and physical factors influencing child growth and development.

**EDF 6165 GROUP PROCESSES FOR EDUCATIONAL PERSONNEL (1-3)**

PR: CI. The application of group process research to the needs of professional educators and training officers. Techniques in interpersonal communication and influence, group processes, conflict management, and the improvement of mutual social, psychological and technical support systems in schools.

**EDF 6166 CONSULTING SKILLS FOR STAFF DEVELOPMENT (1-3)**

PR: CI. Knowledge and skill training for consulting with organizational clients to solve educational problems and design learning environments or programs. Covers workshop designs for training professional groups concerned with specific issues or sets of problems.

**EDF 6167 EXPERIENTIAL LEARNING: THEORY AND METHODS (3)**

PR: CI. Theory and methods of experiential learning in both formal and informal contexts.

**EDF 6211 PSYCHOLOGICAL FOUNDATIONS OF EDUCATION (3)**

Selected topics in psychology of human development and learning.

**EDF 6213 BIOLOGICAL BASES FOR LEARNING AND BEHAVIOR (3)**

PR: One course in Educational Psychology. A study of human biological development and its influence upon learning and behavior.

**EDF 6215 LEARNING PRINCIPLES APPLIED TO INSTRUCTION (4)**

PR: Graduate Standing. Study of learning principles and their application to classroom instruction.

**EDF 6217 BEHAVIOR THEORY AND CLASSROOM LEARNING (4)**

PR: EDF 6215 or CI. Theoretical and practical applications of behavior modification; introduction to experimental methods for behavior modification; operant methods in behavior and development; analysis and field work.

**EDF 6288 INSTRUCTIONAL DESIGN I (3)**

PR: EDF 6215 or CI. Instructional design models/theories and their systematic application to instructional goals.

**EDF 6354 THEORIES OF PERSONALITY FOR SCHOOL PERSONNEL (4)**

Survey and analysis of major personality theories with emphasis on psycho-social and cognitive development throughout a person's life span. Application of relevant theoretical constructs to education and guidance.

**EDF 6517 HISTORICAL FOUNDATIONS OF AMERICAN EDUCATION (4)**

PR: Graduate Standing. A study of the 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 and problems.

**EDF 6520 EDUCATION IN WESTERN CIVILIZATION (4)**

PR: Graduate Standing; basic course in western history or history of philosophy. Study of educational ideas, institutions, practices and prominent theorists from the western tradition and their continuing influence on modern education.

**EDF 6544 PHILOSOPHICAL FOUNDATIONS OF AMERICAN EDUCATION (3)**

Major philosophies of education relevant to an understanding of contemporary educational issues.



- EDF 8606 SOCIO-ECONOMIC FOUNDATIONS OF AMERICAN EDUCATION (4)**  
PR: Graduate Standing. A study of socio-economic factors as they relate to the work of professional educators and the role of public education in American society.
- EDF 6812 SEMINAR IN COMPARATIVE EDUCATION (4)**  
Contemporary policies and practices in education in selected countries of the world. Methodology in Comparative Education.
- EDF 6705 WOMEN AND EDUCATION (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.
- EDF 6738 EDUCATION, COMMUNICATION, AND CHANGE (3)**  
PR: Graduate standing or Cl. Implications for education of the developments in communication, emphasizing the role of innovations as a catalyst in the process of social change as it affects students, teachers, and traditional school arrangements.
- EDF 6765 SCHOOLS AND THE FUTURE (4)**  
Examination of estimates of future demands upon schools; critique of current paradigms, techniques and literature.
- EDF 6906 INDEPENDENT STUDY: EDUCATIONAL FOUNDATIONS (1-6)**  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- EDF 6938 SELECTED TOPICS (1-4)**  
PR: Cl. 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.
- EDF 6944 FIELD EXPERIENCE (1-4)**  
PR: Cl. Demonstrate skills in the practice of the student's specialty. Specific objectives will be defined according to the needs of the individual student.
- EDF 7143 MEASUREMENT OF COGNITIVE FUNCTIONING IN CHILDHOOD AND ADOLESCENCE (4)**  
PR: A course in measurement and Cl. Investigation of theories and measurement of cognitive functioning in childhood and and adolescence.
- EDF 7586 CLASSICS IN EDUCATIONAL RESEARCH (4)**  
PR: Graduate standing; EDF 6517, EDF 6544, EDF 6606, or Cl. An examination of the context, methodology, and impact of significant research studies in education.
- EDF 7610 SCHOOL REFORM (3)**  
Historical critique of causes and effects of school reform efforts.
- EDF 7649 ANALYSIS OF EDUCATIONAL ISSUES (3)**  
Socio-cultural, historical, and axiological examination of selected issues in public education.

**EDF 7655 ORGANIZATION DEVELOPMENT IN (4)****EDUCATIONAL INSTITUTIONS**

PR: Graduate standing, EDF 6517, EDF 6544, EDF 6606, or Cl. The application of social and behavioral science theory to the organizational and developmental problems of schools and school systems.

**EDF 7682 EDUCATION IN METROPOLITAN AREAS (4)**

PR: Graduate standing; EDF 6517, EDF 6544, EDF 6606, or Cl. Study of the school as a formal, socializing institution and its relationship to the various school populations found in metropolitan areas.

**EDF 7934 SEMINAR IN SOCIAL FOUNDATIONS (4)**  
**OF EDUCATION**

PR: Graduate standing; EDF 6517, EDF 6544 or EDF 6606, or Cl. An examination of significant research socio-cultural issues in Education and the literature attendant to those issues.

**SPS 6197, 6198 PSYCHOEDUCATIONAL (4,4)**  
**DIAGNOSIS AND PRESCRIPTION I, II**

PR: Acceptance to graduate program in School Psychology. 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.

**SPS 6806 DEVELOPMENTAL BASES OF DIVERSE (4)**  
**BEHAVIORS**

PR: Cl. This course covers the major developmental causes and effects of various diverse forms of human behavior.

**SPS 6936 GRADUATE SEMINAR IN SCHOOL PSYCHOLOGY (1-3)**

PR: Cl. Seminars to explore current matters of professional concern in school psychology such as trends, problems, legal and ethical issues, empirical bases of techniques. May be repeated up to 9 credit hours (with different subject matter).

**SPS 6700, 6701, 6702 PSYCHOEDUCATIONAL (4,4,4)**  
**INTERVENTIONS WITH CHILDREN AND ADOLESCENTS I,II,III**

PR: Acceptance to School Psychology graduate program or Cl. 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.

**SPS 6940, 6941 PRACTICUM IN PSYCHOEDUCATIONAL (1-4)**  
**INTERVENTIONS**

PR: Concurrent enrollment in Psychoeducational Interventions with Children and Adolescents — I or II, or Cl. Course provides practical ex-

periences and implement skills discussed and acquired in the intervention courses within settings relevant to school psychology. May be repeated for additional credit.

**SPS 6943, 6944 PRACTICUM IN PSYCHOEDUCATIONAL ASSESSMENT (1-4)**

Course will provide opportunities to implement skills acquired in assessment courses. Concurrently with Psychoeducational Assessment (SPS 6197-98) or with CI. May be repeated for additional credit.

### **HEALTH EDUCATION**

**HSC 5319 (formerly HES 5238C) HEALTH PROBLEMS OF SCHOOL AGE POPULATION (3)**

A study of health problems and needs of school age students, including a health status screening laboratory.

**HSC 6246 (formerly HES 6255) PROCESSES & PRACTICES IN HEALTH EDUCATION (3)**

PR: HSC 6605. Study and application of techniques which facilitate learning of information to effectively influence health attitudes and behavior.

**HSC 6605 (formerly HES 6125) FOUNDATIONS OF HEALTH EDUCATION (3)**

Study of the factors which influence health behavior and the role and responsibilities of health education in the intervention process.

**HSC 6715 (formerly HES 6725) PROGRAM DEVELOPMENT AND EVALUATION IN HEALTH EDUCATION (3)**

PR: HSC 6605 or CI. Analysis development, and evaluation of health education programs in various community settings.

### **HIGHER EDUCATION**

**EDH 6061 THE JUNIOR COLLEGE IN AMERICAN HIGHER EDUCATION (4)**

Philosophical and cultural bases for definition of its role and contemporary issues, such as control, financing, and curricular patterns. The place and problems of the community junior college will be central concern of this course.

**EDH 6938 SEMINAR IN COLLEGE TEACHING (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.

**EDH 7225 CURRICULUM DEVELOPMENT HIGHER EDUCATION (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.

**EDH 7505 HIGHER EDUCATION FINANCE (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.

**EDH 7635 ORGANIZATION AND ADMINISTRATION OF HIGHER EDUCATION (3)**

This course examines the concepts about higher education organizations and administration, the behaviors of those organizations and administrators, and the relationships between concept and practice.

**EDH 7930 HIGHER EDUCATION SEMINAR (1)**

Topics of general and special concern in higher education, restricted to advanced graduate students. May be repeated up to 8 credit hours.

**INDUSTRIAL AND TECHNICAL EDUCATION****EIV 5315 PROGRAM MANAGEMENT: DIVERSIFIED COOPERATIVE TRAINING (3)**

Organization, coordination, and budgeting of adult, cooperative, and special programs.

**EVT 5280 OCCUPATIONAL SAFETY AND HEALTH (OSHA) (3)**

Planning and organizing safety and health course content to be included in occupational education programs in Florida. Content to be identified in and selected from Federal Registers, Department of Labor, Occupational Safety and Health Standards.

**EVT 5369 PREPARATION AND DEVELOPMENT FOR TEACHING (4)**

The development of selected instructional materials, use of new educational media, performance evaluation instruments, and counseling techniques.

**EVT 5664 SCHOOL COMMUNITY DEVELOPMENT (4)**

This course is an approach to identifying, assessing, and analyzing, individual, institutional and community needs for the purpose of cooperative program planning, community involvement and public support.

**EVT 6264 ADMINISTRATION OF LOCAL PROGRAMS: VOCATIONAL (4)**

Organization, personnel selection and assignment, and establishment of policies and procedures for local vocational programs within federal, state and local requirements.

**EVT 6265 SUPERVISION OF LOCAL PROGRAMS: VOCATIONAL EDUCATION (3)**

PR: Cl. 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.

**EVT 6500 INDIVIDUALIZED INSTRUCTION (3)**

Attention is given to individualized instruction to include the special needs students, the slow learner, and the more capable student.

**EVT 6504 PLACEMENT OF SEVERELY HANDICAPPED PEOPLE (3)**

A study of the purpose, methods, processes and procedures used to plan, implement and operate a Vocational Rehabilitation Cooperative School Counseling Program.

**EVT 6661 CURRENT TRENDS (3)**

Historical information, issues, current trends, new dimensions and problems in the area of specialization.

- EVT 6769 METHODS, PROCEDURES, AND PROCESSES OF VOCATIONAL EVALUATION (3)**  
A study of the purposes, methods, processes and procedures used to plan, implement and operate a vocational evaluation program.
- EVT 6926 STAFF DEVELOPMENT (1-5)**  
Implementation of new procedures addressed to discreet developmental needs of the staff as identified by an educational agency.
- EVT 6930 SEMINAR (4)**  
PR: EDF 6431 and EDF 6481. Applied research techniques and investigation of important current issues of thesis in the area of specialization.
- EVT 6948 PRACTICUM: INDUSTRIAL-TECHNICAL EDUCATION (3-6)**  
A problem-centered field study in the local community, school, government, office, social agency, business or industry.
- EVT 7066 FOUNDATIONS AND PHILOSOPHY OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION (3)**  
PR: Preliminary admission to the advanced graduate program and/or Ci. This course focuses on the historical development and contemporary philosophies, cultural bases and practices of Vocational, Technical and Adult Education.
- EVT 7155 CAREER DEVELOPMENT IN VOCATIONAL, TECHNICAL, AND ADULT EDUCATION (3)**  
PR: Preliminary admission to the Graduate Program and Ci. Course involves the development of a career model designed to facilitate career development of students and articulate vocational education and career guidance.
- EVT 7168 INSTRUCTIONAL DEVELOPMENT FOR VOCATIONAL, TECHNICAL, AND ADULT EDUCATION (4)**  
PR: EDG 5206 or Ci. The course is designed to develop competencies in a 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.
- EVT 7267 VOCATIONAL AND ADULT EDUCATION PROGRAM PLANNING AND IMPLEMENTATION (3)**  
PR: EVT 4176, Curriculum Construction, or equivalent. Designed to equip students with the knowledge and skills necessary to participate in the initial determination, planning, organization, and implementation of new or expanded vocational and technical education programs.
- EVT 7761 RESEARCH SEMINAR IN VOCATIONAL, TECHNICAL, AND ADULT EDUCATION (3)**  
PR: Completion of program requirements in measurement and research or Ci. Examination and critical evaluation of research in a particular specialization area of Vocational, Technical, or Adult Education. Preparation of an individual research prospectus. Available to majors only. Repeatable up to six credit hours.

## INSTRUCTIONAL COMPUTING

### **CAP 6125 MICROCOMPUTER HARDWARE SYSTEMS FOR EDUCATION (3)**

PR: EDG 5505 or CI. Planning for the selection and configuration of microcomputer hardware systems in education. The logical function of MSI and LSI computer elements and peripherals.

### **EDF 6284 PROBLEMS IN INSTRUCTIONAL DESIGN FOR COMPUTERS (3)**

PR: EDF 6215 and experience with two programming languages. Application of diagnostic, design, and feedback strategies to specific instructional tasks.

### **EME 5403 MICROCOMPUTERS IN EDUCATION (3)**

PR: CAP 4100 or CI. Application of computers in education, selection and evaluation of software and hardware, types of CAI, networking, computing resources. Advanced BASIC programming, including random and sequential files, sort routings, advanced graphics.

### **EME 6412 PROGRAMMING LANGUAGES FOR EDUCATION (3)**

PR: EDG 5505 or CI. Development of concepts, strategies, and materials for utilizing programming languages in educational settings. Separate sections will focus on different programming languages such as LOGO, Assembly Language or PASCAL. Repeatable.

### **EME 6425 MICROCOMPUTERS FOR SCHOOL MANAGEMENT (3)**

PR: CI. Application of microcomputer software packages to computerize school management tasks.

## LIBRARY, MEDIA AND INFORMATION SCIENCE

### **COP 6242 COMPUTER PROGRAMMING FOR LIBRARIES AND INFORMATION CENTERS (3)**

Programming of library-oriented computer applications using PL/C programming language. Emphasis on programming of library technical services operations and information retrieval and dissemination systems.

### **LIS 5315 INSTRUCTIONAL GRAPHICS (3)**

PR: CI. Theoretical aspects, planning and production of instructional graphic materials. The theory of graphic communications. Interpreting needs for instructional materials appropriate for given behavioral objectives.

### **LIS 5321 PREPARING SINGLE CONCEPT FILMS (3)**

PR: CI. Techniques and procedures in the preparation of educational films. Ascertaining concepts, script writing, graphics, lighting, filming, editing.

### **LIS 5333 TV IN SCHOOLS AND LIBRARIES (3)**

Small format video tape recordings and the utilization of open and closed broadcasts in schools and libraries.

### **LIS 5404 FOUNDATIONS OF LIBRARIANSHIP (3)**

Introduction to the study of library service; history; organization; specialized literature; outstanding leaders; current trends, issues, and problems. Place of the library in society with its contributions to that society.

- LIS 5434 COMMUNITY COLLEGE LIBRARIANSHIP (3)**  
Introduction to the community college concept, examination of the basic elements, functions, purposes, directions, programs, etc., inherent in both community college and the library resources center that serves it.
- LIS 5937 SELECTED TOPICS IN LIBRARY STUDIES (1-4)**  
PR: Cl. Covers a variety of topics in such areas as collection development, reference services, technical services, and administration.
- LIS 6110 HISTORY OF LIBRARIES (3)**  
Development of libraries as found from the earliest records to the great libraries of modern times, and the library as a social institution.
- LIS 6111 HISTORY OF CHILDREN'S LITERATURE (3)**  
Historical bibliographical survey of imaginative and informational literature for children.
- LIS 6119 CONTEMPORARY PUBLISHING AND PRINTING (3)**  
PR: LIS 6520. A survey of book publishing as it is carried on today, primarily in the United States. Emphasis on structure of the industry, economic conditions, technological developments, social functions of book publishing and distribution. Complementary relations between libraries and publishing.
- LIS 6202 INTRODUCTION TO BIBLIOGRAPHY (3)**  
PR: Cl. History, theory and practice of bibliotherapy. Conflicting definitions and their resolutions. For continuing education of librarians, advanced majors and practitioners of related disciplines.
- LIS 6203 READING GUIDANCE PROGRAMS IN LIBRARIES AND CLASSROOMS (3)**  
Working with factors and forces influencing reading habits of children and youth; programs for teaching investigative and library skills materials and methods for guidance of reading, listening and viewing.
- LIS 6206 ADULT SERVICES IN LIBRARIES (3)**  
PR: LIS 6520 or Cl. 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.
- LIS 6225 STORYTELLING (3)**  
PR: LIS 6586 or Cl. Building storytelling programs for school and public libraries or other educational institutions. Analysis of historical aspects, material suitable for use and audience reaction.
- LIS 6260 INFORMATION SCIENCE IN LIBRARIANSHIP (3)**  
Historical overview of the emergence of information science as a discipline. The fundamental concepts of information retrieval systems and subsystems, related information technologies, including indexing and abstracting, and their applications to the field of librarianship.
- LIS 6271 RESEARCH METHODS IN LIBRARIANSHIP (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.
- LIS 6312 PREPARING INSTRUCTIONAL MEDIA (3)**  
Fundamentals of preparing and using audiovisuals as they relate to the communication process.

- LIS 6402 ADVANCED LIBRARY ADMINISTRATION (3)**  
 PR: CI. 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.
- LIS 6409 INTRODUCTION TO LIBRARY ADMINISTRATION (3)**  
 PR: CI. 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.
- LIS 6432 SEMINAR IN ACADEMIC LIBRARIES (3)**  
 PR: LIS 6409. 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.
- LIS 6445 SEMINAR IN PUBLIC LIBRARIES (3)**  
 PR: LIS 6409 or CI. 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.
- LIS 6455 THE ORGANIZATION AND ADMINISTRATION (3)**  
**OF THE SCHOOL MEDIA CENTER**  
 PR: CI. 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.
- LIS 6463 LIBRARY NETWORKS AND SYSTEMS (3)**  
 PR: LIS 6409 or LIS 6428 or LIS 6455. Development of library networks at the local, state, regional, and national levels with consideration of organization, administration, services, funding and legislation.
- LIS 6472 SEMINAR IN SPECIAL LIBRARIES (3)**  
 PR: LIS 6409. 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.
- LIS 6473 LAW LIBRARIANSHIP (3)**  
 PR: LIS 6608, LIS 6735, or CI. Course designed to give students an understanding of all aspects of law librarianship, including selection, acquisition, organization, and use of information resources of the law researcher. Emphasis on books, microforms, and computerized legal systems used for legal research, and on work products of lawyers.
- LIS 6475 HEALTH SCIENCES LIBRARIANSHIP (3)**  
 PR: LIS 6260, LIS 6409, LIS 6608, LIS 6735, or CI. 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. Field trip may be required.
- LIS 6506 AUDIOVISUAL UTILIZATION (3)**  
 Examination (and utilization) of non-print media. Characteristics of media equipment and paradigms of use.



**LIS 6508 THE CURRICULUM AND INSTRUCTIONAL TECHNOLOGY (3)**

Effective utilization of instructional materials as they relate to specific areas of curriculum in elementary and high school programs.

**LIS 6520 BUILDING LIBRARY COLLECTIONS (3)**

PR: LIS 6608 or CI. 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.

**LIS 6572 BOOKS AND RELATED MATERIALS FOR YOUNG ADULTS (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.

**LIS 6586 MATERIALS FOR CHILDREN (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.

**LIS 6608 BASIC INFORMATION SOURCES AND SERVICES (3)**

An in-depth examination of the basic sources of information in the general library; discussion of bibliographical control of all communication media, with emphasis on those tools of most value to general reference services.

**LIS 6609 AUTOMATED INFORMATION SOURCES AND SERVICES (3)**

PR: LIS 6608, LIS 6260, or CI. Principles of on-line searching and characteristics of machine-readable bibliographic data bases. Includes two credit hours of laboratory providing hands-on researching experience. (S/U only.)

**LIS 6610 INFORMATION SOURCES AND SERVICES IN THE HUMANITIES (3)**

PR: LIS 6608 or CI. Detailed consideration of the bibliographical and reference materials in the humanities with training and practice in their use for solving problems arising in the reference service.

**LIS 6620 INFORMATION SOURCES AND SERVICES IN THE SOCIAL SCIENCES (3)**

PR: LIS 6608. Detailed consideration of the bibliographical and reference materials in the social sciences with training and practice in their use for solving problems arising in reference service.

**LIS 6630 INFORMATION SOURCES AND SERVICES IN SCIENCE AND TECHNOLOGY (3)**

PR: LIS 6608 or CI. Study of representative reference sources in pure and applied sciences with equal attention given to typical problems encountered in scientific and technological reference service.

**LIS 6651 BOOKS AND RELATED MATERIALS OF LATIN AMERICAN COUNTRIES SUITABLE FOR CHILDREN AND YOUNG PEOPLE (3)**

Bibliographic sources, aids and tools for the selection and utilization of Latin American books and related materials suitable for children and young

people. Examination of representative materials in terms of the basic principles and criteria of selection for libraries.

**LIS 6661 GOVERNMENT DOCUMENTS (3)**

The nature of state, federal, United Nations, and international documents, their reference and research value; the techniques of acquisition, organization and reference use.

**LIS 6724 CLASSIFICATION AND CATALOGING OF NON-BOOK MATERIALS (2)**

PR: LIS 6735 or Ci. Principles and practices in cataloging and organizing non-book materials.

**LIS 6735 TECHNICAL SERVICES IN LIBRARIES (3)**

Principles of general library practice in technical services operations. Emphasis on descriptive cataloging; and use of unabridged Dewey Decimal Classification.

**LIS 6745 ADVANCED CATALOGING (3)**

PR: LIS 6735. 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.

**LIS 6906 INDEPENDENT STUDY (1-4)**

PR: 20 hours earned in program and consent of adviser. (S/U only.)

**LIS 6946 SUPERVISED FIELD WORK (3)**

PR: Ci. 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.

**LIS 7406 ADVANCED FOUNDATIONS OF LIBRARIANSHIP (4)**

PR: LIS 5404 or Ci. Emphasis in this course is upon American libraries and American library education as influenced by legislation, education, censorship, technology, the copyright provisions and other influences.

**LIS 7938 ADVANCED SEMINAR IN LIBRARIANSHIP (1-4)**

PR: Ci. Seminar in advanced areas of current importance in library, media, and information science. Primarily for students enrolled in specialist and doctoral programs.

## MATHEMATICS EDUCATION

*Faculty:* B.K. Lichtenberg, D.R. Kichtenberg, E.R. Phillips, A.M. Troutman, E.A. Uprichard.

**MAE 5636C THE UTILIZATION OF LABORATORY TECHNIQUES IN THE TEACHING OF MATHEMATICS (3)**

PR: 12 semester hours of mathematics or CC. An examination of a variety of sample laboratory lessons, along with methods for creating and evaluating such lessons.

**MAE 6136 CURRENT TRENDS IN SECONDARY MATHEMATICS EDUCATION (3)**

PR: MAE 4330 or CC. Curricular patterns and instructional practices in secondary mathematics.

**MAE 6337 TOPICS IN TEACHING ALGEBRA (1-4)**

PR: Undergraduate degree in mathematics or certification in secondary school mathematics. Topics in algebra, philosophy, new trends, and methods of teaching secondary school algebra. May be repeated for a maximum of four hours.

**MAE 6338 TOPICS IN TEACHING GEOMETRY (1-4)**

PR: Undergraduate degree in mathematics or certification in secondary school mathematics. Topics in geometry, philosophy, new trends, and methods of teaching secondary school geometry. May be repeated for a maximum of four hours.

**MAE 6356 TEACHING OF PRE-SECONDARY SCHOOL MATHEMATICS (3)**

PR: 12 semester hours of mathematics or CC. Development of strategies and materials for teaching mathematical concepts and skills appropriate to pre-secondary school years. May be repeated for a maximum of nine hours.

## **MEASUREMENT AND RESEARCH**

**EDF 6407 STATISTICAL ANALYSIS FOR EDUCATIONAL RESEARCH I (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.

**EDF 6432 FOUNDATIONS OF MEASUREMENT (3)**

Fundamental descriptive statistics, basic measurement concepts, role of measurement in education, construction of teacher-made tests and interpretation of standardized tests.

**EDF 6437 DEVELOPMENT AND VALIDATION OF SCHOOL-WIDE, DISTRICT-WIDE, AND STATE-WIDE TESTS (3)**

PR: EDG 6250, EDF 6215, EDF 6606, EDF 6250, EDF 7488, EDF 6407, and EDF 7488. Design, development, validation, administration and interpretation of standardized testing programs. Special emphasis will be placed on domain sampling, item scaling, item fit, and developing, maintaining and updating item banks.

**EDF 6481 FOUNDATIONS OF EDUCATIONAL RESEARCH (3)**

PR: EDF 6432. Major types of educational research, with emphasis upon understanding the experimental method.

**EDF 6485 FOUNDATIONS OF EDUCATIONAL RESEARCH (3)**

PR: EDG 6250, EDF 6215, EDF 6606, EDF 6938, EDF 6431. Design, development, implementation, interpretation, and communication of both formative and summative educational program evaluation strategies.

**EDF 7408 STATISTICAL ANALYSIS FOR EDUCATIONAL RESEARCH II (4)**

PR: EDF 7407 or CI. Theory and application of statistical procedures to problems in education; (1) ANOVA-factorial; ANCOVA; (2) non-parametric statistics; (3) multiple correlation and regression — a specific technique and a general approach to data analysis. Coordinated use of computer may be included.

- EDF 7410 DESIGN OF SYSTEMATIC STUDIES IN EDUCATION (4)**  
PR: EDF 7408 or equivalent or CI. Theory and application of major design models to systematic inquiry in education, from experimental to naturalistic models. Nature and role of sampling in systematic studies.
- EDF 7437 ADVANCED EDUCATIONAL MEASUREMENT I (3)**  
PR: EDF 6432 or equivalent; EDF 7407 or equivalent. 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.
- EDF 7438 ADVANCED EDUCATIONAL MEASUREMENT II (4)**  
PR: EDF 7437 or CI. Scaling techniques in measurement. Item analytic theories and practices. Validation theory and construction and validation of instruments for measurements in education.
- EDF 7484 STATISTICAL ANALYSIS FOR EDUCATIONAL RESEARCH III (4)**  
PR: EDF 7408 or CI. Theory and application of selected multivariate statistical procedures including Canonical Correlation, Discriminate Analysis, Multivariate Analysis of Variance, Factor Analysis, Multivariate Analysis of Categorical Data, and Path Analysis.
- EDF 7585 THEORY AND PRACTICE OF EDUCATION EVALUATION (3)**  
PR: EDF 7493 or CI. 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.
- EDF 7488 APPLICATION OF COMPUTER LANGUAGE AND PROCEDURES IN EDUCATION (1)**  
Development of understanding and technical skill in relation to computer and data processing approaches to solution of educational research, and administrative problems. Training in use of Fortran as a programming language.
- EDF 7493 SYSTEMS APPROACHES FOR PROGRAM PLANNING, EVALUATION AND DEVELOPMENT (4)**  
Systems theory applied to problems in program planning, evaluation and development. Analysis of evaluation models. Application of Networking, PERT and Modeling procedures to selected problems in education.
- EDF 7940 PRACTICUM IN EDUCATIONAL PLANNING, EVALUATION, AND DEVELOPMENT (1-8)**  
PR: EDF 6407, EDF 7408, EDF 7493. Supervised practicum in which the student assumes major responsibility for significant planning, evaluation or development activity. May be repeated up to 8 credit hours. (S/U only.)

## **MUSIC EDUCATION**

- MUE 6080 FOUNDATIONS AND PRINCIPLES OF MUSIC EDUCATION (3)**  
PR: Acceptance in Music Education Graduate Program or CI. Investigation of historical, philosophical and psychological foundations of music education.

**MUE 6116 ADVANCED ELEMENTARY SCHOOL MUSIC (3)**

PR: Acceptance in Music Education Graduate Program or CI. Study and appraisal of children's musical growth, curriculum plans, materials and teaching techniques essential for the sequential development of musical learnings.

**MUE 6145 MUSIC SUPERVISION AND ADMINISTRATION (3)**

The music curriculum in relation to the total school program; staff and budgetary needs.

**MUE 6336 ADVANCED SECONDARY VOCAL MUSIC (3)**

PR: Acceptance in Music Education Graduate Program or CI. Course provides 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.

**MUE 6347 ADVANCED MATERIALS FOR INSTRUMENTAL MUSIC EDUCATION (3)**

PR: Acceptance in the Music Education Graduate Program and CI. Course designed to examine published and unpublished materials, develop curricula and resources, including media hardware, appropriate for use in school instrumental music programs.

**MUE 6496 CHORAL CONDUCTING IN THE SECONDARY SCHOOLS (3)**

PR: Acceptance in the Music Education Graduate program or CI. Course designed to develop essential conducting competencies required of a choral music director in the secondary schools.

**MUE 6498 CHORAL CONDUCTING IN THE SECONDARY SCHOOLS (3)**

PR: Acceptance in the Music Education Graduate program or CI. Course designed to develop skills of analysis and interpretation needed by school instrumental music teachers. Class activities include laboratory settings and performance practices.

**MUE 6906 INDEPENDENT STUDY: MUSIC EDUCATION (1-6)**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**MUE 7810 FOUNDATIONS OF MUSICAL LEARNING AND TEACHING (3)**

PR: Acceptance in the Music Education Graduate Program, a graduate level educational psychology course or its equivalent, or CI. A critical examination of current findings regarding the phenomena of the psychology of musical behaviors, major problems and plausible solutions. Investigation of musical acoustics, the measurement of musical abilities, and comparative study of theories of learning related to musical learning.

**MUE 7830 AESTHETICS IN MUSIC EDUCATION (3)**

PR: Acceptance in the Music Education Graduate Program or CI. A course designed to investigate the nature of philosophical and psychological aesthetics as they relate to aesthetic and educational theories that influence programs in music education.

## **PHYSICAL EDUCATION FOR TEACHERS**

- PET 6016 PROFESSIONAL ASSESSMENT** (3)  
Selected reading of current trends in physical education; discussion of philosophies of teaching; and individual appraisal of knowledge, values, attitudes and professional competencies.
- PET 6205 SOCIO-PSYCHOLOGICAL ASPECTS OF HUMAN MOVEMENT** (3)  
Involves the psychological and sociological implications of movement to historical and contemporary man. Emphasis on concept, role of movement in society and values and attitudes held toward movement.
- PET 6296 SPECIALIZED STUDY IN SOCIO-PSYCHOLOGICAL ASPECTS OF HUMAN MOVEMENT (SUBJECT)** (1-4)  
Will provide in-depth study in specific areas related to socio-logical and psychological principles of human movement. May be repeated for credit.
- PET 6405C BIO-KINETICS OF HUMAN MOVEMENT** (3)  
Integration of music kinesiological foundations applied to teaching physical education. Specific topics include: physical growth and neuro-muscular development, physical principles of human movement and the effects of exercise on the muscular and cardiorespiratory systems.
- PET 6355 ADVANCED EXERCISE PHYSIOLOGY** (3)  
PR: Cl. Linked to PET 6355L. The study of exercise physiology including: ergometry, body composition, pulmonary function, energy metabolism, work capacity, cardiovascular thermodynamics, acute and chronic response to exercise.
- PET 6355L ADVANCED EXERCISE PHYSIOLOGY LABORATORY** (1)  
PR: Cl. Linked with PET 6355. Provides laboratory learning experiences for Advanced Exercise Physiology, PET 6355, including ergometry, body composition assessment, pulmonary function tests, oxygen uptake, stress tests, muscular strength, flexibility, blood studies, metabolism.
- PET 6356L EXERCISE PHYSIOLOGY LABORATORY TECHNIQUES** (3)  
PR: PET 6355 and PET 6355L. Theoretical and laboratory methods utilized in exercise physiology adult fitness and sports medicine programs. Hands-on exposure to laboratory equipment and development of skills in conducting laboratory measurements in human performance.
- PET 6396 SPECIALIZED STUDY IN BIO-KINETICS OF HUMAN MOVEMENT** (1-4)  
Will provide in-depth study in specific areas related to neurological, physiological, and mechanical principles of human development. Repeatable.
- PET 6425 CURRICULUM AND INSTRUCTIONAL PROCESS IN PHYSICAL EDUCATION** (3)  
Application of learning theory and education innovations, study of structure of subject matter and styles of teaching, and investigation of the nature of the learner as these related to teaching physical education. Fieldwork may be required.

**PET 6496 SPECIALIZED STUDY IN CURRICULUM (1-4)**

**AND INSTRUCTIONAL PROCESS IN  
PHYSICAL EDUCATION**

Will provide in-depth study in specific areas related to the teaching-learning process of physical education. Repeatable.

**PET 6645 PHYSICAL EDUCATION FOR THE (4)  
HANDICAPPED**

The course is concerned with the motor performance and physical fitness of handicapped individuals. Study includes psycho-educational characteristics; planning, conducting, and evaluating individualized programs of physical education; and review of relevant literature. Fieldwork may be required.

**PET 6695C (formerly PET 6646) PHYSICAL (2-4)  
EDUCATION FOR THE HANDICAPPED PRACTICUM**

PR: PET 6645 or Cl. School or treatment center-based experience providing evaluation and instructional services. Seminars are conducted to discuss professional literature, teaching strategies and curriculum organization and evaluation. Repeatable.

**PET 6906 INDEPENDENT STUDY: PROFESSIONAL (1-6)  
PHYSICAL EDUCATION**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**PET 6910L RESEARCH PROJECT IN (1-4)  
PHYSICAL EDUCATION**

In-depth research study of selected topics concerning human movement. Topics will vary according to needs and interests of students. Repeatable.

## **READING EDUCATION**

**RED 6116 CURRENT TRENDS IN ELEMENTARY (3)  
READING INSTRUCTION**

PR: RED 4310 or equivalent course. Study of approaches, materials, and procedures in Elementary Reading instruction, with emphasis on pertinent research. Not for undergraduates, nor to be used as a first course in Reading.

**RED 6247 CURRICULUM AND SUPERVISION PROBLEMS (3)  
IN READING**

PR: EDF 6431, RED 6116, RED 6540 or RED 6546, RED 6544 or RED 6545, or Cl. Planning and administering programs and preparation as consultants in reading. Intensive work on individual and group projects and research paper required.

**RED 6365 READING IN SECONDARY AND HIGHER (3)  
EDUCATION**

PR: Cl and graduate standing; RED 4310, RED 4337, or RED 4360. Designed for students and inservice teachers with appropriate B.A. degrees. Content covers secondary, community college and university levels. Organization permits student to work on applications to individual levels and disciplines. Research paper required.

**RED 6516 CORRECTIVE READING IN THE CLASSROOM (3)**

PR: RED 4310 or Cl. Use of diagnostic and prescriptive procedures with individual and group reading instruction.

- RED 6540 CLASSROOM DIAGNOSIS OF READING PROBLEMS (3)**  
PR: RED 6116 or Ci. Study of multiple factors related to reading problems; sources of information for assessing reading performance. Use of informal diagnostic instruments in the classroom.
- RED 6544 REMEDIATION OF COMPREHENSION PROBLEMS (3)**  
PR: RED 6116 or Ci. Methods and materials for teaching reading and listening comprehension.
- RED 6545 REMEDIATION OF READING AND WRITING VOCABULARY PROBLEMS (3)**  
PR: RED 6116 or Ci. Methods and materials for teaching meaning vocabulary and word identification for reading and writing.
- RED 6546 DIAGNOSIS OF READING DISABILITIES (3)**  
PR: RED 6116. Causes of reading disability; techniques and materials in diagnosis of reading problems. Diagnoses of individual children are required.
- RED 6747 SURVEY OF READING RESEARCH (3)**  
PR: EDF 6481, RED 6116, RED 6540 or RED 6546, Ci. This course will address topics related to the location of research information, to the reading and evaluation of research, and to the identification and understanding of important studies.
- RED 6906 INDEPENDENT STUDY: READING EDUCATION (1-6)**  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- RED 7048 READING AS A SYMBOLIC PROCESS (3)**  
PR: RED 6116 or RED 6365. Advanced graduate standing in Reading/Language Arts or Ci. Examination and understanding of the relationship of the various perceptual, learning, affective, and cognitive processes to the acquisition of reading competencies.
- RED 7938 ADVANCED GRADUATE SEMINAR IN READING/LANGUAGE ARTS (2)**  
Discussion and evaluation of current issues and research in Reading/Language Arts and related fields. May be repeated for a total of six semester hours. Required for each Ph.D. student. (Topics differ each semester.)

## SCIENCE EDUCATION

*Faculty:* J.T. Bullock, F.L. Prince, B.S. Spector, H.E. Steiner.

- SCE 5937 SELECTED TOPICS IN SCIENCE EDUCATION (1-4)**  
May be repeated when topics are not duplicated.
- SCE 6634 CURRENT TRENDS IN SECONDARY SCIENCE EDUCATION (3)**  
PR: Bachelor's degree with major in science area, and certification in secondary science, or CC. Curricular patterns and instructional practices in secondary science.
- SCE 7641 PROGRAMS AND RESEARCH IN EARTH SCIENCE EDUCATION (3)**  
PR: Master's degree or equivalent in Science Education or C.C. A study of curricula, issues, and research in Earth Science Education, grades K-



12. Also included are the study and application of: (1) skills for assisting pre- and in-service school personnel with Earth Science instruction and (2) skills for developing Earth Science curricula.

**SCE 7642 PROGRAMS AND RESEARCH IN LIFE SCIENCES EDUCATION (3)**

PR: Master's degree or equivalent in Science Education or CC. A study of curricula, issues and research in Life Science Education, grades K-12. Also included are the study and application of: (1) skills for assisting pre- and in-service school personnel with Life Science instruction and (2) skills for developing Life Science curricula.

**SCE 7643 PROGRAMS AND RESEARCH IN PHYSICAL SCIENCE EDUCATION (3)**

PR: Master's degree or equivalent in Science Education or CC. A study of curricula, issues, and research in Physical Science Education, grades K-12. Also included are the study and application of: (1) skills for assisting pre- and in-service school personnel with Physical Science instruction; and (2) skills for developing Physical Science curricula.

**SOCIAL SCIENCE EDUCATION**

*Faculty:* R.E. Johnson, J.W. Levy.

**SSE 6133 SECONDARY SOCIAL SCIENCE CURRICULUM (3)**

PR: Admission to College of Education or CC. Evaluation of past and present curriculum in Secondary Social Science.

**SSE 6445 EVALUATION AND IMPLEMENTATION OF MEDIA IN SOCIAL STUDIES (3)**

PR: CC. Techniques of evaluation and using various media in the Social Studies.

**SSE 6636 CURRENT TRENDS IN SECONDARY SOCIAL STUDIES (3)**

PR: SSE 4333 or equivalent or CC. Curricular patterns and instructional practices in Secondary Social Studies.

**SSE 6640 ECONOMIC EDUCATION FOR TEACHERS (3)**

This course is designed to provide teachers with content knowledge, curriculum development experience and exposure to teaching strategies in economic education K-12.

**SPECIAL EDUCATION**

**EDG 6946 FIELD WORK WITH POTENTIALLY HANDICAPPED (CULTURALLY DISADVANTAGED) (1-6)**

Teaching and participation in activities related to teaching disadvantaged young children.

**EED 6201 ADVANCED THEORIES IN BEHAVIOR DISORDERS (3)**

In-depth survey of mild, moderate and severe behavioral pathologies of children and youth. Includes such topics as autism, schizophrenia, neurotic and other psychotic disorders: social, cultural, and behavioral deviations, and the educational implications of each.

- EED 6211 EDUCATIONAL STRATEGIES FOR STUDENTS WITH BEHAVIOR DISORDERS** (3)  
 PR: EED 6201 or equivalent, or Ci. Advanced methods and materials for planning, implementing, and evaluating educational interventions with disturbed students.
- EED 6221 MANAGEMENT METHODS AND TECHNIQUES WITH DISRUPTIVE AND DISTURBED STUDENTS** (3)  
 PR: EED 6201, or equivalent, or Ci. Classroom management methods and techniques. Behavioral, psychodynamic, and ecological interventions. Includes behavior modification, precision teaching, reality therapy, and humanistic approaches. Available to non-majors.
- EED 6246 EDUCATING THE AUTISTIC STUDENT** (3)  
 PR: Graduate standing, introductory course in Educating Exceptional Students; Psycho-educational Assessment. Developing and managing appropriate and effective educational programs and techniques with autistic students.
- EED 6943 SUPERVISED PRACTICUM IN BEHAVIOR DISORDERS** (3)  
 PR: EED 6201 (may be taken concurrently), or equivalent, or Ci. Supervised graduate practicum experiences with emotionally disturbed children. May be repeated up to 12 semester hours. (S/U only.)
- EEX 6025 SURVEY OF TRENDS AND ISSUES IN SPECIAL EDUCATION** (3)  
 Graduate survey of all exceptionalities including current trends and issues related to the field of special education.
- EEX 6222 ADVANCED PSYCHOEDUCATIONAL ASSESSMENT OF EXCEPTIONAL STUDENTS** (3)  
 PR: Graduate standing, introductory courses in exceptional student education and educational assessment. Advanced educational assessment and staffing procedures for individual exceptional students. Laboratory sessions required.
- EEX 6245 EDUCATIONAL STRATEGIES FOR THE ADOLESCENT EXCEPTIONAL STUDENT** (3)  
 PR: Introductory course in educating exceptional students. Graduate standing. Procedures in implementing educational programs for the exceptional adolescent. Includes educational programming, alternative programs, community resource coordination, career/occupational education, and advocacy.
- EEX 6511 ADMINISTRATION OF EXCEPTIONAL STUDENT PROGRAMS** (3)  
 PR: Ci. Procedures that local, state, and national administrators may use to implement services for exceptional students.
- EEX 6706 EDUCATION OF THE PRESCHOOL HANDICAPPED CHILD** (3)  
 PR: Ci. Education of children ages birth through five with special needs. Basic concepts, curricular intervention strategies, and organizational structures are covered.

**EEX 6732 CONSULTATION WITH PROFESSIONALS (3)**

**AND PARENTS OF EXCEPTIONAL STUDENTS**

PR: Introductory course in exceptional student education, graduate standing. Knowledge and skills in developing home, school, and community professional partnership in educating exceptional students.

**EEX 6906 INDEPENDENT STUDY: (1-6)**

**SPECIAL EDUCATION**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**EEX 6936 SEMINAR IN INTEGRATING EXCEPTIONAL (3)**

**STUDENTS IN REGULAR EDUCATIONAL ENVIRONMENTS**

Designed for non-special education graduate students. Surveys the characteristics of exceptional student populations, identification procedures, and systems for providing appropriate services for "mainstreamed" students in academic and non-academic settings.

**EEX 6939 ADVANCED SEMINAR IN SPECIAL EDUCATION (3)**

PR: Completion of all required course work for master's degree. An advanced graduate seminar stressing crosscategorical relationships. Topics include research and exceptional child education, clinical teaching, service delivery, and future directions.

**EEX 6943 PRACTICUM IN PRESCHOOL (1-4)**

**HANDICAPPED EDUCATION**

PR: Admission to Master's Degree Program in Preschool Handicapped and CI. Supervised field work with handicapped children ages birth through five years. May be repeated up to 8 credit hours. (S/U only.)

**EEX 7203 EDUCATIONAL IMPLICATIONS OF (1-5)**

**PSYCHOSOCIAL ASPECTS OF EXCEPTIONAL CHILDREN**

PR: CI. This course will be concerned with the identification of the psychosocial needs and characteristics of exceptional children; opportunity for analysis of the educational implications of these needs and characteristics. May be repeated for a maximum of 5 hours.

**EEX 7301 SELECTED TOPICS IN EXCEPTIONAL (1-8)**

**STUDENT EDUCATION**

PR: EEX 7341 or CI. Identification and specifications of a research problem in special education. Opportunity will be provided for the student to gather and process data, culminating in a written report and/or oral presentation to fellow student researchers. May be repeated for a maximum of 8 hours.

**EEX 7341 RESEARCH STUDIES AND THEIR (3)**

**IMPLICATIONS IN THE EDUCATION**

**OF EXCEPTIONAL CHILDREN**

PR: EDF 6431, EDF 6481 or equivalent CI. This course will involve a study of current research 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.

**EEX 7741 PHILOSOPHY AND PROCESS IN THE (3)**

**PREPARATION OF SPECIALISTS**

**IN EXCEPTIONAL STUDENT EDUCATION**

PR: Admission in the Program for Ed.S. or Ph.D. in Education. In-depth exploration of the philosophy and theory in special education. A theoretic-

cal basis for the preparation of specialists in the field of exceptional child education.

**EEX 7841 FIELDWORK WITH EXCEPTIONAL STUDENTS (1-5)**

PR: Cl. Practical field experience in curriculum development, classroom teaching, supervision and/or administrative areas in special education. May be repeated for a maximum of 5 hours.

**EEX 7911 SPECIALIZED STUDY IN: MENTAL RETARDATION, BEHAVIOR DISORDERS, SPECIFIC LEARNING DISABILITIES, AND GIFTED EDUCATION (1-8)**

PR: Cl. Exploration and demonstration of knowledge in an area of interest to the student in special education. The specialized study may also include areas for which the student needs to demonstrate a higher level of competency. May be repeated for a maximum of 8 hours.

**EGI 5051 NATURE AND NEEDS OF THE GIFTED (3)**

Characteristics and educational needs of gifted children and youth. Emphasis is on five types of giftedness as defined by National Department of Education (1) intellectual giftedness, (2) specific academic aptitude, (3) visual and performing arts, (4) leadership and (5) kinesthetic.

**EGI 5325 CREATIVE PROBLEM SOLVING FOR THE CHILD (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.

**EGI 6232 ADVANCED EDUCATIONAL STRATEGIES FOR THE GIFTED (3)**

PR: EGI 5051. Curriculum adjustments, methods and techniques, classroom organizations necessary for teaching the gifted. Emphasis will be on the examination of various theoretical models and how these can be utilized to develop appropriate programs for the gifted.

**EGI 6416 CONSULTATION, COUNSELING, AND GUIDANCE SKILLS FOR GIFTED STUDENTS (3)**

PR: EGI 5051 or Cl. Counseling techniques appropriate for the gifted and talented will be explored and experienced. Primary emphasis of the course will be to provide opportunities for classroom teachers to develop awareness, knowledge, and understanding of the unique guidance counseling needs of gifted and talented children and their parents.

**EGI 6936 SEMINAR IN EDUCATION OF THE GIFTED: RECENT RESEARCH (3)**

A critical survey of the literature related to the psychological and educational problems of gifted children.

**EGI 6943 SUPERVISED PRACTICUM FOR THE GIFTED (3)**

Planned supervised participation in activities related to specific areas of the gifted.

**ELD 6015 ADVANCED THEORIES IN SPECIFIC LEARNING DISABILITIES (3)**

PR: Introductory course in exceptional child education, graduate standing. Various conceptual and/or theoretical models are reviewed; current trends and issues related to education of children with specific learning disabilities.

**ELD 6235 EDUCATIONAL STRATEGIES FOR STUDENTS WITH SPECIFIC LEARNING DISABILITIES (3)**

PR: ELD 6015, EEX 6222. Advanced educational procedures and materials development for the student with specific learning disabilities.

**EMR 6052 ADVANCED THEORIES IN MENTAL RETARDATION (3)**

PR: Graduate standing; introductory course in exceptional student education. In-depth study of the complex social and biological aspects of mental retardation with particular reference to effects on education.

**EMR 6303 ADVANCED EDUCATIONAL STRATEGIES FOR THE MENTALLY RETARDED (3)**

PR: EMR 4310 or EMR 4230, EEX 6222. In-depth study of the specific curriculum and methodological problems in teaching the retarded.

**EMR 6943 GRADUATE SUPERVISED PRACTICUM IN MENTAL RETARDATION (1-12)**

Supervised graduate practicum encompassing teaching and supervising experiences in public school classes for the mentally retarded.

**EPH 5051 ADVANCED THEORIES IN MOTOR AND PHYSICAL DISABILITIES (3)**

PR: EEX 3010 or CI. Biological and functional aspects of motor and physical health disabilities, including dysfunctions in central nervous system covering motor, sensory, language and psychological disorders.

**EPH 5321 EDUCATIONAL STRATEGIES FOR PHYSICALLY AND AND MULTI-HANDICAPPED STUDENTS (3)**

PR: EPH 5051. Educational management of students with cerebral palsy, motor disabilities and multi-handicapped conditions including rehabilitation and other community services.

**EPH 6944 SUPERVISED PRACTICUM IN MOTOR DISABILITIES (3-12)**

Supervised graduate practicum encompassing teaching and supervising experiences in public/private educational or vocational programs for physically handicapped or motorically disabled individuals. (S/U only.)

**EVI 5311 THE VISUALLY HANDICAPPED IN THE CLASSROOM (3)**

PR: EEX 3010 or CI. The visually handicapped in the classroom; structure, hygiene and educational implications.

**SPEECH COMMUNICATION-ENGLISH EDUCATION**

*Faculty: J. Newcombe, W.W. West.*

**EDG 7365 RESEARCH IN COMMUNICATIONS EDUCATION (3)**

PR: Master's degree in Communications Education area or CI. A survey of exemplary research studies in Communication/Speech Education, English Education, Language Development and Analysis, Mass Communication Education, and Theatre Education, including analysis of design and methodologies.

**SED 6070 SEMINAR IN THE HISTORY OF  
SPEECH COMMUNICATION IN EDUCATION (3)**

PR: Cl. Studies in selected courses, critical writings, and research that have contributed to the development of speech communication as an academic discipline.

**SED 6670 CURRENT TRENDS IN TEACHING  
SPEECH COMMUNICATION (3)**

PR: Cl. Curricular patterns; preparation of personnel; instructional materials, facilities, and practices used in teaching speech communication.

## **THEATRE EDUCATION**

*Faculty:* J. Kase-Polisini.

**EDG 6329 CREATIVE DRAMA IN A  
DEVELOPMENTAL CONTEXT (3)**

Theories and methods of teaching creative drama and related forms of improvised drama and playmaking with supervised teaching of creative dramatics in a school environment.

**EDG 6456 METHODS OF DIRECTING THE  
HIGH SCHOOL PLAY (3)**

Directing the high school play, from script selection through audition, casting, and actor training in rehearsal and performance.

**EDG 6457 CURRENT TRENDS IN SECONDARY  
THEATRE EDUCATION (3)**

A study of curricular patterns and instructional practices in secondary theatre education, including methods of teaching theatre aesthetics through the study of great plays and their production.

**EDG 6458 SELECTED TOPICS IN THE  
TEACHING OF THEATRE (3)**

PR: Open only to students who have completed all other graduate level Theatre Education courses. Investigation of topics related to theatre teaching of special interest to the student. Topics will be selected by the student and approved by the graduate advisor. (S/U only.)

## **College Of Engineering**

*Distinguished Professor and Dean Emeritus:* G.A. Burdick; *Professors:* M.W. Anderson, J.C. Bowers, J.C. Busot, W.C. Carpenter, T.M. Chen, Y. Chiou, M.R. Donaldson, J.E. Fernandez, S.J. Garrett, P.E. Givens, H.Glass, J.E. Griffith, R.E. Henning, V.K. Jain, K.H. Kim, M.G. Kovac, S.C. Kranc, G. Lachs, J.A. Llewellyn, L.W. Oline, B.E. Ross, L.A. Scott, N.C. Small, C.A. Smith, Wm. A. Smith, E.K. Stefanakos, M.R. Varansi, T.E. Wade, L.A. Weaver, R.J. Wimmert, S.J. Ying; *Associate Professors:* R.P. Carnahan, R.A. Crane, L.H. Garcia-Rubio, R.A. Gilbert, A.R. Gondeck, M.L. Hayden, S.K. Khator, W.L. Ko, R.J. Murphy, D.C. Naehring, W.C. Naylor, H.A. Nienhaus, L.F. Porteiro, J.L. Ratliff, A.A. Sagues, A.D. Snider, A.K. Sunol, B.A. Suprenant, P.H. Wiley; *Assistant Professors:* S.A. Al-Arian, J.M. Ammons, A.J. Babu, V. Bhethanabolta, K.W. Bowyer, K.A. Buckle, S.W. Campbell, J.C. Cottle, Jr., J.F. Devine, J.T. Franques, L.O. Hall, A. Kaw, D.V. Kunak, W.E. Lee, III, J.T. Leffew, M. Lulu, R. Mehrotra, W.A. Miller, C.I. Noss, R.A. Perez, D.J. Rundus, R. Sankar, R. Sen, W.S. Snyder, R.I. Stessel, A.O. Tokuta, R.S. Vogelsong, S. Wilkinson; *Lecturers:* H.C. Gordon, Jr.

## BASIC AND INTERDISCIPLINARY ENGINEERING

*Faculty:* Basic and interdisciplinary courses are taught by faculty of the various engineering departments.

### **EGN 5422 ENGINEERING ANALYSIS II (3)**

PR: MAC 4302 or CC. 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.

### **EGN 5423 ENGINEERING ANALYSIS III (3)**

PR: CC or EGB EGN 4450 and MTH MAP 4302. Advanced matrix algorithms: LU and QR factorizations, least-squares, pseudoinverses. Finite fields and coding applications. Probabilities of error detection and correction.

### **EGN 5424 ENGINEERING ANALYSIS IV (3)**

PR: MAC 4302 or CC. Analytic functions, conformal mapping, residue theory, Laurent series, transforms. Applications to various problems in engineering and physics.

### **EGN 5425 ENGINEERING ANALYSIS V (3)**

PR: CC. Special topics in engineering analysis. Content varying from year to year. May be repeated.

## CHEMICAL ENGINEERING

*Faculty:* V. Bhethanabolta, J.C. Busot, S.W. Campbell, L. Garcia-Rubio, R. Gilbert, W.E. Lee, J.A. Llewellyn, C.A. Smith, A.K. Sunol.

### **ECH 6217 ADVANCED TRANSPORT PHENOMENA (3)**

PR: EMC 4118 or CI. Basic flow regimes in multiphase flow. Baker plots and methods of flow prediction, slip correlations, Martinelli-Nelson correlations and two phase corrections. Analysis of packed and fluidized beds.

### **ECH 6515 REACTING SYSTEMS (3)**

PR: ECH 4415 or CI. Dynamics of heterogeneous reactions. Economic factors in the design of chemical reactors. Simulation of complex reacting systems.

### **ECH 6616 COMPUTER-AIDED PROCESS ENGINEERING I (3)**

PR: ECH 4615. Plant and process design with emphasis on computer-aided design.

### **EMC 5107 INDUSTRIAL ENERGY CONSERVATION (3)**

PR: CI. Methods of efficient energy utilization in process industries. Process heat requirements and cogeneration. Energy audits and plant surveys, energy efficient equipment selection.

### **EMC 5115 PROCESS HEAT TRANSFER (3)**

PR: EMC 4118. Selection and sizing of common process heat transfer equipment. Single and multiple convection in shell and tube, flat plate and spiral plate exchangers. Combined heat and mass transfer in partial condensers, spray dryers and cooling towers.

### **EMC 5930 SPECIAL TOPICS III (1-4)**

PR: CC.

- EMC 5931 SPECIAL TOPICS IV** (1-4)  
PR: CC.
- EMC 6105 ADVANCED THERMODYNAMICS** (3)  
PR: CC. Selected topics in classical and irreversible thermodynamics.
- EMC 6120C NUMERICAL METHODS IN HEAT TRANSFER** (3)  
PR: CI. Application of finite difference and finite element techniques to problems of conduction and convection. Cartesian, cylindrical and spherical systems. Steady and transient solutions.
- EMC 6121C ADVANCED CONDUCTION ANALYSIS** (3)  
PR: EMC 4118, EMC 4411. Multi-dimensional heat transfer. Emphasis on solution techniques exact and numerical.
- EMC 6122 RADIATION** (3)  
PR: EMC 4118. Review of basic principles of radiation, grey bodies and real surfaces, calculation of shape factors, absorbing gases.
- EMC 6317 DIRECT DIGITAL CONTROL I** (3)  
PR: ENC 4314, EMC 4411, or CI. Application of digital computers to control of engineering processes. Includes study of digital filtering. Z-transforms, supervisory control, A/C and D/A conversion and advanced control strategies.
- EMC 6318 DIRECT DIGITAL CONTROL II** (3)  
PR: EMC 6317 or CI. A continuation of EMC 6317 with detailed study of special cases. Cases will vary from term to term.
- EMC 6412 PROCESSES ANALYSIS AND MODELING** (3)  
PR: CI. Computer-controlled data acquisition and analysis aimed at development and evaluation of empirical and physical models of chemical and mechanical engineering processes.
- EMC 6906 DIRECTED RESEARCH** (VAR.)  
PR: GR. Master's level. Repeatable. (S/U only.)
- EMC 6907 INDEPENDENT STUDY** (VAR.)  
PR: GR. Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- EMC 6930 SPECIAL PROBLEMS I** (1-3)  
PR: CC.
- EMC 6931 SPECIAL PROBLEMS II** (1-3)  
PR: CC.
- EMC 6938 GRADUATE INSTRUCTION METHODS** (1-4)  
PR: CC. Special course to be used for training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credits per student. (S/U only.)
- EMC 6939 GRADUATE RESEARCH METHODS** (1-4)  
PR: CC. Special course to be used for training of graduate research assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credit hours per student. (S/U only.)
- EMC 6971 THESIS: MASTER'S** (VAR.)  
PR: CC. Repeatable. (S/U only.)
- EMC 7915 DIRECTED RESEARCH** (VAR.)  
PR: CC and GR Ph.D. level. Repeatable. (S/U only.)



**EMC 7980 DISSERTATION: DOCTORAL (VAR.)**

PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

**CIVIL ENGINEERING AND MECHANICS**

*Faculty:* M.W. Anderson, W. Carpenter, J.F. Devine, J.T. Franques, J.E. Griffith, S.C. Kranc, R.J. Murphy, L.W. Oline, J. Ratliff, B.E. Ross, R. Sen, N.C. Small, R.I. Stessel, B.A. Suprenant.

**CEG 5115C FOUNDATION ENGINEERING (3)**

PR: CEG 4011 or Cl. Design of Shallow foundations, cantilevered and anchored retaining walls, piling, drilled piers and special foundations. Computer applications to geotechnical engineering are covered.

**CEG 5205L LABORATORY TESTING FOR GEOTECHNICAL ENGINEERS (3)**

PR: CEG 4011 or Cl. Both routine and advanced forms of soil testing are covered. Emphasis is placed on procedures and application of results to design.

**CEG 6415 SEEPAGE AND SUBSURFACE DRAINAGE (3)**

PR: CEG 4011 or Cl. Design of underdrains, wells, soil filters, fabric filters, and dewatering systems with special emphasis on case studies. May be repeated up to 3 credit hours.

**CES 5104 ADVANCED MECHANICS OF MATERIALS I (3)**

PR: EGN 3331, MAP 4302. Analytical study of the mechanical behavior of deformable solids. Basic concepts, stress and strain transformations, special topics in beams, introduction to theories of elasticity, and bending of thin plates.

**CES 5208 STRUCTURAL DYNAMICS (3)**

PR: CES 3102. Behavior of structural components and systems when subjected to periodic dynamic loads.

**CES 5715 PRESTRESSED CONCRETE (3)**

Fundamental principles of prestressing; calculation of losses; stress analysis and design of simple beams for flexure and shear. Examples of prestress applications.

**CES 6105 ADVANCED MECHANICS OF MATERIALS II (3)**

PR: CES 5104. Continuation of CES 5104. Energy methods, membrane shell theory, introduction to theories of plasticity, limit analysis and design, elastic and plastic buckling of columns.

**CES 6116 FINITE ELEMENT METHODS I (1)**

PR: Cl. Finite element methods in continuum mechanics with applications to solid and fluid mechanics problems.

**CES 6117 FINITE ELEMENT METHODS II (3)**

PR: CES 6116. Finite element methods in continuum mechanics with applications to solid and fluid mechanics problems. Unified approach to statics, dynamics and stability. Computer solutions.

**CES 6218 STRUCTURAL STABILITY (3)**

PR: CES 4141, CES 4208. Elastic and inelastic stability of trusses and frames, local buckling of structural members and plates.

- CES 6608 ADVANCED STRUCTURAL DESIGN I** (3)  
PR: CES 4141, CES 4501. A study of design of complicated structural systems such as curved bridges, orthotropic bridges, tall buildings, towers, suspension structures.
- CES 6726 ADVANCED STRUCTURAL DESIGN II** (3)  
PR: CES 6608. A study of design of complicated structural systems such as curved bridges, orthotropic bridges, tall buildings, towers, suspension structures.
- CGN 5933 SPECIAL TOPICS IN CIVIL ENGINEERING AND MECHANICS** (1-5)  
PR: Cl. New technical topics of interest to civil engineering students. May be repeated up to 6 credit hours.
- CGN 6305 OPTIMIZATION TECHNIQUES IN CIVIL ENGINEERING** (3)  
PR: Cl. Theory and application of optimization techniques to the planning, design and operation of Civil Engineering Systems.
- CGN 6405 NUMERICAL METHODS IN ENGINEERING ANALYSIS** (3)  
PR: EGN 4420. Application of computational and mathematical techniques and principles to advanced engineering problems.
- CGN 6915 DIRECTED RESEARCH** (VAR.)  
PR: GR. Master's level. Repeatable. (S/U only.)
- CGN 6933 SPECIAL TOPICS IN CIVIL ENGINEERING AND MECHANICS** (1-4)  
PR: CC.
- CGN 6939 CIVIL ENGINEERING AND MECHANICS SEMINAR** (1-4)  
PR: CC.
- CGN 6941 GRADUATE INSTRUCTION METHODS** (1-5)  
Special course to be used primarily for the training of graduate research assistants. Variable credit, repeatable. Limited to a cumulative total of 5 credits per student. (S/U only.)
- CGN 6945 GRADUATE RESEARCH METHODS** (1-5)  
Special course to be used primarily for the training of graduate research assistants. Variable credit, repeatable. Limited to a cumulative total of 5 credits per student. (S/U only.)
- CGN 6971 THESIS: MASTER'S** (VAR.)  
Repeatable. (S/U only.)
- CGN 7980 DISSERTATION DOCTORAL** (VAR.)  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)
- CGN 7915 DIRECTED RESEARCH** (VAR.)  
PR: GR. Ph.D. level. Repeatable. (S/U only.)
- ECI 6206 COASTAL WAVES AND STRUCTURES** (3)  
PR: Cl. A study of the fundamentals of wave motion and the mutual interaction of waves and structures. A design project is included.

- ECI 6207 WAVES AND BEACH PROTECTION (3)**  
PR: ECI 6206. A study of the fundamentals of shoreline dynamics including distribution of wave energy, motion of beach sand, stable configurations and protective measures.
- ECI 6208 COASTAL AND ESTUARY MODELING (3)**  
PR: CI. Digital modeling of coastal and estuary systems, currents, tide heights, sediment transport, erosion, data collection, temperature distribution, sources and sinks. Special emphasis on Florida regions.
- ECI 6239 FREE SURFACE FLOW (3)**  
PR: EGM 4816 or CI. Fundamental and applied aspects of free surface flow, including river hydraulics, canal flow, and open channel design.
- ECI 6631 HYDROLOGIC MODELS (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.
- ECI 6632 URBAN HYDROLOGY (3)**  
PR: CI. A study of the quantity and quality problems and solution techniques associated with urban runoff.
- EES 5215 WATER QUALITY FOR ENGINEERS I (3)**  
PR: CI. An introduction to the form, structure, and chemical activities of the important processes essential to treatment of domestic and industrial wastewater.
- EES 6135 WATER QUALITY FOR ENGINEERS II (3)**  
PR: EES 5215, MCB 3010C. Study of biochemical relations and processes in treatment of pollutants with emphasis on control of effluents for the protection of water quality.
- EGM 6136 ADVANCED X-RAY METHODS (3)**  
PR: CI. X-Ray diffraction, analytical and experimental studies of defects, texture, residual stress, crystal and polycrystalline aggregates. Lec.-Lab.
- EGM 6261 ADVANCED DYNAMICS (3)**  
PR: EGN 4430, CES 6116. Elastic and plastic stress wave propagation in solids, experimental and theoretical treatment method of characteristics, use of finite element programs to solve multiple degree of freedom systems.
- EGM 6611 CONTINUUM I (3)**  
PR: CI. Formulation of fundamental problems in solids and fluids from a unified viewpoint; application to ideal media; elastic, plastic, and fluids.
- EGM 6655 CONTINUUM II (3)**  
PR: EGN 5611. Theory of thermoelastic and viscoelastic behavior in continuous media, coupled thermodynamics and mechanical behavior, generalized constitutive relations.
- EGM 6656 THEORY OF ELASTICITY (3)**  
PR: CES 6116. Classical and contemporary elasticity theory with applications to engineering problems.
- EGM 6675 THEORY OF PLASTICITY (3)**  
PR: CI. A study of the theory of plasticity including initial and subsequent yield surfaces, incremental and deformation theories.

- EGM 6796 PLATES AND SHELLS (3)**  
PR: CES 3102, and Cl. Elastic behavior of thin plate and shell structures.
- EGM 6814 ADVANCED FLUID MECHANICS (3)**  
PR: EGM 4816. Formulation and analysis of problems in the flow of viscous and nonviscous fluids including Newtonian and non-Newtonian flows. Mathematical methods and techniques of solutions.
- CGN 6906 INDEPENDENT STUDY (VAR.)**  
PR: CC. Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- ENV 5127 AIR RESOURCE MANAGEMENT (3)**  
PR: Cl. Air pollution source impacts on ambient air quality, modeling, regulatory approaches, source strategic controls and surveillance.
- ENV 5357 SOLID AND HAZARDOUS WASTE CONTROL (3)**  
PR: Cl. Treatment practices and design of waste handling systems to include: land treatment, pretreatment, incineration, resource recovery, recycle, waste elimination.
- ENV 5439 URBAN WATER TREATMENT THEORY AND DESIGN (3)**  
PR: ENV 4417 and Cl. A study of the theory of water treatment and the relation of theory to analysis and design practice. Emphasis is given to unit processes. The course is devoted to the design and analysis of specific water treatment facilities.
- ENV 5539 URBAN WASTEWATER TREATMENT THEORY AND DESIGN (3)**  
PR: ENV 4417, Cl. A study of the theory of wastewater and the relation of theory to analysis and design practice. Emphasis is given to unit processes. The course is devoted to the design and analysis of specific wastewater treatment works.
- ENV 5614 ENVIRONMENTAL RISK ANALYSIS (3)**  
PR: Cl. Study of comprehensive application of risk analysis techniques for environmental control and protection purposes.
- ENV 6016 ADVANCED PHYSICAL/CHEMICAL PROCESSES (3)**  
PR: Cl. Theory and design of processes used in advanced water and wastewater treatment, to include membrane processes, absorption, electro dialysis, ozonation, irradiation.
- ENV 6357 SOLID AND HAZARDOUS WASTE PROCESSING AND TREATMENT (3)**  
PR: ENV 5357 or Cl. Advanced management concepts including: thermal, chemical, and biological treatment, waste-to-energy, and resource recovery.
- ENV 6518 INDUSTRIAL WASTEWATER TREATMENT (3)**  
PR: ENV 5539 or Cl. Industrial waste surveys; contemporary industrial wastewater treatment and control methods; characteristics of industrial wastes and their effects on receiving streams.
- ENV 6645 WATER RESOURCES SYSTEMS (3)**  
PR: ENV 4622, CGN 6305. The planning, design, and operation of water resources by the use of systems analysis and operations research techniques.

## COMPUTER SCIENCE AND ENGINEERING

*Faculty:* S. Al-Arian, K.W. Bowyer, H. Glass, L. Hall, K.H. Kim, P. Maurer, R. Mehrotra, C. Naylor, M. Varansi.

### **CAP 5690 FUNCTIONAL PROGRAMMING LANGUAGES (3)**

PR: COP 4020. The properties of functional and applicative languages; comparison with conventional languages, features and examples of applicative languages, LISP, KRC and FORTH. Implications to computer architecture.

### **CAP 6672 ROBOT INTELLIGENCE AND COMPUTER VISION (3)**

PR: COP 4400 or equivalent. An introduction to robotic systems with emphasis on the computational aspects of robot control. Topics for discussion: overview of the robotics field, computing arm motions using 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.

### **CDA 5400 MODELING COMPUTER SYSTEM PERFORMANCE I (3)**

PR: Knowledge of basic calculus and probability theory. Ability to program computers in a higher level language. Development of models based on queuing theory for evaluation of computer system performance. Analysis of open and closed networks of queues. Operational analysis. Asymptotic bounds analysis.

### **CDA 5401 MODELING COMPUTER SYSTEM PERFORMANCE II (3)**

PR: Semester I course. Continuation of Performance Model I. Practical limitations. Numerical accuracy and stability. Students will develop practical modeling program, and explore its use.

### **CDA 6501 DISTRIBUTED COMPUTER SYSTEMS (3)**

PR: CDA 4101, CDA 4171. Design, performance measurement, and evaluation of distributed systems including distributed system function, network operating systems, protocols and topologies, metering, queuing evaluations, and simulation.

### **CGS 6462 PASCAL AS A RESEARCH TOOL (2)**

PR: Ph.D. level. Intended only for doctoral students who would want to substitute the computer language Pascal for one of the foreign language requirements as a tool of research. (S/U only.)

### **CIS 6610 SOFTWARE ENGINEERING I: BASIC PRINCIPLES AND FORMAL METHODS (3)**

PR: EEL 4851C, CR: COP 6640. Basic principles and formal methods for systematic development of software systems. Software life cycle, formal specifications, design, verification, and reliability analysis.

### **CIS 6900 INDEPENDENT STUDY (VAR.)**

PR: Graduate standing. Independent study in which students must have a contract with an instructor. (S/U only.)

### **CIS 6914 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

- CIS 6915 GRADUATE RESEARCH METHODS (1-4)**  
PR: Graduate standing. Special course to train graduate research assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credits per student. (S/U only.)
- CIS 6916 COMPUTER SCIENCE GRADUATE PROJECT (3)**  
PR: CC. Computer Engineering project that may be taken by graduate students in place of Master's thesis. (S/U only.)
- CIS 6930 SPECIAL TOPICS IN COMPUTER SCIENCE AND ENGINEERING (1-5)**  
PR: CC.
- CIS 6935 GRADUATE COMPUTER SCIENCE AND ENGINEERING SEMINAR (1-4)**  
PR: CC. This is a graduate seminar for students majoring in computer science and engineering. May be repeated up to 4 credit hours. (S/U only.)
- CIS 6940 GRADUATE INSTRUCTION METHOD (1-4)**  
PR: Graduate standing. Special course to train graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credits per student. (S/U only.)
- CIS 6970 THESIS: MASTER'S (VAR.)**  
PR: Graduate standing.
- CIS 7917 DIRECTED RESEARCH (VAR.)**  
PR: GR. Ph.D. level. Repeatable. (S/U only.)
- CIS 7980 DISSERTATION: DOCTORAL (VAR.)**  
PR: Admission to Doctoral Candidacy. Repeatable. (S/U only.)
- COP 5001 TOPICS IN COMPUTERS AND PROGRAMMING (4)**  
PR: CC. Survey of topics in machine organization systems programming.
- COP 6611 SOFTWARE ENGINEERING II: TOOLS AND APPLIED TECHNIQUES (3)**  
PR: COP 6630. Tools and cost-effective techniques for requirements, specifications and analysis, module specification, design and integration, verification and validation, maintenance and project management.
- COP 6613 OPERATING SYSTEMS (3)**  
PR: CC. Operating systems functions and design, resource management, protection systems, process communication and deadlocks.
- COP 6640 PROGRAMMING LANGUAGES AND TRANSLATION (3)**  
PR: CC. Grammars and languages, symbols, strings, syntax, parsing, the design of a compiler, storage organization and symbol tables, translator writing systems.
- EEL 5771 INTRODUCTION TO COMPUTER GRAPHICS I (3)**  
PR: CC. An introduction to the evolution of computer graphics including point-plotting, line drawing, two-dimensional transformations and graphics software packages.
- EEL 6522 INFORMATION THEORY (3)**  
PR: CC. Concepts of information, information channels, channel capacity, information sources and Shannon's fundamental theorem and error correcting codes.

**EEL 6764 PRINCIPLES OF COMPUTER ARCHITECTURE (3)**

PR: CDA 4101 or CC. 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.

**EEL 6766 ADVANCED COMPUTER ARCHITECTURE (3)**

PR: EEL 6764 or CC. Control unit and microprogramming, reduced instruction set computers (RISC), object oriented systems, multiprocessor systems, supercomputers. The macrostructure of computers is considered in this course, ranging from the orthodox von Neumann design to multiprocessors, stack processors, pipeline systems, and associative computers.

**EEL 6773 THREE-DIMENSIONAL GRAPHICS AND SYSTEMS (3)**

PR: EEL 5771 or CC. Advanced course covers the methods of representation of three dimensional objects in the plane of the graphics screen and the hardware and software required for their processing.

**EEL 6846 CODING THEORY (3)**

RP: EEL 6522. Error-correcting codes, algebraic block codes, linear codes and feedback shift registers; BCH codes; convolutional codes; burst error codes; arithmetic codes; decoding methods.

**EEL 6840 AUTOMATA THEORY I (3)**

PR: EEL 5760. Review of mathematical foundations, decomposition and interconnection of digital machines, measurement and control of finite-state sequential circuits, machine identification, regular expressions and finite-state machines.

## **ELECTRICAL ENGINEERING**

*Faculty:* J.M. Ammons, J.C. Bowers, K. Buckle, G.A. Burdick, C.T. Chen, Y.L. Chiou, J.G. Cottle, M.R. Donaldson, S.J. Garrett, H.C. Gordon, R.E. Henning, V.K. Jain, W.L. Ko, M.G. Kovac, G. Lachs, J.T. Leffew, H.A. Nienhaus, D.A. E.K. Stefanakos, R.S. Vogelsong, P.H. Wiley.

**EEL 5250 POWER SYSTEMS ANALYSIS (2)**

PR: CC. Analysis techniques for AC power systems.

**EEL 5253 COMPUTER ANALYSIS OF POWER SYSTEMS (2)**

PR: CC. Review of Fortran programming, matrix algebra, network formulation, short circuit studies, simulation of algebraic equation, load flow studies, numerical solution of differential equations, transient stability studies. Strong emphasis on techniques adaptable to digital computer studies. Programs will be written and run on the IBM 360/65.

**EEL 5344 DIGITAL CMOS/VLSI DESIGN (3)**

PR: EEL 4705 or CC. Design, layout, simulation, and test of custom digital CMOS/VLSI chips, 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.

**EEL 5356 INTEGRATED CIRCUIT PROCESSING (3)**

PR: EEL 4351 or Cl. 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.

- EEL 5357 ANALOG CMOS/VLSI DESIGN (3)**  
PR: EEL 4300. Design of analog circuits for CMOS/VLSI design. Op Amps, comparators, D to A and A to D converters. Switched capacitor filters. Analog simulation.
- EEL 5367 PULSE CIRCUIT PRINCIPLES (2)**  
PR: EEL 4102, EEL 4300. An introduction to the analysis and design of pulse and timing circuits with applications.
- EEL 5388 LOW NOISE ELECTRICAL CIRCUITS (3)**  
PR: EEL 3302. Noise sources, circuit noise representations, noise in diodes, bipolar transistors, field-effect transistors and sensors, low noise circuit design and noise measurements.
- EEL 5437 MICROWAVE ENGINEERING (3)**  
PR: EEL 4411, 4102, or CC. Introduction to passive and active components, devices, and circuits, including transmission lines and wave guides, employed in microwave integrated circuits and systems.
- EEL 5462 ANTENNA THEORY (3)**  
PR: EEL 4411 or CC. Antenna theory beginning with fundamental parameter definitions and continuing with mathematical concepts, elemental antennas and Arrays.
- EEL 5534 COMMUNICATION SYSTEMS I (3)**  
PR: CC. Concepts of information transmission. Digital communication, sampling, SNR; PCM, DPCM, and delta modulation. Multiplexing and wave shaping. Modulation techniques OOK, FSK, PSK, Detection.
- EEL 5620 NONLINEAR CONTROL SYSTEM (3)**  
PR: EEL 4656. Principles of state-variables, phase-plane and describing functions.
- EEL 5705 ADVANCED LOGIC SYSTEMS (3)**  
PR: EEL 4705 or Graduate Standing.
- EEL 5706 TESTING & FAULT TOLERANCE IN DIGITAL SYSTEMS (3)**  
PR: CDA 4101, COT 4103, or Graduate Standing. Reliability concepts, Fault Analysis and diagnosis in digital circuits. Fault modeling, Fault Tolerant Design, CMOS Testability, Self-Checking Circuits, Design for Testability, Fault Masking techniques, and Fault Simulation.
- EEL 5711 DIGITAL COMPUTERS (3)**  
PR: EEL 4705. Digital arithmetic; computer subsystems, arithmetic units; control units; memory units; general purpose computers.
- EEL 5711L DIGITAL LABORATORY (1)**  
CR: EEL 5711.
- EEL 5754 MICROPROCESSOR BASED DIGITAL SIGNAL PROCESSING (3)**  
PR: EEL 4705 or CC. Arithmetic systems, processing structures, efficient algorithms, DSP hardware, TI, NEC, and other DSP microprocessors; hardware, TI, NEC, and other DSP microprocessors; hardware and software system development. Application to telecommunications and voice processing.
- EEL 5502 DIGITAL SIGNAL PROCESSING I (3)**  
PR: EEL 4102 or CC. Digital signals and Fourier transform. Z-transforms, digital filter networks; DFT, DCT, and fast transforms. Design of IIR and FIR



filters; quantization effects. Multi-rate processing; interpolation and decimation.

**EEL 5760 DISCRETE STRUCTURES FOR DIGITAL SYSTEMS (2)**

PR: EEL 4705. Set algebra, basic algebraic structures in computers. Boolean algebra, propositional logic and graphs. Applications to computers.

**EEL 5820 IMAGE PROCESSING (3)**

PR: EEL 5502 or CC. Two-dimensional signals (including random), convolution and system functions. Fourier transform and FFT in two dimensions. Digitization of two-dimensional signals, quantization and aliasing errors. Filtering, restoration, and low bit-rate coding of images. Application to video-conferencing.

**EEL 5935, 5936, 5937 SPECIAL ELECTRICAL TOPICS I, II, III (2,2)**

**EEL 6141, 6142, NETWORKS SYNTHESIS I, II (3,3)**

PR: CC. Network functions; physical realizability, two terminal network synthesis methods, frequency transformation, potential analogy, approximation problems, insertion-loss and transfer function synthesis.

**EEL 6150, 6151 ADVANCED CIRCUIT THEORY I, II (3,3)**

PR: CC. Network fundamentals; network characterization, frequency analysis; superposition integrals; signal-flow techniques, stability problems; real and imaginary relations.

**EEL 6152 NONLINEAR CIRCUITS (2)**

PR: CC. Analytical and topological approaches to nonlinear circuits, nonlinear resonance; relaxation oscillations.

**EEL 6168 CADA: MODELING & SOFTWARE (2)**

PR: EEL 4163. Coverage includes all facets of solid-state modeling pertaining to CADA applications. Discrete and macro modeling techniques are explored for a wide range of devices. Software methods for CADA applications are discussed from several vantage points. Methodology and treatment required for the large scale, general purpose programs are explored. The mathematical techniques used for the modern integration routines are examined, with tradeoffs discussed.

**EEL 6174 OPTIMUM FILTERING AND IDENTIFICATION (2)**

PR: CC or EEL 6631. Estimation theory and development of the Kalman-Wiener filter for continuous discrete-time systems. System identification through deterministic and stochastic approaches. Application to control and communication systems.

**EEL 6261, 6262, 6263 ELECTRIC POWER SYSTEMS I, II, III (2,2,2)**

PR: CC. Steady state and transient analysis of interconnected power systems; power circuit protection; transient characteristics of apparatus.

**EEL 6270 LIGHTNING AND SURGE PROTECTION (2)**

PR: CC. Methods of protection against overvoltage due to lightning. Ground wire shielding systems and tower grounding lightning arresters. Dynamic overvoltage, switching phenomena and system recovery voltages.

- EEL 6271 PROTECTIVE RELAYING OF POWER SYSTEMS** (2)  
 PR: EEL 5250, EEL 6261 or CC. Fundamentals of instrumentation. Design and operation of protective schemes for equipment in generation, transmission, and distribution circuits. Analysis of abnormal system conditions requiring relay operation.
- EEL 6332 ELECTRICAL PROPERTIES OF THIN FILMS** (2)  
 PR: EEL 4330 OR EQUIVALENT AND EEL 4411 OR CC. Electrical properties of thin films as derived from Boltzmann's transport equation. The growth of thin films. The fabrication of electrical circuits with thin films. Lecture supplemented by laboratory experiments and demonstrations.
- EEL 6353, 6354 SOLID STATE ELECTRONICS I, II** (3,3)  
 PR: CC. Theory of operation and application of circuits and devices.
- EEL 6386, 6389 PRINCIPLES OF SEMICONDUCTOR DEVICE MODELING I, II** (2,2)  
 PR: EEL 4102, EEL 4411. Course sequence emphasizes systematic methods for obtaining models that relate device physics to terminal behavior and that provide appropriate compromises between accuracy and simplicity.
- EEL 6387 NOISE THEORY** (3)  
 PR: CC. Electrical noise and signals through linear filters and electronic systems.
- EEL 6432 PASSIVE MICROWAVE STRUCTURES** (3)  
 PR: CC or EEL 5437. Theory and design of passive microwave structures (directional couplers, transformers, phase shifters, junctions, resonators, etc.) for coaxial, waveguide, microstrip and integrated circuit applications.
- EEL 6433 MICROWAVE NETWORKS** (2)  
 PR: CC. Scattering and transfer representation of n-ports. Odd and even mode theory. Wave filters.
- EEL 6434 ACTIVE MICROWAVE STRUCTURES AND DEVICES** (3)  
 PR: CC or EEL 6432. Theory and design of solid state low noise and high power amplifiers, solid state oscillators and high power tubes for waveguide, coax and integrated circuit applications.
- EEL 6447 OPTICAL ELECTRONICS** (3)  
 PR: EEL 3410, PHY 4606. A study of the basic principles and operations of lasers and analyses of power output and frequency pulling in laser oscillators.
- EEL 6448 INTEGRATED OPTICS** (3)  
 PR: EEL 6447. A study of integrated optical devices and guided wave optical systems.
- EEL 6449 FOURIER OPTICS AND SYSTEMS** (3)  
 PR: Linear Systems Analysis (EEL 4102 or PHS 5113). A study of optical applications of linear systems and Fourier transforms.
- EEL 6482, 6483 ELECTROMAGNETIC FIELDS AND WAVES I, II** (3,3)  
 PR: CC. Electromagnetic theory from the engineering point of view, propagation and reflection of waves, guided waves, resonant cavities, antennas and radiation.

- EEL 6486C ELECTROMAGNETIC FIELD THEORY (3)**  
PR: EEL 4411 or CC. Time harmonic electromagnetic fields emphasizing problems with exact solutions in the rectangular, cylindrical and spherical coordinate systems. Solutions by eigen functions methods and Green's functions method.
- EEL 6487C ADVANCED ELECTROMAGNETIC FIELD THEORY (3)**  
PR: EGN 5424 and EEL 6481 or CC. Time harmonic electromagnetic fields emphasizing problems and solution methods which are approximate in nature. Geometrical Optics, WKB method, Wave Scattering.
- EEL 6506 COMMUNICATION NETWORKS (3)**  
PR: EEL 5534 or CC. Objectives of networking, basic topologies and architectures, physical channel considerations. Circuit and packet switching-node design, link and flow control. Access schemes and protocols, network performance for voices/video text/data. Cellular radio, ISDN.
- EEL 6507 SATELLITE COMMUNICATION (3)**  
PR: EEL 5534 or CC. Satellite characteristics, link calculations earth station. Frequency management. Large and small (mobile) earth terminals. Digital communication for satellites: Modulation coding, and multiple-accesses techniques. Examples including the INTELSAT series.
- EEL 6519 ULTRA HIGH SPEED COMMUNICATIONS (3)**  
PR: EEL 6535 or CC. Ultra high-speed channels; radio, microwave, and lightwave. High-order constellations. Multiplexing, demultiplexing, and framing. Adaptive equalization for inter-symbol interference and multi-path fading. Switching (space and time) for UHS streams.
- EEL 6522 INFORMATION THEORY (3)**  
PR: CC. Concepts of information, information channels, channel capacity, information source, Shannon's fundamental theorem and introduction to error correcting codes.
- EEL 6531 TELECOMMUNICATIONS I (3)**  
PR: CC. Advanced theory of communication and application to satellite communication, telephone (voice and data), video (television) and facsimile transmission, digital radio, spread spectrum communication. Intersymbol interference, adaptive equalizers, channel fading and nonlinearities, and error-correcting codes are also discussed.
- EEL 6532 TELECOMMUNICATIONS II (3)**  
PR: CC. Physical basis and statistical representation of electrical noise, filtering, modulation, and de-modulation of signals corrupted by noise; correlation techniques and linear prediction; statistical estimation of signal parameter; optimum filters receivers; and ambiguity functions and inverse probability; quantitative measure of information sources, noise channels and channel capacity; an introduction to error-correcting codes.
- EEL 6535 COMMUNICATIONS SYSTEM II (3)**  
PR: CC or EEL 5534. Digital and analog communication; AM, DSB, SSB, and FM. Multisymbol communication, QAM, modems. Noise, bandwidth, error rate, SNR. Matched filters. M-ary signaling, orthogonal waveforms, channel-capacity, introduction to coding.

- EEL 6537 ADVANCED DETECTION THEORY (3)**  
PR: EEL 6545 or CC. Fundamental principles of signal detection. Likelihood functions; threshold detection; parameter estimation; applications to radar, sonar and digital communication systems.
- EEL 6545 RANDOM PROCESSES IN ELECTRICAL ENGINEERING (3)**  
PR: CC. Introduction to time series analysis by computers. Discrete Fourier methods applied to time series, sample spectrum, cross spectrum, smoothing of spectral estimators, distribution properties. Application to physical, biological and environmental problems.
- EEL 6563 OPTICAL FIBER COMMUNICATION (3)**  
PR: EEL 6447. A study of fiber optic technology as applied to communications systems.
- EEL 6585 SPEECH SIGNAL PROCESSING (3)**  
PR: EEL 5502 or CC. 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.
- EEL 6613 MODERN CONTROL THEORY (2)**  
PR: EEL 4656, EEL 5620, EEL 6631, EEL 6640 or CC. A study of modern control techniques including optimum and adaptive control.
- EEL 6614 SYSTEMS AND CONTROL THEORY I (3)**  
PR: CC or EEL 4656. 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.
- EEL 6615 SYSTEMS AND CONTROL THEORY II (3)**  
PR: CC or EEL 4656. Continuation of EEL 6614.
- EEL 6631 DIGITAL CONTROL SYSTEMS (3)**  
PR: EEL 4656. Sample data and digital control processes.
- EEL 6640 RANDOM PROCESSES IN CONTROL SYSTEMS (2)**  
PR: EEL 4656. Analysis and design of control systems subject to random inputs and disturbances.
- EEL 6752 DIGITAL SIGNAL PROCESSING II (3)**  
PR: CC or EEL 5502. 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. May not be repeated.
- EEL 6753 DIGITAL SIGNAL PROCESSING III (3)**  
PR: CC or EEL 6755. Topics in digital signal processing, e.g., speech processing, radar signal processing, adaptive arrays, and noise cancellation.
- EEL 6822 PATTERNS RECOGNITION THEORY (2)**  
PR: CC. Theory of pattern recognition. Parametric and non-parametric methods, training theorems, unsupervised learning. Biomedical and other engineering applications.

- EEL 6823 COMPUTER APPROACHES TO PATTERN RECOGNITION (2)**  
PR: EEL 6822. Computer implementation of pattern recognition problems. Feature reduction methods. CLAFIC and SELFIC techniques. Sequential methods.
- EEL 6846 CODING THEORY (3)**  
PR: EEL 6522 or CC. Error-correcting codes, algebraic block codes, linear codes and feedback shift registers; BCH codes; convolutional codes; burst error correcting codes; arithmetic codes; decoding methods.
- EEL 6840 AUTOMATA THEORY I (1)**  
PR: EEL 5760. Review of mathematical foundations, decomposition and interconnection of digital machines, measurement and control of finite-state sequential circuits, machine identification, regular expressions and finite-state machines. Vector spaces over finite fields, linear sequential circuits, pseudo-random sequences.
- EEL 6841 AUTOMATA THEORY II (3)**  
PR: EEL 6840. Turing machines, recursive function; computability. Artificial languages, phase-structure grammars, operations on languages, decision problems, discrete value random processes, Markov processes, probabilistic sequential machines, nondeterministic sequential machines.
- EEL 6908 INDEPENDENT STUDY (VAR.)**  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- ELR 6910 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- ELR 6911 GRADUATE RESEARCH METHODS (1-5)**  
Special course to be used primarily for the training of graduate research assistants. Variable credit. Limited to a cumulative total of 5 credits per student. (S/U only.)
- EEL 6932 ADVANCED ENGINEERING SEMINAR (1-3)**  
PR: CC.
- EEL 6935 SELECTED ELECTRICAL TOPICS (1-3)**  
PR: CC.
- EEL 6936 SPECIAL ELECTRICAL PROBLEMS (1-3)**  
PR: CC.
- ELR 6940 GRADUATE INSTRUCTION METHODS (1-5)**  
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 5 credits per student. (S/U only.)
- EEL 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)
- EEL 7910 DIRECTED RESEARCH (VAR.)**  
PR: GR. Ph.D. level. Repeatable. (S/U only.)
- EEL 7931 SELECTED TOPICS IN COMMUNICATION (3)**  
PR: EGE EEL 6535. Advanced topics in communications such as synchronization, spread-spectrum communications, fading channels, large constellation signaling schemes, mobile radio, statistical multiplexing, performance measurement, etc.

**EEL 7980 DISSERTATION: DOCTORAL (VAR.)**

PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

## **INDUSTRIAL AND MANAGEMENT SYSTEMS ENGINEERING**

*Faculty:* A.J.G. Babu, P.E. Givens, S.K. Khator, D.V. Kunak, M. Lulu, W.A. Miller, W.S. Snyder, L.A. Weaver, R.J. Wimmert.

**EIN 5245 WORK PHYSIOLOGY AND BIOMECHANICS (3)**

PR: CC. A study of the human physiological limitations encountered in the design, analysis and evaluation of man-machine systems.

**EIN 5253 HUMAN PROBLEMS IN AUTOMATION (3)**

The study of analysis of combined human operations, automated processes, and robotics in industrial environments.

**EIN 5301C INDUSTRIAL ENGINEERING CONCEPTS (3)**

PR: CC. Survey of industrial and management engineering methodology. Work measurement, methods, production and inventory control, and facility design.

**EIN 5322 PRINCIPLES OF ENGINEERING MANAGEMENT (3)**

Introduction to the fundamentals of accounting, finance, management, and marketing as needed by engineers, scientists, and other professionals in managerial positions.

**EIN 5345 INVENTORY CONTROL (3)**

PR: EIN 4335 or equivalent. Properties of inventory systems and fundamentals of deterministic and probabilistic inventory models. Principles and concepts of material requirements planning.

**EIN 5353 ENGINEERING VALUE ANALYSIS (3)**

PR: EIN 4352 or equivalent. Statistical models for analyzing engineering alternatives from an economic viewpoint. The use of advanced engineering economy concepts in solving industrial problems.

**EIN 5389 FORECASTING (3)**

Introduction to forecasting techniques used to plan and schedule production and inventory control functions. Smoothing and decomposition time-series methods, regression methods, and autoregressive/moving average methods are presented. Integrating forecasting and planning into the engineering organization is discussed.

**EIN 5914, 5915, 5916 SPECIAL(1-3 EACH) INDUSTRIAL PROJECTS I, II, III (3)**  
PR: CC.

**EIN 6119 DECISION SUPPORT SYSTEMS IN ENGINEERING MANAGEMENT (3)**

Conceptual foundations of decision support systems with focus on the needs of engineering managers and effective decision making in technological and scientific organizations.

**EIN 6121 TECHNOLOGY AND MARKETS (3)**

Marketing strategy and management of R&D programs, engineering projects and systems from the viewpoint of interaction between the technical enterprise and its industrial and government customers.

**EIN 6204 ENGINEERING INFORMATION PROCESSING (3)**

A study of human information processing theories and measurement techniques as applied to engineering problems emphasizing perceptual, cognitive, and learning aspects of interpersonal and human-computer communication.

**EIN 6246C HUMAN FACTORS RESEARCH METHODOLOGY (3)**

Detailed study of experimental methodology, choice of independent and dependent variables, data collection, analysis, and related theory used for evaluation of performance in human/machine systems. Emphasis placed upon parametric analysis techniques, uncertainty theory and signal detection theory.

**EIN 6249C SYSTEMS DESIGN AND TASK ANALYSIS (3)**

Task analysis for design of human/machine interface. Methodologies for collecting and evaluating task analysis information. Evolution of systems and application of human factors engineering methods in systems design.

**EIN 6258 HUMAN/COMPUTER INTERACTION (3)**

PR: EIN 5245. Application of human factors in the design and operation of man/machine systems. Analysis of the use of microprocessors and computer-controlled devices in man/machine systems.

**EIN 6265 INDUSTRIAL MENTAL HEALTH (3)**

Theories and concepts of mental hygiene and positive mental health as applied to organizational settings. Review of research studies related to industrial mental health; stress management; strategies for improving mental health and employee performance.

**EIN 6319 WORK DESIGN AND PRODUCTIVITY ENGINEERING (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.

**EIN 6323 ENGINEERING MANAGEMENT POLICY AND STRATEGY (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.

**EIN 6324 TECHNICAL ENTREPRENEURSHIP (3)**

A comprehensive study of developing and starting an engineering project venture. Student teams work out a complete business plan for a company to develop, manufacture, and distribute a technical product or service.

**EIN 6336 PRODUCTION CONTROL SYSTEMS (3)**

PR: CC. Forecasting models, development of production plans, loading and scheduling models and basic inventory models. Use of MRP. Design and evaluation of production control systems.

- EIN 6386C PROBLEMS IN ENGINEERING MANAGEMENT (3)**  
 A study of problems encountered by managers in the planning, organizing, directing, and controlling of resources in technology-based organizations.
- EIN 6605C ROBOTICS AND ASSEMBLY AUTOMATION (3)**  
 The use of robots in manufacturing assembly; coordinated use of robots, machine tools, feeders, holding devices, and material handling systems.
- EIN 6933 ADVANCED ENGINEERING SEMINAR (1-3)**  
 PR: CC.
- EIN 6934, 6935, 6936 SPECIAL INDUSTRIAL TOPICS I, II, III (1-3 EACH)**  
 PR: CC.
- EIN 6971 THESIS: MASTER'S (VAR.)**  
 Repeatable. (S/U only.)
- ESI 5216 ENGINEERING STATISTICS II (3)**  
 PR: EGN 3443 or equivalent. Application of non-parametric statistics, sequential analysis, orthogonal polynomials and other advanced statistical techniques to solving engineering problems.
- ESI 5219 STATISTICAL METHODS FOR ENGINEERING MANAGERS (3)**  
 Study of statistical methods applied to engineering management problems involving estimation and prediction under conditions of uncertainty. Not open to students who have had EGN 3443.
- ESI 5233 RELIABILITY ENGINEERING (3)**  
 PR: EGN 3443 or equivalent. Fundamental concepts of reliability. Estimation of reliability of systems and components. Measures of availability, maintainability and reliability.
- ESI 5306 OPERATIONS RESEARCH FOR ENGINEERING MANAGEMENT (3)**  
 Linear programming, non-linear programming, queueing, inventory, network analysis. Not open to students who have had ESI 4315.
- ESI 5470 MANUFACTURING SYSTEMS ANALYSIS (3)**  
 PR: CC. 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.
- ESI 5522 COMPUTER SIMULATION II (3)**  
 PR: ESI 4521 or equivalent. Design of discrete and continuous simulation models. Model validation and verification. Statistical analysis of simulation model output.
- ESI 6213 THEORY OF INDUSTRIAL STATISTICS (3)**  
 PR: ESI 5219 or equivalent. Study of the theory behind the statistical techniques applied to the solving of engineering problems.
- ESI 6223C ECONOMIC QUALITY CONTROL (3)**  
 PR: EIN 5353, ESI 4221. The design of acceptance sampling systems and control charts for the economic point of view. Consideration of the effects of inspection error on sampling plan and control chart designs.



- ESI 6227 STATISTICAL ASSURANCE PLANS (3)**  
ESI 4221 or equivalent. Advanced techniques in quality control systems. Includes study of articles in current journals.
- ESI 6291 SPECIAL TOPICS IN STATISTICS (3)**  
PR: CC. Special topics in statistics related to research in engineering.
- ESI 6336 QUEUEING THEORY (3)**  
PR: ESI 4315. Introduction to queueing models. Poisson queues, non-Poisson queues, decision models, transient analysis and special queueing topics.
- ESI 6341 DYNAMIC PROBABILISTIC SYSTEMS (3)**  
PR: ESI 4215. Theory and application of stochastic engineering problems. Emphasis on dynamic systems involving Markov processes, recurrent processes, normal processes, and counting processes.
- ESI 6405 NONLINEAR AND DYNAMIC PROGRAMMING (3)**  
PR: ESI 6491 or equivalent. Optimization using nonlinear programming techniques. Techniques of solution using zero-one, integer, quadratic, geometric and dynamic programming. Variational methods.
- ESI 6414 LINEAR PROGRAMMING AND NETWORKS MODELS (3)**  
PR: ESI 4314 or equivalent. Linear models, the simplex method, duality theory, sensitivity analysis, transportation and assignment problems, integer programming, network models, large-scale systems.
- ESI 6491 MULTIVARIATE OPTIMIZATION (3)**  
PR: CC. Classical optimization theory. Direct and indirect methods for system optimization using theoretical and numerical methods. Penalty function and vector-space methods. Response surface methods. Computer implementation.
- ESI 6550 INDUSTRIAL SYSTEMS DESIGN (3)**  
PR: ESI 4521, ESI 4315 or equivalent. Design of integrated systems using statistical and operations research models. Digital simulation using several different digital simulation systems.
- ESI 6552 EVALUATION OF SYSTEM PERFORMANCE (3)**  
PR: ESI 4215, ESI 4315 or equivalent. Applications of probability and random processes to the design and evaluation of physical systems from the viewpoint of satisfying prescribed specifications.
- ESI 6555 TOPICS IN AUTOMATION (3)**  
PR: CC. Study of recent advances in automated systems, automation concepts, control methods, numerical control, adaptive control.
- ESI 6906 INDEPENDENT STUDY (VAR.)**  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- ESI 6911 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- ESI 6991 GRADUATE RESEARCH METHODS (1-5)**  
Special course to be used primarily for the training of graduate research assistants. Variable credit, repeatable. Limited to a cumulative total of five credits per student. (S/U only.)

- ESI 6992 GRADUATE INSTRUCTION METHODS (1-5)**  
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of five credits per student. (S/U only.)
- ESI 7911 DIRECTED RESEARCH (VAR.)**  
PR: GR. Ph.D. level. Repeatable. (S/U only.)
- ESI 7980 DISSERTATION: DOCTORAL (VAR.)**  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

## **MECHANICAL ENGINEERING**

*Faculty:*R.A. Crane, A. Kaw, J. Porteiro, L.A. Scott, W.A. Smith, S. Wilkinson, S.J. Ying.

- EMC 5315 MACHINE CONTROL SYSTEMS (3)**  
PR: EMC 4314 or CI. Machine control system components and their effects on closed loop system performance. Transfer characteristics of hydraulic, pneumatic and electrical elements and processes.
- EMC 5510 MOTOR SELECTION AND CONTROL (3)**  
PR: EGN 3373, EGN 3433. Standard electrical voltages; power wiring in industrial plants; NEMA motor designs and their industrial uses; techniques for estimating motor starting times and temperature rise; motor selection; starting and operating safety interlocks; conventional motor starting and control systems, direct digital (programmable) controls; electrical code requirements for conductors and protective devices.
- EMC 5930 SPECIAL TOPICS III (1-4)**  
PR: CC.
- EMC 5931 SPECIAL TOPICS IV (1-4)**  
PR: CC.
- EMC 6105 ADVANCED THERMODYNAMICS (3)**  
PR: CC. Selected topics in classical and irreversible thermodynamics.
- EMC 6120C NUMERICAL METHODS IN HEAT TRANSFER (3)**  
PR: CI. Application of finite difference and finite element techniques to problems of conduction and convection. Cartesian, cylindrical and spherical systems. Steady and transient solutions.
- EMC 6121C ADVANCED CONDUCTION ANALYSIS (3)**  
PR: EMC 4118, EMC 4411. Multi-dimensional heat transfer. Emphasis on solution techniques exact and numerical.
- EMC 6122 RADIATION (3)**  
PR: EMC 4118. Review of basic principles of radiation, grey bodies and real surfaces, calculation of shape factors, absorbing gases.
- EMC 6317 DIRECT DIGITAL CONTROL I (3)**  
PR: EMC 4314, EMC 4411, or CI. Application of digital computers to control of engineering processes. Includes study of digital filtering Z-transforms, supervisory control, A/C and D/A conversion and advanced control strategies.
- EMC 6318 DIRECT DIGITAL CONTROL II (3)**  
PR: EMC 6317 or CI. A continuation of EMC 6317 with detailed study of special cases. Cases will vary from term to term.

- EMC 6906 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- EMC 6907 INDEPENDENT STUDY (VAR.)**  
PR: GR. Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- EMC 6930 SPECIAL PROBLEMS I (1-3)**  
PR: CC.
- EMC 6931 SPECIAL PROBLEMS II (1-3)**  
PR: CC.
- EMC 6938 GRADUATE INSTRUCTION METHODS (1-4)**  
PR: CC. Special course to be used for training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credits per student. (S/U only.)
- EMC 6939 GRADUATE RESEARCH METHODS (1-4)**  
PR: CC. Special course to be used for training of graduate research assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credit hours per student. (S/U only.)
- EMC 6971 THESIS: MASTER'S (VAR.)**  
PR: CC. Repeatable. (S/U only.)
- EMC 7915 DIRECTED RESEARCH (VAR.)**  
PR: CC and GR. Ph.D. level. Repeatable. (S/U only.)
- EMC 7980 DISSERTATION: DOCTORAL (VAR.)**  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)
- EML 5232 COMPOSITE LAMINATED MATERIALS (3)**  
PR: EML 3500. 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 shall be introduced to design laminated composite materials using user friendly software.
- EML 5509 PROJECT DESIGN III (2)**  
PR: CC. Correlation of previously acquired mechanical design experiences with a creative design project. Lec-lab.
- EML 5528 ANALYSIS METHODS FOR MECHANICAL DESIGN (2)**  
PR: EML 4503, or CI. Treatment of stress, strain and strengths aspects of machine design. Application of failure theories, residual stresses and energy principles to machine elements.
- EML 6222 VIBRATION ANALYSIS (3)**  
PR: EML 4265 or CI. Transient and steady state analysis of mechanical systems with lumped parameters. Computer simulation systems. Application of generalized coordinates, matrix representation and other methods to lumped parameter systems.
- EML 6225 ACOUSTICS AND NOISE CONTROL (3)**  
PR: CC. Fundamentals of sound propagation, sound power and intensity. Psychoacoustics, industrial noise sources and methods of attention. Noise ordinances and instruments for noise measurement.

**EML 6235 APPLIED ENGINEERING ASPECTS OF FATIGUE (2)**

PR: EML 5528 or Ci. Evaluation of strength of machine members under fatigue loadings. Stress concentrations, residual stress effects, surface coatings, environmental effects. Statistical treatment in fatigue analysis.

**EML 6273 ADVANCED DYNAMICS OF MACHINERY (3)**

PR: EML 4265 or Ci. Detailed study of velocities, accelerations and forces in machines with parts having rotating, reciprocating and combined motion.

**EML 6533 ADVANCED MECHANICAL DESIGN (2)**

PR: CC. A technical application course involving the problem of developing machines to perform specified functions. The analysis will include evaluation of kinematic performance, and examination of parts from stress, strain, wear and fabrication.

**EML 6606 HVAC SYSTEMS (3)**

PR: EML 4601 or Ci. Criteria for selection of systems types; performance, characteristics of single zone, multizone, double duct and variable volume systems; energy conservation in HVAC design; HVAC controls computer models of HVAC systems; solar energy used in HVAC.

**EML 6715 ADVANCED FLUID MECHANICS AND HEAT TRANSFER (3)**

PR: Ci. A graduate level 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 rather than on the development of computational methods and software.

**EML 6801 ROBOTIC SYSTEMS (3)**

PR: Ci. 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.

## College of Fine Arts

### ART

*Chairperson:* A. Eaker; *Distinguished Professor:* D.J. Saff; *Professor Emeritus:* H.W. Covington; *Professors:* H.W. Covington, E.L. Cox, L.M. Dietrich, A.B. Eaker, C.J. Fager, R.W. Gelinis, J.M. Kronsoble, M.R. Larsen, C.P. Lyman, B.L. Marsh, M.A. Miller, G. Pappas; *Associate Professors:* C.W. Houk, T.E. McLaughlin, B.J. Nickels, P. Schroth, D.R.E. Wright, T.F. Wujcik; *Assistant Professors:* S. Davis, V. Hirt, L.S. Marcus; *Lecturers:* D.E. Elmeer; *Other Faculty:* D.L. Rosenzweig.

Admission to all 5000 level studio courses by Consent of Instructor.

**ARH 5333 CULTURAL AND INTELLECTUAL HISTORY OF RENAISSANCE AND BAROQUE ART (4)**

A course in which Renaissance and Baroque theories of art are treated as part of general cultural and intellectual history.

**ARH 5451 CULTURAL AND INTELLECTUAL HISTORY OF MODERN ART (4)**

A course in which theories of modern artists and of critics and historians of Modernism are treated as a part of general cultural and intellectual history.

**ARH 5795 METHODS OF ART HISTORY (4)**

This course introduces students to various methods used by art historians to analyze the form and content of individual works of art, and to various modes of historical explanation. (Must be taken during the student's first two semesters in the program.)

**ARH 6055 ART HISTORY (4)**

PR: Cl. May be repeated.

**ARH 6332 CURRENT HISTORIOGRAPHY: RENAISSANCE (4)**

PR: ARH 5333. This course explores current perspectives on problems of Renaissance historiography.

**ARH 6335 CURRENT HISTORIOGRAPHY: BAROQUE-ROCOCO (4)**

PR: 5333. This course explores current perspectives on problems of Baroque and Rococo historiography.

**ARH 6440 CURRENT HISTORIOGRAPHY: 19TH CENTURY (4)**

PR: ARH 5451. This course explores current perspectives on problems in the historiography of 19th Century Art.

**ARH 6456 CURRENT HISTORIOGRAPHY: 20TH CENTURY (4)**

PR: 5451. Cultural and intellectual history of Modern Art.

**ARH 6798 SEMINAR IN ART HISTORY (4)**

PR: Cl. Variable, specialized topics in art history.

**ART 5125C CERAMICS (4)**

PR: ART 4111C. Advanced problems in the various ceramic techniques, including throwing and glaze calculation. May be repeated.

**ART 5340C DRAWING (4)**

PR: ART 4320C. Advanced problems in various drawing techniques. Emphasis on individual creative expression. May be repeated.

**ART 5422C LITHOGRAPHY (4)**

PR: ART 4421C. Advanced problems in various lithographic techniques. Emphasis on individual creative expression. May be repeated.

**ART 5472C INTAGLIO (4)**

PR: ART 4471C. Investigations into more complex intaglio processes including photoengraving and color printing procedures. Emphasis on personal conceptual development in graphic media. May be repeated.

**ART 5532C PAINTING (4)**

PR: ART 4520C. Advanced problems in the various painting techniques. Emphasis on individual creative expression. May be repeated.

**ART 5730C SCULPTURE (4)**

PR: ART 4702C. Advanced problems in the various techniques of sculpture. Emphasis on individual creative expression. May be repeated.

- ART 5797 GALLERY AND MUSEUM INTERNSHIP** (2-6)  
 By working in Bay Area museums or galleries, students will become familiar with various museological operations. Internships vary owing to the work at hand in particular museums, but possible areas of work include registration, installation, conversation, writing of grants, or museum education. (Students are eligible after completing one semester in the program.) S/U only.
- ART 5910 RESEARCH** (1-4)  
 PR: CC. May be repeated.
- ART 5936 STUDIO TECHNIQUES:** (2)  
**SELECTED PROJECTS**  
 PR: Visual Concepts I, II and Introduction to Art, the topic-technique-related 3000-4000 level studio sequence and CI. Concentration in specialized technical data and process. May be repeated for credit for different topics only.
- ART 6126C CERAMICS** (4)  
 PR: CI. May be repeated.
- ART 6341C DRAWING** (4)  
 PR: CI. May be repeated.
- ART 6423C LITHOGRAPHY** (4)  
 PR: CI. May be repeated.
- ART 6473C INTAGLIO** (4)  
 PR: CI. May be repeated.
- ART 6580C PAINTING** (4)  
 PR: CI. May be repeated.
- ART 6620C PHOTOGRAPHY** (4)  
 PR: CI. May be repeated.
- ART 6645C CINEMATOGRAPHY** (4)  
 PR: CI. May be repeated.
- ART 6731C SCULPTURE** (4)  
 PR: CI. May be repeated.
- ART 6907 INDEPENDENT STUDY** (VAR.)  
 Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)
- ART 6911 DIRECTED RESEARCH** (VAR.)  
 PR: GR. Master's level. Repeatable. (S/U only.)
- ART 6936 GRADUATE SEMINAR** (2)  
 PR: CI. Advanced course in theoretical and conceptual foundations of the visual arts. The specific structure and content to be determined by the instructor. Must be repeated for a minimum of 4 hours.
- ART 6937 GRADUATE INSTRUCTION METHODS** (1-4)  
 Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credits per student. (S/U only.)

**ART 6940 SELECTED TOPICS IN ART (1-4)**

PR: Graduate Standing and Cl. Variable credit depending upon the scope and magnitude of the work agreed to by the student and the responsible member of the faculty. May be repeated.

**ART 6956 GRADUATE STUDIO THESIS DOCUMENTATION (2)**

PR: Cl. An advanced seminar focused on the problems of documenting in verbal form the development of a body of work in the visual arts.

**ART 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)

**PGY 5420 PHOTOGRAPHY (4)**

PR: Cl. Advanced work in photography and related media leading to development of personal/expressive statements. May be repeated.

**PGY 5530 CINEMATOGRAPHY (4)**

PR: ART 4631C. Advanced studio work using black and white, color and sound as technical and aesthetic factors in visual, artistic productions. May be repeated.

## MUSIC

*Chairperson:* J. Heller; *Professors:* J. Abram, V.A. Bridges, L.R. Cullison, A.J. Galos, J. Heller, R.E. Helps, V.S. Jennings, J.E. Lewis, W.D. Owen, E.C. Preodor, M.N. Rearick, J.L. Smith, R.J. Summer, A.J. Watkins, A.N. Woodbury; *Associate Professors:* B.G. Alberg, C.P. Doane, R.O. Froelich, A.L. Hawkins, W.W. Jaworski, H.K. Jones, J.F. Junkin, D.W. Kneeburg, R.M. McCormick, C.R. Owen, J.M. Reynolds, J.O. Robison, N.S. Stevens, A.J. Summer, N.R. Warfield, M. Westcott; *Assistant Professors:* A.M. Aks, K.C. Holm, J.K. Khorsandian, A. Holzman, J. Keesecker, J.W. Richmond, W.S. Woodruff; *Instructor:* A.Y. Monroe; *Other Faculty:* A.D. Laue, J.B. Moorhead, C.D. Moses, M. Neuenschwander, M. Texter.

**MUC 6251 COMPOSITION (4)**

PR: Cl. Private instruction in original composition. Required of composition majors. May be repeated for three semesters.

**MUC 6444, 6445 ELECTRONIC (3,3)**

**MUSIC/ANALOG/DIGITAL SYSTEMS RESEARCH**

PR: Cl. State-of-the-art compositional and performance applications; new concepts of electronic music synthesis; documentation and critical analysis of new repertory.

**MUG 6254 BAND/WIND ENSEMBLE CONDUCTING (3)**

Combination of lecture, seminar, laboratory and individual instruction experiences designed to provide development of advanced conducting skills. May be repeated for credit up to 12 hours.

**MUG 6256, 6257, 6258 CHORAL (4,4,4)**  
**LITERATURE AND CONDUCTING**

PR: Cl. Combination of seminar, classroom, and laboratory types of experience designed to provide depth in stylistic study of choral music literature and performance.

- MUG 6271 BAND/WIND ENSEMBLE LITERATURE** (3)  
 Combination of seminar and classroom experiences designed to provide depth in historical study of band and wind ensemble literature. May not be repeated for credit.
- MUG 6272 BAND/WIND ENSEMBLE LITERATURE SEMINAR** (3)  
 Seminar experience designed to provide in depth study and analysis of selected masterpieces of the band/wind ensemble repertoire. May be repeated for credit.
- MUG 6306 BAND/WIND ENSEMBLE CONDUCTING** (4)  
 Combination of lecture, seminar, laboratory and individual instruction experiences designed to provide development of more advanced conducting skills. Repeatable.
- MUL 6375 TWENTIETH CENTURY MUSIC LITERATURE** (3)  
 PR: Cl. A study of the literature, compositional techniques, and music philosophies of the major 20th century composers from Debussy to the present.
- MUL 6410, 6411 KEYBOARD REPERTORY** (2,2)  
 PR: Cl. A study of style, history, and performance practice in keyboard repertory including masterworks of all periods.
- MUL 6505 SYMPHONIC LITERATURE** (2)  
 PR: Cl. A chronological study of the development of orchestral music; analysis and study of major works from a stylistic and biographical perspective.
- MUL 6565 CHAMBER MUSIC LITERATURE** (2)  
 PR: Cl. A survey and stylistic analysis of chamber music repertory 1750 through the present day.
- MUL 6624, 6625 SONG LITERATURE** (2,2)  
 PR: Cl. Solo song literature from the 17th century through the contemporary with emphasis on German lieder, French songs, and contemporary English and American songs; special emphasis on performance.
- MUL 6671 OPERA LITERATURE** (2)  
 PR: Cl. A chronological study of the development of opera from 1600 to the present; emphasis on the technical, stylistic, and performance aspects of opera.
- MUL 6687 SOLO VOCAL LITERATURE IN ORATORIO** (2)  
 PR: Cl. A survey of literature for the solo voice in cantatas and orchestral music.
- MAJOR ENSEMBLE PERFORMANCE COURSES** (below)  
 PR: Cl. 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; may be repeated for credit.
- MUN 6125 UNIVERSITY BAND** (1)
- MUN 6145 WIND ENSEMBLE** (1)



- MUN 6215 UNIVERSITY ORCHESTRA (1)**  
**MUN 6316 UNIVERSITY SINGERS (1)**  
**MUN 6385 UNIVERSITY-COMMUNITY CHORUS (1)**  
**MUN 6456 PIANO ENSEMBLE (1)**  
**MUN 6716 JASS ENSEMBLE (1)**  
**MUO 6501 OPERA WORKSHOP (1)**
- CHAMBER MUSIC ENSEMBLES COURSES (below)**  
PR: Cl. 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; may be repeated for credit.
- MUN 6345 CHAMBER SINGERS (1)**  
**MUN 6416 STRING QUARTET (1)**  
**MUN 6425 GRADUATE SAXOPHONE ENSEMBLE (1)**  
**MUN 6426 FLUTE CHOIR (1)**  
**MUN 6428 CLARINET CHOIR (1)**  
**MUN 6429 WOODWIND QUINTET (1)**  
**MUN 6435 BRASS CHOIR (1)**  
**MUN 6436 BRASS QUINTET (1)**  
**MUN 6437 HORN QUARTET (1)**  
**MUN 6445 PERCUSSION ENSEMBLE (1)**  
**MUN 6447 MARIMBA ENSEMBLE (1)**  
**MUN 6475 COLLEGIUM MUSICUM (1)**  
**MUN 6495 NEW MUSIC ENSEMBLE (1)**  
**MUN 6498 CLASSICAL GUITAR ENSEMBLE (1)**  
**MUN 6715 JAZZ CHAMBER ENSEMBLE (1)**
- MUS 5905 DIRECTED STUDY (1-4)**  
PR: CC. Independent studies in the various areas of music; course of study and credits must be assigned prior to registration may be repeated.
- MUSIC WORKSHOP COURSES (below)**  
PR: Cl. Intensive study in the specialized areas indicated below; open to teachers, University students, and secondary students; credit available to qualified students.
- MUS 5927 ORCHESTRA WORKSHOP (1-2)**  
**MUS 5929 STRING WORKSHOP (1-2)**  
**MUS 6793 TECHNIQUES OF RESEARCH IN MUSIC AND MUSIC EDUCATION (3)**  
PR: CC. A study of the methods of research and professional bibliography and with an individual, formal project as a terminal requirement.
- MUS 6906 INDEPENDENT STUDY (VAR.)**  
Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)
- MUS 6910 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- MUS 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)

- MUS 6976 GRADUATE RECITAL** (2)  
PR: CC.
- MUS 6994 GRADUATE INSTRUCTION METHODS** (1-4)  
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credits per student. (S/U only.)
- MUS 6995 GRADUATE RESEARCH METHODS** (1-4)  
A graduate level review of basic theoretical concepts with emphasis on the common practice period. The course serves to satisfy deficiencies in music theory and as such does not count toward the degree.
- MUT 5051 GRADUATE REVIEW OF MUSIC THEORY** (2)  
A graduate level review of basic theoretical concepts with emphasis on the common practice period. The course serves to satisfy deficiencies in music theory and as such does not count toward the degree.
- MUT 6545 CRITICAL ANALYSIS-THEORY** (2)  
PR: Cl. A study of analytical procedures and compositional practices from the common practice period. An emphasis on consistent practices that provide a theoretical basis for composition and/or performance.
- MUT 6586 CRITICAL ANALYSIS-HISTORY** (2)  
PR: Cl. A study of historical developments of music in western civilization. The emphasis will be placed on a different historical period each semester, from the Middle Ages through the Romantic Period. May be repeated up to 6 hours.
- MUT 6629 ANALYTICAL SYSTEMS** (2)  
PR: Cl. May not be repeated. The investigation and practical application of various systems of musical analysis from traditional to the alternative systems of Schenker, Reti, Schoenberg, etc.
- MUT 6751 TEACHING OF MUSIC THEORY** (3)  
PR: Cl. Comparative study of teaching techniques, procedures, and materials used in teaching visual and aural theory.
- MUT 6760 HISTORY OF MUSIC THEORY** (2)  
PR: Cl. History of the evolution of the materials of western music to include tuning systems, scales, models, tonality, rhythm, counterpoint and harmony. Includes the exploration of treatises and theorists contributing to this evolution.
- APPLIED MUSIC COURSES** (below)  
PR: Necessary competency determined by faculty jury audition. Required of all applied music majors. Private and class instruction.
- MVB 6251 APPLIED TRUMPET, SECONDARY** (2)
- MVB 6252 APPLIED FRENCH HORN, SECONDARY** (2)
- MVB 6253 APPLIED TROMBONE, SECONDARY** (2)
- MVB 6254 APPLIED BARITONE, SECONDARY** (2)
- MVB 6255 APPLIED TUBA, SECONDARY** (2)
- MVB 6451 APPLIED TRUMPET** (4)
- MVB 6452 APPLIED FRENCH HORN** (4)
- MVB 6453 APPLIED TROMBONE** (4)
- MVB 6454 APPLIED BARITONE** (4)
- MVB 6455 APPLIED TUBA** (4)

<b>MVK 6251 APPLIED PIANO, SECONDARY</b>	<b>(2)</b>
<b>MVK 6253 APPLIED ORGAN, SECONDARY</b>	<b>(2)</b>
<b>MVK 6451 APPLIED PIANO</b>	<b>(4)</b>
<b>MVK 6453 APPLIED ORGAN</b>	<b>(4)</b>
<b>MVP 6251 APPLIED PERCUSSION, SECONDARY</b>	<b>(2)</b>
<b>MVP 6451 APPLIED PERCUSSION</b>	<b>(4)</b>
<b>MVS 6251 APPLIED VIOLIN, SECONDARY</b>	<b>(2)</b>
<b>MVS 6252 APPLIED VIOLA, SECONDARY</b>	<b>(2)</b>
<b>MVS 6253 APPLIED VIOLONCELLO, SECONDARY</b>	<b>(2)</b>
<b>MVS 6454 APPLIED DOUBLE BASS, SECONDARY</b>	<b>(2)</b>
<b>MVS 6255 APPLIED HARP, SECONDARY</b>	<b>(2)</b>
<b>MVS 6256 APPLIED CLASSICAL GUITAR, SECONDARY</b>	<b>(2)</b>
<b>MVS 6451 APPLIED VIOLIN</b>	<b>(2)</b>
<b>MVS 6452 APPLIED VIOLA</b>	<b>(4)</b>
<b>MVS 6453 APPLIED VIOLONCELLO</b>	<b>(4)</b>
<b>MVS 6454 APPLIED DOUBLE BASS</b>	<b>(4)</b>
<b>MVS 6455 APPLIED HARP</b>	<b>(4)</b>
<b>MVS 6456 APPLIED CLASSICAL GUITAR</b>	<b>(4)</b>
<b>MVV 6251 APPLIED VOICE, SECONDARY</b>	<b>(2)</b>
<b>MVV 6451 APPLIED VOICE</b>	<b>(4)</b>
<b>MVW 6251 APPLIED FLUTE, SECONDARY</b>	<b>(2)</b>
<b>MVW 6252 APPLIED OBOE, SECONDARY</b>	<b>(2)</b>
<b>MVW 6253 APPLIED CLARINET, SECONDARY</b>	<b>(2)</b>
<b>MVW 6254 APPLIED BASSOON, SECONDARY</b>	<b>(2)</b>
<b>MVW 6255 APPLIED SAXOPHONE, SECONDARY</b>	<b>(2)</b>
<b>MVW 6451 APPLIED FLUTE</b>	<b>(4)</b>
<b>MVW 6452 APPLIED OBOE</b>	<b>(4)</b>
<b>MVW 6453 APPLIED CLARINET</b>	<b>(4)</b>
<b>MVW 6454 APPLIED BASSOON</b>	<b>(4)</b>
<b>MVW 6455 APPLIED SAXOPHONE</b>	<b>(4)</b>

**MASTER COURSES** (below)

PR: Cl. Study and performance of selected literature with special emphasis on style, form, and techniques; especially designed for teachers, piano majors, and talented secondary school students.

<b>MVK 5751 PIANO, MASTER CLASS</b>	<b>(2)</b>
<b>MVS 5750 STRINGS, MASTER CLASS</b>	<b>(2)</b>

**STUDIO TEACHING SEMINAR** (below)

PR: Graduate standing in performance and Cl; emphasis on techniques used in teaching the individual student in performance.

<b>MVK 6850 STUDIO TEACHING SEMINAR-CLASS PIANO</b>	<b>(2)</b>
<b>MVK 6851 STUDIO TEACHING SEMINAR-PIANO</b>	<b>(2)</b>

## **MUSIC EDUCATION**

*Chairperson:* J. Heller; *Professors:* V.A. Bridges, J. Heller; *Associate Professor:* C. Doane.

**MUE 6080 FOUNDATIONS AND PRINCIPLES OF MUSIC EDUCATION (3)**

PR: Acceptance into Music Education Graduate Program or CI. Investigation of historical, philosophical, and psychological, foundations of music education.

**MUE 6116 ADVANCED ELEMENTARY SCHOOL MUSIC (3)**

PR: Acceptance in the Music Education Graduate Program or CI. Study and appraisal of children's musical growth, curriculum plans, materials, and teaching techniques essential for the sequential development of musical learnings.

**MUE 6145 MUSIC SUPERVISION AND ADMINISTRATION (3)**

The music curriculum in relation to the total school program; staff and budgetary needs.

**MUE 6336 ADVANCED SECONDARY VOCAL MUSIC (3)**

PR: Acceptance in the Music Education Graduate Program and CI. 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.

**MUE 6347 ADVANCED MATERIALS FOR INSTRUMENTAL MUSIC EDUCATION (3)**

PR: Acceptance in the Music Education Graduate Program and CI. Course designed to examine published and unpublished materials, develop curricula and resources, including media hardware, appropriate for use in school instrumental music programs.

**MUE 6496 CHORAL CONDUCTING IN THE SECONDARY SCHOOLS (3)**

PR: Acceptance in the Music Education Graduate Program or CI. Course designed to develop essential conducting competencies required of a choral music director in the secondary schools.

**MUE 6498 INSTRUMENTAL CONDUCTING IN THE SECONDARY SCHOOLS (3)**

PR: Acceptance in the Music Education Graduate Program or CI. Course designed to develop skills of analysis and interpretation needed by school instrumental music teachers. Class activities include laboratory settings and performance practices.

**MUE 6906 INDEPENDENT STUDY: MUSIC EDUCATION (1-6)**

Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**MUE 7810 FOUNDATIONS OF MUSICAL LEARNING AND TEACHING (3)**

PR: Acceptance in the Music Education Graduate Program, a graduate level educational psychology course or its equivalent, or CI. A critical examination of current findings regarding the phenomena of the psychology of musical behaviors, major problems and plausible solutions. Investiga-

tion of musical acoustics, the measurement of musical abilities, and a comparative study of theories of learning related to musical learning.

**MUE 7830 AESTHETICS IN MUSIC EDUCATION (3)**

PR: Acceptance in the Music Education Graduate Program or CI. A course designed to investigate the nature of philosophical and psychological aesthetics as they relate to aesthetic and educational theories that influence programs in music education.

## **THEATRE**

*Chairperson:* D. Williams; *Professors:* N.B. Cole, W.A. Lorenzen, P. Massie, P.B. O'Sullivan; *Associate Professors:* J.W. Belt, D.M. Calandra, C. Steele; *Assistant Professors:* B.W. Lee, A.G. Lillethun, D.K. Williams; *Adjunct Assistant Professor:* M. Steele; *Lecturer:* M.A. Bentley; *Other Faculty:* P.M. Finelli, B.G. Stephens.

**THE 5909 DIRECTED STUDY (1-6)**

PR: CC. Independent studies in the various areas of Theatre. Course of study and credits must be assigned prior to registration.

**THE 5931 SELECTED TOPICS IN THEATRE (1-8)**

PR: CI. The content of the course will be governed by student demand and instructor interest. May be lecture or class discussion or studio format. May be repeated for credit for different topics only.

## **College Of Medicine**

### **ANATOMY**

*Chairperson:* J.A.G. Rhodin; *Professors:* L.T. Chen, J.A.G. Rhodin, H.N. Schnitzlein; *Associate Professors:* H.K. Brown, D.R. Hilbelink, M.F. Nolan, C.P. Phelps, S. Saporta; *Assistant Professor:* D.F. Cameron, A.M. Gerdes.

**GMS 6600C CORE COURSE IN HUMAN ANATOMY (5)**

PR: Admission to Ph.D. Program in Medical Sciences.

**GMS 6601 METHODS OF ELECTRON MICROSCOPY IN MEDICAL RESEARCH (3)**

PR: GMS 6600, GMS 6608 or CC.

**GMS 6602 NEURAL CORRELATES OF BEHAVIOR (3)**

PR: GMS 6600, or CC.

**GMS 6603 COMPARATIVE NEUROANATOMY (2)**

PR: GMS 6600, or CC.

**GMS 6604 HUMAN EMBRYOLOGY (3)**

PR: GMS 6600, or CC.

**GMS 6608 ADVANCED MICROSCOPIC ANATOMY (3-6)**

PR: GMS 6600, or CC.

**GMS 6609 ADVANCED HUMAN GROSS ANATOMY (6-12)**

PR: GMS 6600, or CC.

**GMS 6610 ADVANCED NEUROANATOMY (3-6)**

PR: Admission to GMS program and acceptance into the Anatomy department.

- GMS 6611 INTRODUCTION TO ANATOMICAL RESEARCH** (2)  
PR: Admission to GMS program and acceptance into the Anatomy department.
- GMS 6612 SUPERVISED TEACHING IN HUMAN ANATOMY** (3)  
PR: GMS 6608, 6609, or 6610 and acceptance into the Anatomy department.
- GMS 7418 DIRECTED RESEARCH** (VAR.)  
PR: Gr. Ph.D. level. Repeatable. (S/U only.)
- GMS 7930 SELECTED TOPICS** (1-3)  
PR: Departmental Core Course or CC.
- GMS 7939 GRADUATE SEMINAR** (1)  
PR: Departmental Core Course or CC.
- GMS 7980 DISSERTATION: DOCTORAL** (VAR.)  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

## BIOCHEMISTRY

*Acting Chairperson:* L.P. Solomonson; *Professors:* G.C. Ness, L.P. Solomonson; *Associate Professors:* W.L. Adair, M.J. Barber, D.C. Eichler, R.K. Keller, M.T. Williams; *Other Faculty:* R.V. Farese, P.J. Neame, R.A. Olsson, R.P. Pollet, A.W. Root, L.C. Rosenberg, J. Sasse, L.A. Weber, E. Wickstrom.

- BCH 6255 MOLECULAR BIOLOGY AND MACROMOLECULAR METABOLISM** (3)  
PR: GMS 6200C or CC. A discussion of experimental systems currently being used to investigate the organization and expression of genetic information in eukaryotic cells. Offered every other year.
- BCH 6275 BIOLOGICAL MEMBRANES—STRUCTURE AND FUNCTION** (2)  
PR: GMS 6200C or CC. Current concepts in the structure and function of biological membranes. Offered every other year.
- BCH 6335 LIPID METABOLISM AND REGULATION** (3)  
PR: GMS 6200C or CC. Current concepts in the metabolism of lipids in eukaryotic and prokaryotic cells.
- BCH 6415C METHODS IN MOLECULAR BIOLOGY** (4)  
PR: BCH 6255 or CC. An introduction to modern molecular biological techniques and instrumentation. Lec.-Lab.
- BCH 6506 ADVANCES IN ENZYMOLOGY** (3)  
PR: GMS 6200C, BCH 6067 or CC. A discussion of the theory and mechanism of enzymological reactions with emphasis on enzymological techniques.
- BCH 6627 METABOLIC BASIS OF DISEASE** (3)  
PR: GMS 6200C or CC. A discussion of the metabolic basis of major inherited diseases.
- BCH 6746 PHYSICAL BIOCHEMISTRY** (3)  
PR: GMS 6200C, BCH 6067 or CC. The theory and application of modern physical biochemical techniques.

- BCH 6806 BIOCHEMICAL ENDOCRINOLOGY (2)**  
PR: GMS 6200C or CC. A study of the biochemical mechanisms of polypeptide, thyroid, and steroid hormones, including sites of action. Offered every other year.
- GMS 6200C CORE COURSE IN MEDICAL BIOCHEMISTRY (5)**  
PR: A comprehensive introductory course in biochemistry with emphasis on intermediary metabolism and its regulation. Admission to Ph.D. Program in Medical Sciences or CC.
- GMS 7418 DIRECTED RESEARCH (VAR.)**  
PR: Gr. Ph.D. level. Repeatable. (S/U only.)
- GMS 7930 SELECTED TOPICS (1-3)**  
PR: GMS 6200C or CC.
- GMS 7939 GRADUATE SEMINAR (1)**  
PR: GMS 6200C or CC.
- GMS 7980 DISSERTATION: DOCTORAL (VAR.)**  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

## **MEDICAL MICROBIOLOGY AND IMMUNOLOGY**

*Chairperson:* H. Friedman; *Professors:* N.K. Day, H. Friedman, R.A. Good, J.W. Hadden, D.G. Halkias, M. Nonoyama, W.E. Stewart II; *Associate Professors:* J.Y. Djeu, R.J. Grasso, T.W. Klein, G.J. Lancz, L.J. Paradise, S. Spector.

- GMS 6100C CORE COURSE IN MEDICAL MICROBIOLOGY (5)**  
PR: Admission to Ph.D. Program in Medical Sciences.
- GMS 6101 DIAGNOSTIC MICROBIOLOGY (3)**  
PR: GMS 6100C or CC.
- GMS 6102 RESEARCH PLANNING AND METHODS (3)**  
PR: GMS 6100C or CC.
- GMS 6104 CELLULAR IMMUNOLOGY (3)**  
PR: GMS 6100C or CC.
- GMS 6105 ADVANCES IN IMMUNOLOGY (2)**  
PR: GMS 6100C or CC.
- GMS 6106 IMMUNOCHEMISTRY (3)**  
PR: GMS 6100C or CC.
- GMS 6107 ADVANCES IN VIROLOGY (2)**  
PR: GMS 6100C or CC.
- GMS 6108 MICROBIAL PHYSIOLOGY AND GENETICS (2)**  
PR: GMS 6100C or CC.
- GMS 6109 REGULATORY CONTROL MECHANISMS IN ANIMAL CELL SYSTEMS (2)**  
PR: GMS 6100C or CC.
- GMS 6110 HOST-PARASITE INTERACTIONS (2)**  
PR: GMS 6100C or CC.

- GMS 6417 ANIMAL RESEARCH METHODS** (3)  
PR: GMS 6100C or CC.
- GMS 6940 SUPERVISED TEACHING IN MEDICAL MICROBIOLOGY AND IMMUNOLOGY** (1-3)  
PR: GMS 6100C or CC. (S/U only.)
- GMS 7418 DIRECTED RESEARCH** (VAR.)  
PR: Gr. Ph.D. level. Repeatable. (S/U only.)
- GMS 7930 SELECTED TOPICS** (1-3)  
PR: Departmental Core Course or CC.
- GMS 7939 GRADUATE SEMINAR** (1)  
PR: Departmental Core Course or CC.
- GMS 7980 DISSERTATION: DOCTORAL** (VAR.)  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

## PATHOLOGY

*Chairperson:* D.T. Rowlands, Jr.; *Professors:* H.A. Azar, J.U. Balis, P. Byvoet, D.G. Halkias, S.V. Nicosia, D.T. Rowlands, Jr., P.J. Schmidt, J.V. Straumfjord, Jr.; *Associate Professor:* S.A. Shelley; *Assistant Professors:* R.E. Domen, C.G. Espinoza, S.R. Saba.

- GMS 6111 HUMAN SYSTEMIC PATHOLOGY** (3)  
PR: GMS 6300 or CC.
- GMS 6112 BIOCHEMICAL PATHOLOGY** (2)  
PR: GMS 6300 or CC.
- GMS 6113 IMMUNOPATHOLOGY** (2)  
PR: GMS 6300 or CC.
- GMS 6300C CORE COURSE IN PATHOLOGY** (5)  
PR: Admission to Ph.D. Program in Medical Sciences.
- GMS 6301 ADVANCED GROSS PATHOLOGY** (2)  
PR: GMS 6300 or CC.
- GMS 6302 ADVANCED MICROSCOPIC PATHOLOGY** (2)  
PR: GMS 6300 or CC.
- GMS 6303 ELECTRON MICROSCOPY OF DISEASE STATES** (2)  
PR: GMS 6300 or CC.

## PHARMACOLOGY AND THERAPEUTICS

*Chairperson:* Diane H. Russel; *Professors:* L. Chedid, J.J. Krzanowski, Jr., J.B. Polson, D.H. Russel, A. Szentivanyi; *Associate Professors:* F.M. Audibert, R.G. Coffey, D.F. Fitzpatrick, J.F. Hackney, J.F. Williams.

- GMS 6469 AUTONOMIC PHARMACOLOGY** (2-4)  
PR: GMS 6400, GMS 6200, GMS 6500 or CC.
- GMS 6500C CORE COURSE IN PHARMACOLOGY** (5)  
PR: GMS 6200, GMS 6400 or CC.
- GMS 6501 THEORETICAL PHARMACOLOGY** (3-6)  
PR: GMS 6500 or CC.
- GMS 6502 CLINICAL PHARMACOLOGY** (3-6)  
PR: GMS 6500 or CC.



<b>GMS 6503 PHARMACOLOGY LABORATORY</b> PR: GMS 6500 or CC.	(1-3)
<b>GMC 6504 IMMUNOPHARMACOLOGY</b> PR: GMS 6500 or CC.	(2-4)
<b>GMS 6505 PHARMACOLOGY OF BACTERIAL PRODUCTS</b> PR: GMS 6100, GMS 6500 or CC.	(3-6)
<b>GMS 6506 THE PHARMACOLOGY OF BIOLOGICAL MEMBRANES</b> PR: GMS 6500 or CC.	(3-6)
<b>GMS 6507 DRUG METABOLISM AND PHARMACOKINETICS</b> PR: GMS 6500 or CC.	(2-4)
<b>GMS 6508 DRUG ADDICTION, TOLERANCE AND PHYSICAL DEPENDENCE</b> PR: GMS 6200, GMS 6400 or CC.	(2-3)
<b>GMS 6509 THE HISTORY OF PHARMACOLOGICAL INVESTIGATION</b> PR: GMS 6500 and CC.	(1-2)
<b>GMS 6510 TOXICOLOGY</b> PR: GMS 6500 and CC.	(3)
<b>GMS 7418 DIRECTED RESEARCH</b> PR: Gr. Ph.D. level. Repeatable. (S/U only.)	(VAR.)
<b>GMS 7930 SELECTED TOPICS</b> PR: Departmental Core Course or CC.	(1-3)
<b>GMS 7939 GRADUATE SEMINAR</b> PR: Departmental Core Course or CC.	(1)
<b>GMS 7980 DISSERTATION: DOCTORAL</b> PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)	(VAR.)

## PHYSIOLOGY AND BIOPHYSICS

*Chairperson:* C.H. Baker; *Professors:* C.H. Baker, D.L. Davis, R. Shannon; *Associate Professors:* J.R. Dietz, B.G. Lindsey, S.J. Nazian, J.M. Price, F.R. Wilmoth.

<b>GMS 6400C CORE COURSE IN PHYSIOLOGY</b> PR: Admission to Ph.D. Program in Medical Sciences.	(5)
<b>GMS 6402 RESPIRATION</b> PR: GMS 6400 or CC.	(4)
<b>GMS 6403 ENDOCRINE MECHANISMS</b> PR: GMS 6400 or CC.	(4)
<b>GMS 6404 SYSTEMS NEUROPHYSIOLOGY</b> PR: GMS 6400 or CC.	(4)
<b>GMS 6407 SMOOTH AND SKELETAL MUSCLE</b> PR: GMS 6400 or CC.	(4)

- GMS 6409 PERIPHERAL CIRCULATION AND HEMODYNAMICS** (4)  
PR: GMS 6400 or CC.
- GMS 6410 CARDIOVASCULAR REGULATION** (4)  
PR: GMS 6400 or CC.
- GMS 6413 PHYSIOLOGICAL BASIS OF CARDIOLOGY** (4)  
PR: GMS 6400 or CC.
- GMS 7418 DIRECTED RESEARCH** (VAR.)  
PR: Gr. Ph.D. level. Repeatable. (S/U only.)
- GMS 7930 SELECTED TOPICS** (1-3)  
PR: Departmental Core Course or CC.
- GMS 7939 GRADUATE SEMINAR** (1)  
PR: Departmental Core Course or CC.
- GMS 7980 DISSERTATION: DOCTORAL** (VAR.)  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

## College Of Natural Sciences

### ASTRONOMY

- AST 5506 INTRODUCTION TO CELESTIAL MECHANICS** (3)  
PR: MAC 3413 and some knowledge of differential equations, or CI. The two-body problem, introduction to Hamiltonian systems and canonical variables, equilibrium solutions and stability, elements of perturbation theory.
- AST 5932 SELECTED TOPICS IN ASTRONOMY** (1-5)  
PR: Senior or advanced junior standing or CI. Intensive coverage of special topics to suit needs of advanced students.

### BIOLOGY

*Chairperson:* C.J. Dawes; *Professors:* M.R. Alvarez, B.C. Cowell, C.J. Dawes, F.E. Friedl, G.W. Hinsch, J.M. Lawrence, D.V. Lim, R.L. Mansell, A.J. Meyerriecks, W.S. Silver, J.L. Simon, S.L. Swihart, G.E. Woolfenden; *Associate Professors:* G.W. Arendash, S.S. Bell, J.V. Betz, B.J. Cochrane, F.B. Essig, E. Hichey, E.D. McCoy, A. Michaels, H.R. Mushinsky, D.A. Nickerson, J.T. Romeo, D. TeStrake, L.A. Weber, R.P. Wunderlin; *Assistant Professors:* M.J. Saunders, G.J. Stewart; *Courtesy Faculty Professor:* J.N. Layne.

- APB 5595 FUNDAMENTALS OF TUMOR BIOLOGY** (3)  
PR: PCB 4023C. A detailed examination of current information on cancer etiology, tumor cell growth and regulation, and host-tumor relationships.
- BSC 5931 SELECTED TOPICS IN BIOLOGY** (1-3)  
Each topic is a course in directed study under supervision of faculty member.
- BSC 6907 INDEPENDENT STUDY** (VAR.)  
PR: CI and CC. Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

- BSC 6910 DIRECTED RESEARCH (VAR.)**  
Master's level. Repeatable. (S/U only.)
- BSC 6932 SELECTED TOPICS IN BIOLOGY (1-4)**  
PR: CI and CC.
- BSC 6935 GRADUATE SEMINAR IN BIOLOGY (1)**  
PR: CI and CC. (S/U only.)
- BSC 6945 GRADUATE INSTRUCTION METHODS (1-3)**  
PR: CI and CC. Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 4 credits per student. (S/U only.)
- BSC 7912 DIRECTED RESEARCH (VAR.)**  
PR: CI and CC. Ph.D. level. Repeatable. (S/U only.)
- BSC 7980 DISSERTATION: DOCTORAL (VAR.)**  
PR: CI and CC. Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)
- PCB 5115C CYTOGENETICS (3)**  
PR: PCB 4023C. Survey of the structure and function of cytoplasmic and nuclear components of plant and animal cells. Lec.-lab.
- PCB 5235C PRINCIPLES OF IMMUNOLOGY (3)**  
PR: PCB 4012C or MCB 3010C. Course will emphasize the biological principles involved in the vertebrate immune response. It will present the homeostatic, defense, and detrimental aspects of the immune system in terms of basic cellular and molecular mechanisms. Techniques will be described to familiarize the student with the types of immunological tools available to the cellular and molecular biologist.
- PCB 5415 BEHAVIORAL ECOLOGY (3)**  
PR: ZOO 2010, PCB 4043. An emphasis on the evolutionary mechanisms that influence an organism's behavioral responses to environmental events. The theoretical framework is presented and analyzed. Intended for majors.
- PCB 5525C MOLECULAR GENETICS (3)**  
PR: PCB 3063. Detailed examination of DNA, RNA and protein synthesis; the effects of mutations on proteins, cellular control; selected aspects of viral, bacterial, and fungal genetics.
- PCB 5615 EVOLUTIONARY GENETICS (3)**  
PR: PCB 3063. Examination of factors such as mutation, migration, natural selection, and genetic drift that modify the genetic structure of populations.
- PCB 5835C NEUROPHYSIOLOGY (3)**  
PR: PCB 4023C. A comparative analysis to the physiochemical basis and evolution of nervous systems and sensory mechanisms.
- PCB 5845 PRINCIPLES OF NEUROSCIENCE (3)**  
PR: PCB 4743C and Graduate Standing or CI. A study of the mammalian brain's structure and function, with an emphasis on the neuroanatomy, neuropharmacology, and neurophysiology of the human brain. Topics include brain imaging, dementia, and mechanisms of learning/memory. Techniques utilized in brain research will also be discussed, as will some basic neuropathological processes that result in abnormal brain functioning.

**PCB 6176C ULTRASTRUCTURE TECHNIQUES IN ELECTRON MICROSCOPY (4)**

PR: PCB 4023C and CI and CC. Discussion of theory and techniques in electron microscopy. Emphasis on preparation of biological microscope. Lec.-lab.

**PCB 6405 CHEMICAL ECOLOGY (3)**

PR: PCB 4043 and CHM 3200. A broad introduction to the biochemistry of plant and animal interactions. Emphasis on the roles of secondary metabolites such as alkaloids, flavonoids, and terpenes in the complex animal/animal, animal/plant, plant/plant, and plant/microorganism interactions occurring in natural and terrestrial and aquatic environments.

**PCB 6426C POPULATION BIOLOGY (3)**

PR: PCB 4043C. Introduction to population dynamics with emphasis on the ecological components of population growth, competition, and predation.

**PCB 6456C BIOMETRY (3)**

PR: MAC 2243 and MAC 2244. An introduction to statistical procedures for research in biological sciences. Experimental design, analysis of data, and presentation of results are emphasized. Lec.-dis.

**PCB 6458 BIOMETRY II (3)**

PR: PCB 6456C or CI. 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.

**BOTANY****BOT 5156 TAXONOMY OF FLORIDA VASCULAR PLANTS (3)**

PR: BOT 3143C or BOT 4713C or CI. Identification of native and naturalized vascular plants of Florida; species composition of major plant communities. Field trips emphasized. Lec.-Lab.

**BOT 5185C MARINE BOTANY (3)**

PR: BOT 2010C, PCB 4043C. A field course in marine plants with emphasis on ecology and functional morphology. Field work will stress the ecological aspects of plants in a subtropical marine environment in Florida. Lec.-lab.

**BOT 5605 PLANT ECOLOGY (3)**

PR: BOT 2010C, PCB 4043C. An introduction to principles of Physiological Ecology, Population Biology and Community Ecology as applied to plants. Field investigations of Florida plant communities. Lec./Field trip.

**BOT 5725C EVOLUTION OF FLOWERING PLANTS (3)**

PR: BOT 4713C. A phylogenetic study of Angiosperms; relationship of the principal orders and families, problems of nomenclature, identification of specimens, comparisons of recent systems of classification, dissection of representative flower types. Field trips and lab work. Lec.-lab.

**BOT 6716C BIOCHEMICAL SYSTEMATICS (4)**

PR: BOT 3713C or equivalent. Application of Cytology, Ecology, Genetics, Biochemistry, and Morphological Analysis to the study of evolution and classification of species of higher plants. Lec.-lab.

**BOT 6916 INDEPENDENT STUDY (VAR.)**

PR: CI and CC. Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**BOT 6971 THESIS: MASTER'S (VAR.)**

PR: CI and CC. Repeatable. (S/U only.)

## MICROBIOLOGY

**APB 5575C MEDICAL MYCOLOGY (4)**

PR: MCB 3010C. A survey of the yeasts, molds, and actinomycetes most likely to be encountered by the bacteriologist, with special emphasis on the forms pathogenic for man.

**MCB 5206 PUBLIC HEALTH AND PATHOGENIC MICROBIOLOGY (3)**

PR: MCB 3010C. A comprehensive survey of pathogenic microbes responsible for disease in man and 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.

**MCB 5605 MICROBIAL ECOLOGY (4)**

PR: MCB 3010C. A study of the theory and methodology of the quantification of microbial processes in natural habitats with special emphasis on aquatic and terrestrial systems. Lec.-lab.

**MCB 5606 SYMBIOLOGY (3)**

PR: A course in Microbiology, Cell Biology or Biochemistry, and advanced standing. Consideration of mutualistic and parasitic symbioses between microbes and various animal, plant, and microbial hosts from cellular, Biochemical, Evolutionary, and Ecological perspectives.

**MCB 6459 ADVANCED TOPICS IN CHEMICAL MICROBIOLOGY (2)**

PR: MCB 4404, Biochemistry. An in-depth study of metabolic and physiological phenomena associated with microorganisms, especially bacteria, including: growth, regulations, unique metabolic traits, morphogenesis, cell division, cell death, and survival mechanisms.

**MCB 6919 INDEPENDENT STUDY (VAR.)**

PR: CI and CC. Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**MCB 6971 THESIS: MASTER'S (VAR.)**

PR: CI and CC. Repeatable. (S/U only.)

**PCB 6236 ADVANCED IMMUNOLOGY (4)**

PR: CI. Discussion of the basic immune reaction, nature of antigenicity; basic immunological techniques and their use in biological research and the medical sciences. Lec.-lab.

## GEOLOGY

*Chairperson:* S.B. Upchurch; *Professors:* R.A. Davis, Jr., M.T. Stewart, S.B. Upchurch; *Associate Professors:* R.N. Strom, H.L. Vaucher; *Assistant Professors:* M.J. Defant, R.J. Hooper, B.W. Nocita.

**GLY 5241 GENERAL GEOCHEMISTRY (3)**

PR: One year college Chemistry, GLY 4200 or CI. Age, formation and evolution of the earth with application of basic chemical concepts and

processes that govern the distribution of elements in geologic environments.

**GLY 5245 ANALYTICAL TECHNIQUES IN GEOLOGY (4)**

PR: One year college Chemistry, GLY 4220 or CI. Use and application of modern analytical methods including X-ray, atomic absorption, and other geochemical techniques. Interpretation and statistical analysis of data acquired. Lec.-lab.

**GLY 5310 IGNEOUS AND METAMORPHIC PETROLOGY (4)**

PR: GLY 4220. Systematic study of igneous and metamorphic rocks and complexes, including origin, composition, and classification. Use of the polarizing microscope for thin section analysis will be emphasized, and other modern methods of study will be employed. Lec.-lab.

**GLY 5450 PRINCIPLES OF APPLIED GEOPHYSICS (4)**

PR: Senior or advanced junior standing, one year of Physics or CI. Elementary treatment of gravimetric, magnetic, electric, and seismic geophysical techniques as applied to site investigation and mineral deposits. Lec.-lab.-field trips.

**GLY 5752 GEOLOGICAL FIELD EXCURSION (2)**

PR: GLY 3400, GLY 4550, and GLY 4750. Lectures and 2-3 week field excursion to study regional geology, structure and lithogenesis of geologically complex terrain. Mapping and out-crop description techniques are emphasized. Destination of trip varies. Trip requires camping and vigorous physical activity. Lec.-field trip.

**GLY 5825 ADVANCED HYDROGEOLOGY (4)**

PR: GLY 4820, MAC 3282 or MAC 3412 or CI. 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.

**GLY 5890 STATISTICAL MODELS IN GEOLOGY (3)**

PR: STA 3023 or equivalent or CI. 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.

**GLY 5932 SELECTED TOPICS IN GEOLOGY (1-4)**

PR: Senior or advanced junior standing and CC. Each topic is a course in directed study under supervision of a faculty member. All areas of geology included. Departmental permission required prior to registration.

**GLY 6250 CLAY MINERALOGY (3)**

PR: Graduate standing in Geology or CI. Composition, structures, origin, and diagenesis of clay minerals. Identification of clay minerals by X-ray diffraction techniques.

**GLY 6290 SEDIMENTARY GEOCHEMISTRY (3)**

PR: GLY 5241 or CI. Fundamentals of aqueous geochemistry in relation to chemical and biochemical precipitation of sedimentary materials. Geochemistry of fluids with emphasis on diagenesis.

**GLY 6345 SEDIMENTARY PETROGRAPHY (4)**

Classification, petrographic description and interpretation of sedimentary rocks including depositional environments and diagenesis. Lec.-lab.

**GLY 6410 GEOLOGY OF NORTH AMERICA (2)**

PR: Graduate standing or Cl. Regional structure, stratigraphy, and history of North America.

**GLY 6420 GLOBAL TECTONICS (2)**

PR: Graduate standing or Cl. Development of the global tectonic hypothesis, modern global tectonic theory, and application of the theory in selected regions of the earth.

**GLY 6553 FACIES MODELS (3)**

PR: GLY 4550 or equivalent. 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.

**GLY 6575 COASTAL SEDIMENTATION (3)**

PR: GLY 4555 or equivalent. 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.

**GLY 6735 SELECTED TOPICS IN GEOLOGY (1-4)**

PR: Cl. May be repeated for credit.

**GLY 6828 GROUND-WATER GEOCHEMISTRY (3)**

PR: One year of college Chemistry, GLY 4820, GLY 5241, or Cl. Chemical behavior of ground water. Includes interaction of water with aquifer materials, salt-water intrusion, chemical impacts of waste disposal, use of chemical tracers, and transport of hazardous chemicals. Methods of sampling and data interpretation are emphasized. Lec.

**GLY 6905 INDEPENDENT STUDY (VAR.)**

Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**GLY 6910 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**GLY 6931 GRADUATE SEMINAR (1)**

PR: CC. May be repeated for credit. (S/U only.)

**GLY 6933 ADVANCED TOPICS IN GEOLOGY (2)**

PR: Graduate standing in Geology. Study of current topics in Geology. May be repeated for credit.

**GLY 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

## ZOOLOGY

**ENY 5501 AQUATIC ENTOMOLOGY (3)**

PR: ENY 4004. Taxonomy, development, and ecology of aquatic insects with emphasis on local forms. Lec.-lab.

**PCB 5306C LIMNOLOG (4)**

PR: Cl and CC. An introduction to the physical, chemical, and biological nature of fresh water environments. Lec.-lab.

- PCB 6376C PHYSIOLOGICAL ECOLOGY (4)**  
PR: CI and CC. Effect of environmental factors on animal function at the cellular and organ system level with emphasis on control and mechanism. Lec.-lab.
- PCB 6756 COMPARATIVE METABOLISM (2)**  
PR: PCB 4023C and BCH 3033. Some knowledge of Animal Phylogeny will be assumed. A presentation of various metabolic pathways found in invertebrate animals including specializations related to parasitism and facultative anaerobiosis.
- ZOO 5235C PARASITOLOGY (4)**  
PR: ZOO 2010C. Fundamentals of animal parasitology and parasitism, the biology of selected animal parasites, including those of major importance to man. Lec.-lab.
- ZOO 5425C HERPETOLOGY (4)**  
PR: ZOO 3713C, CI and CC. Major aspects of amphibian and reptilian biology emphasizing fossil history, evolutionary morphology, sensory physiology, life history, and reproductive behavior. Lec.-lab. Field trip.
- ZOO 5475C ORINTHOLOGY (4)**  
PR: ZOO 2010C. The biology of birds. Field trips emphasize local avifauna. Lec.-lab.
- ZOO 5485C MAMMALOLOGY (4)**  
PR: ZOO 3713C, CI and CC. The biology of mammals, including systematics, ecology, natural history, and geographical distribution. Lec.-lab.
- ZOO 5555C MARINE ANIMAL ECOLOGY (4)**  
PR: PCB 4043C and ZOO 3203C. Investigation of energy, flow, biogeochemical cycles, and community structure in marine environments. Lec.-lab.
- ZOO 5815C BIOGEOGRAPHY (3)**  
PR: One year major in Biology. Principles and general patterns of terrestrial and marine animal and plant distributions.
- ZOO 6907 INDEPENDENT STUDY (VAR.)**  
PR: CI and CC. Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)
- ZOO 6971 THESIS: MASTER'S (VAR.)**  
PR: CI and CC. Repeatable. (S/U only.)

## CHEMISTRY

*Chairperson:* S.W. Schneller; *Associate Chairpersons:* J.C. Davis, Jr. (undergraduate), D.J. Raber (graduate); *Research Professor:* R.N. Castle; *Professors:* J.S. Binford, Jr., R.S. Braman, J.C. Davis, Jr., J.E. Fernandez, G.R. Jurch, Jr., L. Mandell, D.F. Martin, P.C. Maybury, G.R. Newkome, E.D. Olsen, T.C. Owen, D.J. Raber, S.W. Schneller, B.Stevens, J.H. Worrell; *Associate Professors:* S.H. Grossman, M.D. Johnston, Jr., R.M. O'Malley, J.A. Stanko, J.E. Weinzierl, G.R. Wenzinger; *Assistant Professors:* R.L. Potter, T.B. Schefler, E. Wickstrom.

- BCH 5065 BIOCHEMISTRY CORE COURSE (3)**  
PR: Either CHM 3211, CHM 3211L, and CHM 3400 or CHM 4410 or graduate standing. A one-semester survey course in Biochemistry for



graduate students in Chemistry, Biology, and other appropriate fields and for particularly well-qualified undergraduates. Lec.

**BCH 6066 GENERAL BIOCHEMISTRY I (3)**

PR: BCH 5065 or Cl. First semester of a rigorous two-semester General Biochemistry course for Chemistry and Biology graduate students whose primary interests are in this field. Lec.

**BCH 6067 GENERAL BIOCHEMISTRY II (3)**

PR: BCH 6066. Continuation of General Biochemistry I. Lec.

**BCH 6706 ADVANCED BIOCHEMISTRY II: BIOORGANIC MECHANISMS (3)**

PR: BCH 6067 or Cl. A study of biochemical systems with emphasis on mechanisms of biological reaction. Lec.

**CHM 5225 INTERMEDIATE ORGANIC CHEMISTRY (3)**

PR: CHM 3211, CHM 3211L, or equivalent. This course will extend Organic Chemistry beyond the undergraduate level and will emphasize concepts of stereochemistry and reaction mechanisms.

**CHM 5226 INTERMEDIATE ORGANIC CHEMISTRY II (3)**

PR: CHM 5225 or Cl. An introduction to synthetic organic chemistry for graduate students and advanced undergraduates. Lec. Semester II.

**CHM 5425 APPLICATIONS IN PHYSICAL CHEMISTRY (3)**

PR: CHM 4412. Applications of chemical theory to chemical systems.

**CHM 5452 POLYMER CHEMISTRY (3)**

PR: Either CHM 3211, CHM 3211L, and CHM 3400 or CHM 4410 or graduate standing. Fundamentals of polymer synthesis, structure, properties, and characterization.

**CHM 5621 PRINCIPLES OF INORGANIC CHEMISTRY (3)**

PR: CHM 4411 or Cl. Chemical forces, reactivity, periodicity, and literature in organic chemistry; basic core course. Lec.

**CHM 5931 SELECTED TOPICS IN CHEMISTRY (1-3)**

PR: Cl. 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.

**CHM 6150 ADVANCED ANALYTICAL CHEMISTRY (3)**

PR: Cl. 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.

**CHM 6153 ELECTROCHEMISTRY (3)**

PR: Cl. Introduction to the theory of ionic solutions and electrode processes. Theory and applications and electrochemical measurements. Lec.

**CHM 6250 ADVANCED ORGANIC CHEMISTRY I: SYNTHESIS (3)**

PR: CHM 5225. Detailed consideration of modern synthetic methods. Lec.

**CHM 6260 ADVANCED ORGANIC CHEMISTRY II: PHYSICAL-ORGANIC (3)**

PR: CHM 5225. A study of organic reaction mechanisms emphasizing the interpretation of experimental data. Lec.

- CHM 6280 ADVANCED ORGANIC CHEMISTRY III: NATURAL PRODUCTS** (3)  
PR: CHM 5225 or Cl. A study of any of several of the following topics: terpenes, steroids, vitamins, alkaloids, porphyrins, purine, and antibiotics.
- CHM 6440 CHEMICAL KINETICS** (3)  
PR: Cl. Theory and methods for the study of reaction rates and the elucidation of reaction mechanisms. Lec.
- CHM 6460 STATISTICAL THERMODYNAMICS** (3)  
PR: Cl. Application of statistical mechanics to the thermodynamics; the relation of molecular structure to thermodynamic properties. Lec.
- CHM 6480 QUANTUM CHEMISTRY** (3)  
PR: Cl. Introduction to elementary quantum mechanism. Atomic structure and spectra. Lec.
- CHM 6625 CHEMISTRY OF THE LESS FAMILIAR ELEMENTS** (3)  
PR: Cl. An integrated treatment of the conceptual and factual aspects of the traditionally less familiar elements, including noble gas elements, unfamiliar non-metals, alkali, and alkaline-earth metals and the transition elements. Lec.
- CHM 6650 STRUCTURAL INORGANIC CHEMISTRY** (3)  
PR: CHM 5621 or Cl. Modern theories of bonding and structure of inorganic compounds, including coordination theory, stereo-chemistry, solution equilibria, kinetics, mechanisms of reactions, and use of physical and chemical methods. Lec.
- CHM 6907 INDEPENDENT STUDY** (VAR.)  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- CHM 6935 GRADUATE SEMINARS IN CHEMISTRY** (1)  
PR: Admission to graduate program in Chemistry. Required every semester (when offered) for all students enrolled in Chemistry graduate program. Required participation in and attendance at the weekly departmental seminar. Must be repeated. (S/U only.)
- CHM 6936 CHEMISTRY COLLOQUIUM** (1)  
PR: Admission to graduate program in Chemistry. Frequent (usually weekly) small-group analysis of current developments. May be repeated up to a cumulative total of 10 hours. (S/U only.)
- CHM 6938 SELECTED TOPICS IN CHEMISTRY** (1-3)  
PR: Cl. The following titles are representative of those that are taught under this title: Symmetry and Group Theory, Photochemical Kinetics, Quantum Mechanical Calculations, Advanced Chemical Thermodynamics, Reaction Mechanisms, Advanced Instrumentation, Separations and Characterizations, Spectroscopy, etc.
- CHM 6946 GRADUATE INSTRUCTION METHODS** (1-4)  
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 5 credits per student. (S/U only.)
- CHM 6971 THESIS: MASTER'S** (VAR.)  
Repeatable. (S/U only.)
- CHM 6973 DIRECTED RESEARCH** (VAR.)  
PR: GR. Master's level. Repeatable. (S/U only.)

**CHM 7820 DIRECTED RESEARCH (VAR.)**  
PR: GR. Ph.D. level. Repeatable. (S/U only.)

**CHM 7980 DISSERTATION: DOCTORAL (VAR.)**  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)

## MARINE SCIENCE

*Chairperson:* P.R. Betzer; *Professors:* P.R. Betzer, N.J. Blake, J.C. Briggs, R.H. Byrne, K.L. Carder, L.J. Doyle, K.A. Fanning, R.M. Garrels, G.R. Gust, A.C. Hine, T.L. Hopkins, A.D. Kirwan, W.M. Sackett, E.S. Van Vleet, J.J. Walsh; *Associate Professors:* P.H. Muller, J.H. Paul, J.J. Torres, G.A. Vargo, R.H. Weisberg; *Assistant Professors:* J.S. Compton, R.R. Wilson.

**OCB 5050 BIOLOGICAL OCEANOGRAPHY (3)**  
PR: Graduate standing, CI. The study of life in the sea with reference to distribution, reproduction, adaptation, competition, and populations. Lec.-lab.

**OCB 6567 PHYTOPLANKTON ECOLOGY (3)**  
PR: B.S. in Biology, OCB 5050, or CI. 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.

**OCB 6567L METHODS IN PHYTOPLANKTON ECOLOGY (3)**  
PR: B.S. in Biology, OCB 5050, or CI. Laboratory and field procedures for identification, culture techniques, enumeration, growth and nutrient uptake rates, photosynthesis, biomass estimates, enzyme kinetics, etc. will be covered. Practical application of the techniques will be made in class-designed experiments and/or a 5-10 day research cruise.

**OCB 6646 MARINE ZOOGEOGRAPHY (3)**  
PR: B.S. in Biology, OCB 5050, or CI. The geographical distribution of animals in the marine environments of the world including the major habitats of the benthic and pelagic realms. Studies of the relationships between distributional and evolutionary patterns.

**OCB 6666 ECOLOGICAL PHYSIOLOGY (3)**  
PR: B.S. in Biology, 1 year general and Organic Chemistry, OCB 5050, or CI. The study of those physiological mechanisms that enable organisms to live in their environment, and deal with changes in the environment. Coursework is focused on aquatic ectotherms. Topics include osmotic and ionic regulation nitrogen excretion, feeding and digestion, respiration, temperature, and energetics. Lab separate.

**OCB 6671 METHODS IN BIOLOGICAL OCEANOGRAPHY (1)**  
PR: CI. 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.

**OCC 5050 CHEMICAL OCEANOGRAPHY (3)**  
PR: CHM 2046 and CI. The ocean as a chemical system, including composition, physical-chemical aspects, role of nutrients, trace metals, interaction between bottom and overlying water, modern methods of analysis in routine use in oceanography. Lec.-lab.

- OCC 5067 MARINE POLLUTION (3)**  
PR: OCC 5050 or Cl. 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.
- OCC 6057 METHODS IN CHEMICAL OCEANOGRAPHY (1)**  
PR: OCC 5050 or Cl. 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.
- OCC 6216 MARINE ORGANIC CHEMISTRY (3)**  
PR: B.S. in Biology or Chemistry, Biochemistry, OCC 5050 or Cl. Distribution and biogeochemical cycling of organic matter in the oceans. Topics include carbohydrates, proteins, lipids, humics, pheromones, interaction with trace metals, isotopic fractionation, microbial alternations, and biochemical tracers.
- OCE 6908 INDEPENDENT STUDY (VAR.)**  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- OCE 6934 SELECTED TOPICS IN OCEANOGRAPHY (1-3)**  
PR: Cl. Special topics in Biological, Chemical, Geological, and Physical Oceanography.
- OCE 6939 GRADUATE SEMINAR IN OCEANOGRAPHY (1)**  
PR: Graduate standing. May be repeated. (S/U only.)
- OCE 6942L FIELD STUDIES IN MARINE SCIENCE (3)**  
PR: One of the following: OCE 5050, OCE 6671, OCC 5050, OCC 6057, OCG 6075, OCP 5051, OCP 6056, or Cl. Combination of classroom study with the collection, analysis, and interpretation of field data to attack specific problems in marine science both for deep sea and nearshore environments.
- OCE 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)
- OCE 6972 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- OCE 7910 DIRECTED RESEARCH (VAR.)**  
PR: GR. Ph.D. level. Repeatable. (S/U only.)
- OCE 7980 DISSERTATION: DOCTORAL (VAR.)**  
PR: Must be admitted to Doctoral Candidacy. Repeatable (S/U only.)
- OCG 5050 GEOLOGICAL OCEANOGRAPHY (3)**  
PR: Graduate standing or Cl. An introduction to the physical, historical sedimentary, and structural geology of the ocean basins and their borders. Lec.-lab.
- OCG 5455 MARINE ISOTOPE GEOCHEMISTRY (3)**  
PR: Chemical Oceanography or Cl. Study of stable and radioactive isotope variations in the marine environment and the use of these variations as elemental tracers and in determining ages and rates and paleoclimatic conditions.

**OCG 6075 METHODS IN GEOLOGICAL OCEANOGRAPHY (1)**

PR: OCG 5050 or Ci. Description and application of the modern techniques used to investigate Geology and Geophysics.

**OCG 6086 GEOLOGY OF CONTINENTAL MARGINS (3)**

PR: B.S. in Geology, OCG 5050, or Ci. Analysis of tectonic, structural and stratigraphic development and general geologic history of the major types of continental margins. Includes interpretation of seismic data.

**OCG 6358C STRATIGRAPHIC INTERPRETATION OF SEISMIC DATA (3)**

PR: B.S. in Geology, OCG 5050, or Ci. Study of seismic reflection data for the purpose of determining structural/sedimentological development, facies distribution, and general geological history of stratigraphic packages. Course includes fundamentals of seismic reflection and depositional sequence/seismic facies analyses.

**OCG 6551C SCANNING ELECTRON MICROSCOPY: THEORY AND TECHNIQUE (4)**

PR: Graduate standing, one year Physics, or Ci. 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.

**OCG 6656C MARINE MICROPALAEONTOLOGY (4)**

PR: B.S. in Geology or Biology, OCG 5050, or Ci. 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.

**OCG 6660 MARINE PALEOECOLOGY (3)**

PR: Background in sedimentology, paleontology or marine ecology, or Ci. Interpretation of the relationships between ancient organisms and their environment with emphasis on the substrate. Applications of modern benthic marine environments and sediment-organism relationships to fossil record.

**OCG 6664 PALEOCEANOGRAPHY (3)**

PR: OCB 5050, OCC 5050, OCG 5050, and OCP 5051, or Ci. The study of the development of the ocean system through geologic history, including study of the tectonic framework, sea level history, paleoclimatology, paleocirculation within the ocean basins, and the evolution of marine biotas. May not be repeated. (S/U only).

**OCP 5051 PHYSICAL OCEANOGRAPHY (3)**

PR: Graduate standing, Ci, PHY 3042. The world ocean including its morphology, physical properties, currents, waves, tides, heat budget, and related topics. Lec. -lab.

**OCP 6056 METHODS IN PHYSICAL OCEANOGRAPHY (1)**

PR: MAC 3413, OCC 5050 or OCP 5051, and Ci. Field and laboratory techniques for acquisition, reduction, display and discussion of physical oceanographic data (e.g., waves, tides, currents, dissolved, and suspended constituents).

**PCB 6476 DYNAMICS OF MARINE BENTHIC COMMUNITIES (3)**

PR: EGN 2210, ZOO 5555C, or Ci. Theoretical approach to the study of benthic communities in fluctuating and constant environments. Methods

of analysis of benthic data will be evaluated and discussed. Computer programs will be utilized for analysis wherever possible. Lec.-lab.

**ZOO 5456C ICHTHYOLOGY (4)**

PR: CI or Senior or Graduate status; BSC 2010C, BSC 2012, PCB 4674 (helpful), ZOO 3713C (helpful). The evolution systematics, and ecology of fishes. (Also listed under Zoology.)

**ZOO 6256 ZOOPLANKTON BIOLOGY (4)**

PR: B.S. in Biology, OCB 5050, or CI. The taxonomy and biology of marine zooplankton with emphasis on tropical-subtropical fauna.

## **MATHEMATICS**

*Chairperson:* K.L. Pothoven; *Distinguished Service Professor:* A.W. Goodman; *Graduate Research Professor:* E.B. Saff; *Professors:* W.E. Clark, M.A.D. Ismail, A.G. Kartsatos, S.J. Lee, J.J. Liang, Y.F. Lin, M.N. Manougian, A. Mukherjea, A.N.V. Rao, J.S. Ratti; *Associate Professors:* I.A. Ahmad, S.Y. Lin, M.M. McWaters, R.K. Nagle, M.E. Parrott, K.L. Pothoven, J.H. Reed, B. Shekhtman, W.R. Stark, E.A. Thieleker, C.A. Williams; *Assistant Professors:* P.B. Cerrito, R.W. Darling, G.L. McColm, K.M. Ramachandran, J.C. Snader.

**MAA 5306 REAL ANALYSIS I (3)**

PR: MAA 4212. Metric spaces, limits, continuity, differentiation, convergence, Riemann-Stieltjes integration, Lebesgue measure and integration on the real line.

**MAA 5307 REAL ANALYSIS II (3)**

PR: MAA 5306. Continuation of MAA 5306.

**MAA 5405 APPLIED COMPLEX ANALYSIS (3)**

Complex numbers, analytic and harmonic functions. Series. Contour integrals, residue theory. Conformal mappings. (A survey course emphasizing techniques and applications.)

**MAA 5406 TOPICS IN COMPLEX ANALYSIS (3)**

PR: MAA 5405. Univalent and multivalent functions, entire functions, approximation theory in the plane.

**MAA 6406 COMPLEX ANALYSIS (3)**

PR: MAA 5307 or CI. Theoretical development of analytic functions, harmonic functions, conformal mapping, power series, contour integrations, residue theory.

**MAA 6506 INTRODUCTION TO FUNCTIONAL ANALYSIS I (3)**

PR: MAA 6616. Linear topological spaces, normed linear spaces, Hahn-Banach Theorem, theorems on linear operators, dual spaces.

**MAA 6507 INTRODUCTION TO FUNCTIONAL ANALYSIS II (3)**

PR: MAA 6506. Continuation of MAA 6506.

**MAA 6616 MEASURE AND INTEGRATION I (3)**

PR: MAA 5307. Abstract measure and integration in sigma rings, application to Euclidean spaces, Fubini's Theorem, Radon-Nikodym Theorem,  $L_p$  spaces.

**MAA 6617 MEASURE AND INTEGRATION II (3)**

PR: MAA 6616. Continuation of MAA 6616.

- MAD 5101 LISP: PROGRAMMING WITH ALGEBRIC APPLICATIONS (3)**  
PR: Programming experience or Ci. The powerful algebraic language LISP is introduced. The course covers (1) programming in LISP, (2) functional languages, (3) foundations in the Lambda Calculus, and (4) algebraic applications in artificial intelligence (theorem proving and game playing.)
- MAD 5305 INTRODUCTION TO GRAPH THEORY (3)**  
PR: Ci. Brief introduction to classical graph theory (4-color theorem, etc.), directed graphs, connected digraphs, condensations, incidence matrices, Poly's Theorem, networks.
- MAD 6407 ANALYSIS OF NUMERICAL METHODS (4)**  
PR: MAA 4212, or MAA 5307, MAP 4302, MAS 3103; or Ci. Iterative solution of nonlinear equations. Approximation theory. Numerical differentiation and integration. Solution of ordinary and partial differential equations. Accuracy, convergence, and round-off error.
- MAD 6510 ANALYSIS OF ALGORITHMS (4)**  
PR: Ci. Mathematical theory associated with algorithms for computer information processing; expected time and space requirements of algorithms, comparison of algorithms, construction of optimal algorithms, theory underlying particular algorithms.
- MAD 6616 ALGEBRAIC AUTOMATA THEORY (3)**  
PR: MAS 5312 or Ci.
- MAD 6617 ALGEBRAIC CODING THEORY (3)**  
PR: MAD 6616 or Ci.
- MAE 5874 ABSTRACT ALGEBRA FOR TEACHERS (3)**  
PR: MAS 3103 and MAS 4301 and Bachelor's degree or Ci. Groups, fields, vector spaces as they relate to high school algebra and geometry. (No credit for Mathematics majors.)
- MAE 5876 MATHEMATICAL ANALYSIS FOR TEACHERS (3)**  
PR: MAC 3313 and Bachelor's degree or Ci. Advanced consideration of limits, continuity, derivatives, differentials. (No credit for Mathematics majors.)
- MAP 5205 MATHEMATICAL OPTIMIZATION THEORY I (3)**  
PR: MAS 3103 and MAA 4211, or equivalent. Content: Unconstrained and linearly constrained extrema, linear and nonlinear programming applicable to matrices and quadratic forms, Lagrange multiplier rule for equality constraints.
- MAP 5316 ORDINARY DIFFERENTIAL EQUATIONS I (3)**  
PR: MAP 4302 and MAA 4211, or Ci. Existence and uniqueness theory, properties of solutions, linear systems, stability theory. Sturm-Liouville theory.
- MAP 5317 ORDINARY DIFFERENTIAL EQUATIONS II (3)**  
PR: MAP 5316 and MAA 5307 or Ci. Topics selected from fixed point theory, comparison theory, oscillation theory, Poincare-Bendixson theory, Lyapunov functions, eigen-function expansions.

- MAP 5345 APPLIED PARTIAL DIFFERENTIAL EQUATIONS (3)**  
 PR: MAP 5407 or Cl. Separation of variables, the heat equation, wave equation, Laplace's equation, classification, Green's functions with emphasis on applications.
- MAP 5407 METHODS OF APPLIED MATHEMATICS (3)**  
 PR: MAP 4302. 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.
- MAP 6206 MATHEMATICAL OPTIMIZATION THEORY II (3)**  
 PR: MAP 5205. Minima relative to inequality constraints, normed spaces, Gâteaux variation, Fréchet differential, extended Lagrange multiplier rule, augmentability, application to elementary control theory.
- MAP 6336 THEORY OF ORDINARY DIFFERENTIAL EQUATIONS (4)**  
 PR: MAP 5317 or Cl. Advanced topics selected from: existence and uniqueness theory, singularity theory, asymptotics and stability, eigenfunctions, perturbations, topological methods, spectral theory of differential operators.
- MAP 6356 PARTIAL DIFFERENTIAL EQUATIONS (4)**  
 PR: MAP 5345 and MAA 5307; or Cl. Classification of second order equations, Cauchy problems, Dirichlet and Neumann problems, mixed problems, properties of solutions.
- MAP 6375 NUMERICAL TECHNIQUES FOR PARTIAL DIFFERENTIAL EQUATIONS (3)**  
 PR: MAP 5345 and MAD 6407. Finite differences and finite element methods. Convergence, stability, accuracy. Variational techniques. Acceleration methods. Shocks.
- MAS 5107 ADVANCED LINEAR ALGEBRA (3)**  
 PR: MAS 3103, MAS 4301, or MHF 3102, or Cl. The study of finite dimensional vector spaces over arbitrary fields. Topics covered include: dual spaces canonical forms for linear transformations, inner product spaces, orthogonal, unitary and self-adjoint operators and quadratic forms.
- MAS 5215 NUMBER THEORY (3)**  
 PR: Cl. Congruences, quadratic residues, selected topics.
- MAS 5311 ALGEBRA I (3)**  
 PR: MAS 3103, MAS 4301. An introduction to group theory.
- MAS 5312 ALGEBRA II (3)**  
 PR: MAS 5311. An introduction to Galois theory.
- MAT 5932 SELECTED TOPICS (1-4)**  
 PR: Senior or Junior standing and Cl. Each topic is a course of study. 01-History of Mathematics, 03-Logic and Foundations, 05-Number Theory, 07-Topics in Algebra, 09-Mathematics for Physics, 11-Topics in Probability and Statistics, 13-Topics in Analysis, 15-Topics in Topology.
- MAT 6908 INDEPENDENT STUDY (VAR.)**  
 Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)



- MAT 6911 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- MAT 6932 SELECTED TOPICS (1-4)**  
PR: Cl. 01-Topology, 02-Analysis, 03-Algebra, 04-Applied Mathematics, 05-Graph Theory, 06-Number Theory, 07-Mathematics for Physics, 08-Probability, 09-Statistics, 10-Complex Analysis.
- MAT 6939 GRADUATE SEMINAR (1-2)**  
Direction of this seminar is by a faculty member. Students are required to present research papers from the literature. (S/U only.)
- MAT 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)
- MAT 7912 DIRECTED RESEARCH (VAR.)**  
PR: GR. Ph.D. level. Repeatable. (S/U only.)
- MAT 7980 DISSERTATION: DOCTORAL (VAR.)**  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)
- MHF 5306 ELEMENTARY MATHEMATICAL LOGIC (3)**  
PR: Cl. Truth tables, tautologies, quantifiers, rules of inference, informal proofs in mathematics.
- MHF 5404 HISTORY OF MATHEMATICS (3)**  
PR: MAC 3313. Traces the development of mathematical ideas through history. Special emphasis is placed on those concepts that led to the Calculus. This course is open to majors and non-majors alike.
- MHG 6307 LOGIC AND FOUNDATIONS (4)**  
PR: Cl. Propositional Calculus, Post's theorem, first order and equality calculi, models, completeness and consistency theorems. Gödel's theorem, recursive functions.
- MTG 5316 TOPOLOGY I (3)**  
PR: MAC 3313 and MAS 4301. Metric and topological spaces, continuity, homeomorphisms, connectedness, fundamental group, compact spaces, separation axioms, product spaces.
- MTG 5317 TOPOLOGY II (3)**  
PR: MTG 5316. Continuation of MTG 5316.
- MTG 6326 ADVANCED TOPOLOGY (3)**  
PR: MTG 5317 and Cl. Function spaces, compactifications, covering spaces, and other topics.
- STA 5166 COMPUTATIONAL STATISTICS I (3)**  
PR: STA 4321, COP 3215 or Cl. 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.
- STA 5206 STOCHASTIC PROCESSES (4)**  
PR: STA 5447. Basic concepts of stochastic processes, finite Markov chains, random-walks, with applications to Life Sciences and Engineering.
- STA 5326 MATHEMATICAL STATISTICS (4)**  
PR: STA 5446. Sample distribution theory, point & interval estimation theory, and theory of hypothesis testing.

**STA 5446 PROBABILITY THEORY I (3)**

PR: MAA 4212 or MAA 5306. Axioms of probability, random variables, probability distributions and distributions of functions of random variables, mathematical expectation, moment generating functions and introductory limit theory of probability distributions.

**STA 5447 PROBABILITY THEORY II (3)**

PR: STA 5446. Continuation of STA 5446. Topics include characteristic functions and advanced limit theory.

**STA 5526 NON-PARAMETRIC STATISTICS (4)**

PR: STA 5326, Cl. Theory and methods of non-parametric statistics, order statistics, tolerance region, and their applications.

**STA 6167 COMPUTATIONAL STATISTICS II (3)**

PR: STA 5166. Design of statistics programs, pivoting and other technology used in stepwise regressions, algorithms in non-linear regression, balanced and unbalanced ANOVA. Iteration methods of numerical solutions of likelihood equations.

**STA 6208 LINEAR STATISTICAL MODELS (3)**

PR: STA 6167 or STA 5326. Distribution theory for linear statistical models. Results applied to multiple regression, polynomial regression, balanced and unbalanced experimental designs, analysis of covariance.

**STA 6228 SAMPLING TECHNIQUES (3)**

PR: STA 4321 or Cl. Sampling versus total enumeration. Planning of a survey. Statistical sampling methods and their analysis; simple, stratified, systematic, cluster, and double and multisage sampling. Use of auxiliary information in sampling. Ratio and regression estimates. Case study.

**STA 6746 APPLIED MULTIVARIATE ANALYSIS (3)**

PR: STA 5326. 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.

**STA 6876 TIME SERIES ANALYSIS (4)**

PR: STA 5326. Theory and applications of discrete time series models illustrated with forecasting problems. Filtering, forecasting, modeling, and special analysis of time series. Control problems. Applications include the use of computers.

## PHYSICS

*Chairperson:* S. Sundaram; *Professors:* S.C. Bloch, S.R. Deans, N.Djeu, R.W. Flynn, N.C. Halder, W.D. Jones, H.W. Kendall, D.K. Killinger, N.L. Oleson, S. Sundaram; *Professor Emeritus:* Guy Forman; *Associate Professors:* J.L. Aubel, H.R. Brooker, R.S.F. Chang, R.W. Clapp, W.H. Kruschwitz; *Assistant Professor:* R.J. Berkley; *Lecturer:* D. Spurgin, J.E. Turbeville.

**PHY 5624 QUANTUM MECHANICS II (3)**

PR: PHY 4604 or Cl. Symmetries, identical particles, scattering, approximation methods, Dirac equation, field quantization. Spring Semester.

**PHY 5722C ELECTRONICS (4)**

PR: PHY 3822L and PHY 4324. Vacuum and gas-discharge tubes, semiconductors, transistors, electronic circuit analysis, and laboratory. Spring Semester.

**PHY 5937 SELECTED TOPICS IN PHYSICS (1-4)**

PR: Senior or advanced standing and CC. Each topic is a course in directed study under the supervision of a faculty member.

**PHY 6246 CLASSICAL MECHANICS (4)**

PR: PHS 5113 or Cl. Dynamics of particles and systems of particles, Lagrange's equation, central forces, rigid body dynamics. Fall Semester.

**PHY 6346 ELECTROMAGNETIC THEORY I (3)**

PR: PHY 4325 or Cl. Electrostatics, magnetostatics, potential and boundary value problems. Maxwell's equations. First semester of sequence PHY 6346, PHY 6347. Fall Semester.

**PHY 6347 ELECTROMAGNETIC THEORY II (3)**

PR: PHY 6346 or Cl. Electromagnetic waves, wave guides and resonant cavities, diffraction, relativistic-particle kinematics and dynamics, plasmas and magnetohydrodynamics. Spring Semester.

**PHY 6449 FOURIER OPTICS AND SYSTEMS (3)**

PR: Linear Systems Analysis (EEL 4102) or PHS 5113. A study of optical applications of linear systems and Fourier transforms.

**PHY 6536 STATISTICAL MECHANICS (3)**

PR: PHY 4626 or Cl. Kinetic theory, configuration and phase space. Boltzmann theorem, Liouville theorem, ensemble theory, quantum statistics. Spring Semester.

**PHY 6846L EXPERIMENTAL PHYSICS (2)**

PR: Graduate standing. Laboratory techniques frequently required in experimental research. Includes manipulation of glass, production and measurement of vacua, production and measurement of thin films, and use of various machine tools. Fall Semester.

**PHY 6909 INDEPENDENT STUDY (VAR.)**

Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**PHY 6911 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**PHY 6935 GRADUATE SEMINAR (1)**

All Physics graduate students are expected to enroll in this course Semester I each year. (S/U only.) Semesters: Fall, Spring, Summer.

**PHY 6938 SELECTED TOPICS IN PHYSICS (1-10)**

PR: CC. Each topic is a course in directed study under the supervision of a faculty member.

**PHY 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

**PHZ 5115 METHODS OF THEORETICAL PHYSICS I (3)**

PR: MAP 4302 or Cl. 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. Fall Semester.

**PHZ 5116 METHODS OF THEORETICAL PHYSICS II (3)**

PR: MAP 4302 or Cl. Applications of mathematical techniques to classical and modern physics. Selected topics in complex analysis, differential and

integral equations, numerical methods, and probability theory. Spring Semester.

**PHZ 5304 NUCLEAR PHYSICS (3)**

PR: PHY 4604 or Cl. Nuclear forces, nuclear models, nuclear structure, decay, nuclear reactions, and high energy physics. Spring Semester.

**PHZ 5405 SOLID STATE PHYSICS I (3)**

PR: PHY 3123, MAP 4302. 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 PHY 5405, PHS 6426. Spring Semester.

**PHZ 5505 PLASMA PHYSICS I (3)**

PR: PHY 4324 or Cl. Introduction to Boltzmann, magnetohydrodynamic and orbit approaches to plasmas. Longitudinal and electromagnetic waves in plasmas. Collisions and radiation. Instabilities. Fall Semester.

**PHZ 6136 PHYSICAL APPLICATIONS OF GROUP THEORY (3)**

PR: PHS 5113 or Cl. Matrices, symmetry elements and point groups, reducible and irreducible representations, molecular vibrations, selection rules, rotation groups and atomic levels, molecular orbitals and electronic energies, space groups and spectra of crystals, crystal field theory and symmetry. (Offered alternate years.)

**PHZ 6204 ATOMIC AND MOLECULAR SPECTRA I (3)**

PR: PHY 4604 or Cl. Hydrogen atom, one electron systems, central field and vector models, perturbations, Zeeman and Stark effect, hyperfine structure, atomic structure calculations; diatomic spectra, rotational and vibrational analysis, intensities, temperatures from spectra, isotope effects. Fall Semester.

**PHZ 6205 ATOMIC AND MOLECULAR SPECTRA II (3)**

PR: PHZ 6204 or Cl. Electronic transitions in diatomic molecules, Hund's coupling schemes, electron configuration and valence, astrophysical applications, predissociation, normal modes of polyatomic molecules, Raman and IR spectra, rotation-vibration interaction, microwave spectra, thermodynamic properties, stellar atmospheres. Spring Semester.

**PHZ 6426 SOLID STATE PHYSICS II (3)**

PR: PHY 5405 or Cl. Optical, electrical and magnetic properties of insulators, superconductivity, imperfections in solids. Second semester of sequence PHS 5405, PHS 6426. Fall Semester.

**PHZ 6525 PLASMA PHYSICS II (3)**

PR: PHS 5505 or Cl. An analytical study of the various types of wave phenomena in plasmas describable by the continuum.

**PHZ 6607 THEORY OF RELATIVITY (3)**

PR: PHS 5513 or Cl. The special and general theory of relativity, including the gravitational field equations, applications of the special theory, experimental tests of the general theory and various topics of current research interest. (Offered alternate years.)

## College Of Nursing

### NURSING

*Dean:* J.A. Plawecki; *Professors:* A. Applegate, F. Carbonell, G. Dowd, I. King, G.R. MacDonald, O. Riggin, V. Ross, J. Sasmor; *Associate Professors:* C. Burns, P. Byers, N. Entrekin, J. Gregory, E. Gultiz, S. McMillan, B. Redding; *Assistant Professors:* R. Kearney, L. Gonzalez, C. O'Neil, S. Sharma, C. Selleck.

**NGR 5810 INTRODUCTION TO NURSING RESEARCH (3)**

PR: Satisfactory completion of a course in elementary statistics and/or permission of the faculty. This course will introduce the research process and provide an understanding of the use of nursing research in the improvement of nursing practice. Content focuses on critiquing and analyzing nursing research and applying it. Ethical and legal issues that affect nursing research will be examined.

**NGR 5935 ETHICS IN HEALTH CARE (3)**

PR: Permission of the instructor. Theories and concepts of ethics as applied to health care are presented through lecture and discussion. Contemporary issues are analyzed in terms of their implications for health care providers. Majors and non-majors.

**NGR 5949C UNDERGRADUATE/GRADUATE TRANSITION COURSE IN NURSING (4)**

PR: Baccalaureate degree; currently licensed R.N., and faculty permission. Examine and clinically apply basic theoretical concepts and principles underlying first level professional nursing.

**NGR 6030C ADULT HEALTH ASSESSMENT (3)**

PR: Admission to program or permission of faculty. Advanced Physiology prerequisite or concurrent. Emphasizes advanced physical and psychological clinical assessment skills and includes a theoretical and practical approach based on nursing process.

**NGR 6096 ONCOLOGY NURSING CONCEPTS (3)**

PR: Permission of faculty. This course provides specialized oncology nursing content. Learning activities include lecture, discussion, audio-visuals, group presentations, and self-study.

**NGR 6120 MANAGEMENT IN CLINICAL NURSING PRACTICE (2)**

Explores management concepts including a variety of theoretical and clinical approaches to the nursing management of patient care in a variety of patient care settings.

**NGR 6121 THEORY DEVELOPMENT OF NURSING (3)**

PR: Admission to program or permission of faculty. Focuses on theory development in nursing, including theory development, relationships of theoretical frameworks, and analysis of conceptual models as a basis for nursing diagnosis.

**NGR 6124 CLINICAL AND COMMUNITY NUTRITION (3)**

Study of the science of nutrition throughout life, and its place in contemporary society. Focus will be on national/international status, issues and policies, and research in nutrition.

- NGR 6140 ADVANCED PHYSIOLOGIC ASSESSMENT (4)**  
 PR: Admission to program or permission of faculty. Focus on cellular physiology and the feedback and control mechanism of bodily functions at the cellular, organ, and system level.
- NGR 6141 ADULT HEALTH I (3)**  
 PR: NGR 6140. A conceptual approach that focuses on disease mechanisms to establish a sound scientific base for clinical assessment and management of common health problems of adult patients.
- NGR 6142 PATHOBIOLOGY OF NEOPLASIA (2)**  
 PR: Cl. This course emphasizes basic concepts of cellular differentiation and the abnormal cytologic changes which occur in cancer. The learning activities include lecture, audio-visually, discussion, group presentations, and self-study.
- NGR 6155 FACTORS INFLUENCING HEALTH CARE (3)**  
 PR: Admission to program or permission of faculty. An interdisciplinary course that focuses on contemporary social, political, and economic issues related to health care and legal-ethical concepts applicable to the decision-making process in nursing practice, education, and research.
- NGR 6190 PHARMACOLOGY FOR ADVANCED NURSE CLINICIANS (2)**  
 PR: NGR 6140; Graduate status. Synthesizes information relative to the pharmacological actions of selected classes of drugs with emphasis on mechanism, pharmacodynamics, and implications for nursing practice.
- NGR 6210 ADULT HEALTH II (3)**  
 PR: NGR 6121; NGR 6140, NGR 6705 prior or concurrent. Advanced course in specialized nursing practice focuses on selected concepts applied health restoration and rehabilitation in a variety of settings.
- NGR 6210L ADULT WELLNESS-ILLNESS PRACTICUM I (2-4)**  
 PR: NGR 6121; NGR 6140, NGR 6705 and NGR 6210 prior or concurrent. Clinical experience in functional role and selected area of specialization emphasizing wellness-illness concepts applied to adults.
- NGR 6211 ADULT HEALTH (3)**  
 PR: NGR 6121; NGR 6140, NGR 6705 prior or concurrent. Advanced course in specialized nursing practice focuses on selected concepts applied health restoration and rehabilitation in a variety of settings.
- NGR 6211L ADULT WELLNESS-ILLNESS PRACTICUM II (2-4)**  
 PR: NGR 6121; NGR 6140; NGR 6705 and NGR 6211 prior or concurrent. Clinical experience in functional role and selected area of specialization emphasizing wellness-illness concepts applied to adults with significant health problems.
- NGR 6250 GERONTOLOGICAL NURSING I (3)**  
 PR: Permission of faculty. This foundation course in gerontological nursing emphasizes the physiological and psychological aspect of nursing of the well-elderly, including functional assessment.
- NGR 6251 GERONTOLOGICAL NURSING II (3)**  
 PR: Social Policy in Aging or permission of faculty. Theoretical and clinical experience that emphasizes the health maintenance and environmental interaction of the well-elderly.

**NGR 6252 ISSUES IN GERONTOLOGY (2)**

PR: Admission to program or permission of faculty. A multidisciplinary focus on current developments in Gerontology in the fields of Biology, Psychology, Medicine, Nutrition, Economics, Adult Education, Sociology and Nursing.

**NGR 6253 GERONTOLOGICAL NURSING PRACTICUM I (3-4)**

PR: Permission of faculty. Clinical practicum that emphasizes effective nursing intervention in acute and chronic illness in the elderly, including: treatment of illness, prevention of complications, rehabilitation, and health education.

**NGR 6254 GERONTOLOGICAL NURSING PRACTICUM II (3-4)**

PR: Gerontological nursing sequence course or permission of faculty. Practicum experience emphasizes leadership/management principles that assist the gerontological nurse in health care delivery of the elderly.

**NGR 6260 GERONTOLOGICAL NURSING III (3)**

PR: Permission of faculty or admission to program. This course provides specialized gerontological nursing content. Learning activities include lecture, discussion, audio-visuals, written group presentations and self-study.

**NGR 6280 SOCIAL AND ECONOMIC FACTORS IN GERONTOLOGICAL NURSING (3)**

PR: Permission of faculty. Analyze and evaluate multilevel social and economic factors affecting the health care of the elderly by gerontological nurses.

**NGR 6505 THEORETICAL FOUNDATIONS IN PSYCHIATRIC/MENTAL HEALTH NURSING (3)**

PR: Admission to program or CI. Examine the selected theories relevant to psychiatric-mental health nursing with emphasis on interpersonal theory.

**NGR 6506 CONCEPTUAL BASES FOR PSYCHIATRIC/MENTAL HEALTH NURSING (3)**

PR: NGR 6505 and 6506 or CI. Study of the evolution and practice of the advanced role of psychiatric-mental health nurse in individual, family and group therapy including consultation/liaison and interdisciplinary collaborations.

**NGR 6507 THERAPIES IN PSYCHIATRIC/MENTAL HEALTH NURSING (2)**

PR: NGR 6505 and 6506 or CI. Study of the evolution and practice of the advanced role of psychiatric-mental health nurse in individual, family and group therapy including consultation/liaison and interdisciplinary collaborations.

**NGR 6508 GROUP THERAPY IN PSYCHIATRIC/MENTAL HEALTH NURSING (2)**

PR: NGR 6505, 6506, 6507 or CI. Focuses on the scientific approaches to group therapy for psychiatric-mental health nursing clinical specialists with a major emphasis on interactional group therapy.

**NGR 6509 FAMILY THERAPY IN PSYCHIATRIC/MENTAL HEALTH NURSING (2)**

PR: NGR 6505, 6506, 6507, or CI. The focus is the role of the psychiatric nurse clinical specialist in the systems approach to therapeutic interventions with families.

**NGR 6511 GEROPSYCHIATRIC NURSING (3)**

Theoretical implications and foundations for providing geropsychiatric nursing care for the elderly who have been diagnosed or have potential emotional/mental problems with emphasis of various therapies in a variety of clinical settings.

**NGR 6539C PSYCHOSOCIAL ASPECTS OF CANCER (3)**

PR: CI. This course is designed to provide knowledge and skills to assist the specialist in cancer nursing to cope with the psychosocial ramifications of cancer of the client and family.

**NGR 6566 PRACTICUM I: INDIVIDUAL PSYCHIATRIC/MENTAL HEALTH NURSING (2-4)**

PR: NGR 6505, 6506, 6507, or CI. Therapeutic nursing interventions in acute and chronic behavioral disturbances in the adult. Primary focus will be on therapy and/or crisis intervention with individuals.

**NGR 6567 PRACTICUM II: GROUP THERAPY IN PSYCHIATRIC/MENTAL HEALTH NURSING (2)**

PR: NGR 6505, 6506, 6507, 6565, or CI. Clinical practicum emphasizing nursing interventions with groups and consultation/liason service.

**NGR 6568 PRACTICUM III: FAMILY THERAPY IN PSYCHIATRIC/MENTAL HEALTH NURSING (2)**

PR: NGR 6505, 6506, 6507, 6508, 6565, or CI. Clinical Practicum emphasizing therapeutic nursing interventions with families. Primary focus will be family therapy with a systems approach.

**NGR 6602C STRATEGIES FOR COMMUNITY HEALTH NURSING (4)**

PR: NGR 6121 and PR or concurrent NGR 6738. Examines the variables that influence and guide community health nursing practice, and the application of relevant nursing concepts and theories.

**NGR 6603L METHODS OF COMMUNITY HEALTH NURSING (3-6)**

PR or concurrent registration conceptual bases for community health nursing. Focuses on clinical application of community health nursing concepts in selected community settings. A minimum of 2 semester hours are required for MPH students in the nursing concentration.

**NGR 6610 CONCEPTUAL BASIS OF FAMILY HEALTH NURSING (3)**

PR or Concurrent: Theory Development in nursing; Conceptual Basis for Advanced Nursing Practice. This course will analyze family structure and functioning within the framework of personal, interpersonal, and social systems. Interventions and assessment skills that promote healthy families will be discussed. Additionally, the dysfunctions and deficits that may affect families and family members will be covered. Special needs of the non-traditional family will be addressed. Didactic and clinical.

**NGR 6617L PRACTICUM IN FAMILY CENTERED NURSING (minimum; practicum(s) may range from 2-8 SH per semester) (6)**

PR: or Concurrent: Family Centered Health Care or Family Centered Health Care of Children. This course is designed as a clinical preceptorship experience. The student will be expected to seek clinical experiences in a variety of settings where the health care to families is possible. The out-



come is a solid foundation in family health nursing which provides a basis for clinical specialization in a selected area of family health nursing. The student is expected to synthesize previous knowledge which contributes to the roles and functions of the Family Health Nursing Specialist (i.e. researcher, manager, clinician.)

**NGR 6630C FAMILY CENTERED NURSING CARE (4)**

PR: Family Health Nursing Concepts and Advanced Physiology and Advanced Assessment. This course will assist the student in applying concepts related to family health nursing to clinical situations and problems across the life span. Clinical strategies will encompass health management, health promotion, health resource development as related to families and to a variety of family structures. Child health, reproductive health of men and women, adult health concepts, etc. will be stressed as they relate to promoting healthful family functioning. This course is designed for those specializing in primary nursing care of families.

**NGR 6631C FAMILY CENTERED NURSING CARE OF CHILDREN (4)**

PR: Family Health Nursing Concepts and Advanced Assessment and Advanced Physiology. This course is designed as an indepth study of child health, and acute and chronic health problems. The multiple interactional relationships which affect children of all ages will be stressed as well as how the environment (genetic, social, cultural, educational, biologic) affects the health of the child. Clinical interventions which promote optimum growth and development and health will be explored. This course is designed for those specializing in the care of the acutely and chronically ill child.

**NGR 6703 ADVANCED ROLE DEVELOPMENT (3)**

PR: Permission of faculty. Combined lecture/seminar focusing on an exploration of role theory and its application to advanced nursing roles.

**NGR 6705 CONCEPTUAL BASIS FOR SPECIALIZED NURSING PRACTICE (3)**

PR: NGR 6121, prior to or concurrent. Exploration of selected concepts that are essential to all areas of specialized nursing practice.

**NGR 6710 CURRICULUM AND INSTRUCTION IN NURSING EDUCATION (2)**

PR: Permission of faculty. Trends and issues in curriculum development, faculty role, instructional strategies, internal and external factors influencing decisions in curriculum and instruction and implications for their utilization in nursing programs.

**NGR 6712 NURSING EDUCATION IN INSTITUTIONS OF HIGHER EDUCATION (2)**

PR: Permission of faculty. An examination of the historical development of nursing education within higher education, issues in higher education and their effect on nursing education, and the future role of nursing education in institutions of higher education.

**NGR 6738 CONTEMPORARY PUBLIC/COMMUNITY HEALTH NURSING: ISSUES & TRENDS (2)**

PR or Concurrent: Theory Development in Nursing; Health Care Organization and Management. Analyzes the relationship between public health issues and public/community health nursing practice. Identifies special-

ized nursing roles in public health practice and factors that influence these roles.

**NGR 6790 CONSULTATION/LIAISON IN PSYCHIATRIC/MENTAL HEALTH NURSING (3)**

PR: Clinical and theoretical courses for major, or Cl. Emphasizes evolution of the consultation/liaison role for advanced nurse practitioners with emphasis on the consultation process in a variety of clinical settings.

**NGR 6800 NURSING RESEARCH (3)**

PR: Theory Development in Nursing. Includes an overview of research in nursing. Identification of researchable problems, design and analysis of research proposals, and research methodologies and strategies applicable to nursing.

**NGR 6822 MEASUREMENT IN NURSING EDUCATION AND RESEARCH (3)**

PR: Permission of faculty. Course purposes are to increase skill in measurement of nursing variables as part of the research process, to enhance ability of nurse educators to identify or develop valid and reliable measurement instruments for evaluation of students, clients and educational programs.

**NGR 6905 INDEPENDENT STUDY (1-6)**

Specialized individualized study determined by students' needs and interests; requires an approved contract with a faculty member. (S/U only.)

**NGR 6931 SELECTED TOPICS (1-4)**

Seminars for the analysis and discussion of selected issues in nursing of topical concern to student and faculty.

**NGR 6945 PRACTICUM IN CLINICAL NURSING I (4)**

PR: Adult Nursing. Intensive directed study in advanced professional nursing that focuses on testing of nursing theories, teaching strategies, and management of selected patients.

**NGR 6946 PRACTICUM IN CLINICAL NURSING II (4)**

PR: Practicum in Clinical Nursing I. A summative clinical experience that focuses on the role of the advanced nurse clinician as a clinical specialist or adult primary care nurse.

**NGR 6947 PRACTICUM IN NURSING EDUCATION (4)**

PR: Course requirements for Nursing Education functional minor; permission of faculty. Instructional experiences that utilize educational concepts and instructional strategies in a variety of educational settings in nursing.

**NGR 6948 ONCOLOGY NURSING PRACTICUM I (3)**

PR: Cl. This course provides immersion for oncology nursing specialists including practice in appropriate settings. Emphasis is on the nurse's role in appropriate settings. Emphasis is on the nurse's role in prevention, detection, treatment, and rehabilitation. Learning activities include clinical practice, case presentations, discussions, and independent study.

**NGR 6949 ONCOLOGY NURSING (3)**

**PRACTICUM II**

PR: NGR 6948. This practicum requires synthesis of all knowledge and skills acquired earlier in the program. Emphasis is on the roles of the oncology nurse specialist, including those of expert clinician, consultant, teacher, researcher and administrator.

**NUR 6609C MANAGEMENT OF PRACTICE (2)**

**IN FAMILY HEALTH NURSING**

PR: Theory Development in Nursing or Consent of Instructor. The primary focus of the course will be on the application of management/leadership principles. The collaborative role of the Family Health Nurse Specialist will be explored, as well as trends and issues impacting upon the role. Program development, and evaluation techniques will be introduced as a vital component of the Family Health Nurse Specialist's role and function.

## College Of Public Health

### GENERAL PUBLIC HEALTH COURSES

**PHC 6907 (formerly HSC 6907) INDEPENDENT (1-3)**

**STUDY: PUBLIC HEALTH**

PR: Cl. Independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

**PHC 6930 PUBLIC HEALTH SEMINAR (1)**

PR: Graduate standing. Interaction of faculty, students and select health professionals in relation to public health issues and research. May be repeated up to 3 credit hours. (S/U only.)

**PHC 6934 (formerly HSC 6934) SELECTED (1-3)**

**TOPICS IN PUBLIC HEALTH**

PR: Cl. The content of this course will be governed by student demand and instructor interest. May be repeated for credit for different topics only.

**PHC 6945 (formerly HSC 6945) SUPERVISED (1-12)**

**FIELD EXPERIENCE**

PR: Cl. 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. (S/U only.)

**PHC 6971 THESIS: MASTER OF SCIENCE (1-19)**

**IN PUBLIC HEALTH**

Research-oriented study for students seeking the Master of Science degree in Public Health. Repeatable. (S/U only.)

**PHC 6977 (formerly HSC 6977) SPECIAL PROJECT: MPH (3)**

PR: Cl. Indepth study of a selected issue in public health. A topic will be selected by each student according to needs and interests. (S/U only.)

**PHC 7908 SPECIALIZED STUDY IN PUBLIC HEALTH (1-9)**

PR: Cl. Demonstration of an indepth 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.

**PHC 7935 SPECIAL TOPICS IN PUBLIC HEALTH (1-3)**

PR: Cl. Content will include recent or current issues in public health. Repeatable as topics vary.

## **DEPARTMENT of COMMUNITY and FAMILY HEALTH**

*Chairperson:* S.N. Graven; *Professor:* S.N. Graven; *Associate Professors:* R.G. Bruce, J. Coreil, R.J. McDermott, W. Ward; *Assistant Professors:* M.L. Coulter, D. Taren; *Visiting Assistant Professor:* J. Meurer, G. Riddle; *Other Faculty:* L. Barness, C. Brooks, M.Cupoli, E. Gulitz, R. Knuppel, M.Lake, E. Lucker, F. Paris, K. Summerfield.

### **PHC 4100 INTRODUCTION TO PUBLIC HEALTH (3)**

A survey of policies and programs in public/community health with emphasis on specific needs and problems of Florida.

### **PHC 6410 (formerly HSC 6920) SOCIAL (3)**

#### **AND BEHAVIORAL SCIENCES APPLIED TO HEALTH**

PR: CI. 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.

### **PHC 6521 PUBLIC HEALTH NUTRITION (3)**

PR: CI. An analysis of nutritional issues concerned with health and disease. Biological and social interactions are studied as they relate to the development, monitoring and evaluation of community nutrition intervention programs.

## **MATERNAL and CHILD HEALTH**

### **PHC 6530 PRINCIPLES OF MATERNAL AND CHILD HEALTH (3)**

PR: CI. A study of the organization and delivery of programs in maternal and child health care.

### **PHC 6531 HEALTH OF HANDICAPPED CHILDREN (3)**

PR: CI. A study of causative factors, characteristics, care needs and programs for handicapped children with emphasis on health and health care issues.

### **PHC 6532 WOMEN'S HEALTH ISSUES IN (3) PUBLIC HEALTH**

Women's health needs with their impact on society, family and children will be presented with a public health orientation.

### **PHC 6533 HEALTH PROGRAM DEVELOPMENT (3) AND CHANGE PROCESS**

PR: CI. A study of approaches to program development, implementation and management of change process in maternal and child health.

### **PHC 6534 CHILD HEALTH PROGRAMS IN (3) CARE SETTINGS**

PR: CI. Advanced analysis of factors contributing to impact on children of health and care settings such as foster care, hospital care, and day care. Focus includes epidemiology of child health problems, program evaluation, administration and policy assessment.

## **PUBLIC and COMMUNITY HEALTH EDUCATION**

### **HSC 5319 (formerly HES 5238C) HEALTH (3) PROBLEMS OF SCHOOL AGE POPULATION**

Study of health problems and needs of school age students, including a health status screening laboratory.

**PHC 6500 (formerly HES 6125) FOUNDATIONS  
OF HEALTH EDUCATION (3)**

PR: Ci. Study of the historical, social and cultural factors influencing health behavior and the practice of health education.

**PHC 6505 HEALTH EDUCATION PROGRAM PLANNING (3)**

PR: PHC 6125 or Ci. Analysis of the planning and development process for health education programs.

**PHC 6707 HEALTH EDUCATION RESEARCH  
AND EVALUATION (3)**

PR: PHC 6125 and PHC 6725 or PHC 6530 or Ci. Examination of research and evaluation issues in health education. Includes methods for designing studies in schools and other educational settings in the community.

**DEPARTMENT of ENVIRONMENTAL  
and OCCUPATIONAL HEALTH**

*Chairperson: S.M. Brooks; Professor: S.M. Brooks; Associate Professors: A. Kulkarni, U. Reischl, A. Vickery; Assistant Professors: B. Kwa, C.I. Noss, I. Richards, W.A. Spaul; Visiting Associate Professor: E. Szonntag; Other Faculty: F. Dukes-Dubos, R. Freeman, A. Koplin, J. Lincer, M. Montgomery, C.D. Riggs, B. Yangco.*

**HSC 6556 (formerly HSC 6560) PATHOBIOLOGY  
OF HUMAN DISEASE (3)**

PR: Ci. 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.

**HSC 6557 (formerly HSC 6565) PATHOBIOLOGY  
OF HUMAN DISEASE II (3)**

PR: HSC 6556 and Ci. Overview of the distinct pathogenesis and etiology and selected acute and chronic diseases and their preventive aspects and impacts on the health care system. Provides basic knowledge of disease and illness patterns and their relationship to health planning.

**PHC 6357 (formerly HSC 6436) ENVIRONMENTAL  
AND OCCUPATIONAL HEALTH (3)**

PR: Ci. The study of major environmental and occupational factors that contribute to development of health problems in industrialized and developed countries.

**PHC 6510 EXOTIC AND INFECTIOUS DISEASE (3)**

PR: Ci. A study of human infectious disease with particular emphasis upon disease caused by parasites, viruses, bacteria, and fungi found in sub-tropical and tropical environments.

**PHC 6562 FUNCTIONS OF PUBLIC HEALTH  
LABORATORIES (3)**

PR: Ci. Study of public health laboratory activities, investigations, administrative operations and current techniques through laboratory and lecture experience.

## **ENVIRONMENTAL HEALTH**

- PHC 6301 ANALYSIS OF WATER AND WASTEWATER (3)**  
 PR: CHM 3610C or Cl. A study of treatment systems for water and wastewater. Emphasis is given to problems encountered in current technologies, health effects, and environmental impact.
- PHC 6302 MUNICIPAL SANITATION (3)**  
 PR: PHC 6357 or Cl. A study of environmental sanitation activities, programs, and issues of local government.
- PHC 6303 COMMUNITY AIR POLLUTION (3)**  
 PR: CHM 3610C or Cl. A study of air pollutants. Emphasis is given to sources and control technologies as well as health effects and environmental impact.
- PHC 6304 ENVIRONMENTAL HEALTH MICROBIOLOGY (3)**  
 PR: MCB 3010C or Cl. Techniques for isolation and enumeration of microorganisms of health significance from food and aquatic sources.
- PHC 6305 CHEMICAL METHODS IN ENVIRONMENTAL HEALTH (3)**  
 PR: CHM 3610C or Cl. Techniques used in quantitative and qualitative chemical analyses for determining water quality.
- PHC 6425 LEGAL AND REGULATORY ASPECTS OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH (3)**  
 PR: PHC 6355 or Cl. A study of pertinent federal and state statutes and regulations affecting health of the environment and workplace.

## **INDUSTRIAL HYGIENE and SAFETY MANAGEMENT**

- PHC 6310 ENVIRONMENTAL OCCUPATIONAL TOXICOLOGY (3)**  
 PR: Cl. 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, using lecture and appropriate laboratory methods.
- PHC 6355 (formerly HSC 6431) OCCUPATIONAL HEALTH (3)**  
 PR: Cl. The study of historical, epidemiologic, administrative, legal, and clinical aspects of worker's health and of the workplace.
- PHC 6356 (formerly HSC 6435) INDUSTRIAL HYGIENE (3)**  
 PR: Cl. A study of the recognition, evaluation, and control of the workplace affecting the health of employees.
- PHC 6358C INDUSTRIAL HYGIENE-PHYSICAL AGENTS (4)**  
 PR: PHC 6356 and 1 year college physics or Cl. Recognition, evaluation, and control of physical agents in the workplace. Laboratory exercises and field surveys will be conducted in addition to class lectures. Lec.-lab.
- PHC 6359 INDUSTRIAL HYGIENE-CHEMICAL AGENTS (4)**  
 PR: PHC 6356 and 1 year college chemistry or Cl. Recognition, evaluation, and control of chemical agents in the workplace. Laboratory exercises and field surveys will be conducted in addition to class lectures. Lec.-lab.

**PHC 6360 (formerly HSC 6455) SAFETY MANAGEMENT PRINCIPLES AND PRACTICES (3)**

PR: CI. 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.

**DEPARTMENT of EPIDEMIOLOGY and BIOSTATICS**

*Chairperson:* P.E. Leaverton; *Professors:* P.E. Leaverton; *Associate Professors:* J.L. Cresanta, P.D. Wilson; *Assistant Professors:* N.A. Brandenburg, J.G. Morel, H.G. Stockwell; *Other Faculty:* M. Bayona-Cells, G.H. Lyman, M. Magenheim, M.H. Wilder, J.J. Witte.

**PHC 6000 EPIDEMIOLOGY (3)**

PR: CI. Study of epidemiological methods to evaluate the patterns and determinants of health and diseases in populations.

**PHC 6006 (formerly HSC 6413) EPIDEMIOLOGY OF INFECTIOUS AND NON-INFECTIOUS DISEASES (3)**

PR: PHC 6000, PHC 6050 and CI. A study of the distribution and determinants of specific infectious and non-infectious human diseases of public health importance using epidemiological methods.

**PHC 6007 CANCER EPIDEMIOLOGY (3)**

PR: PHC 6000 or CI. 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.

**PHC 6008 CARDIOVASCULAR DISEASE EPIDEMIOLOGY (3)**

PR: PHC 6000 or CI. A review of the major issues in cardiovascular disease epidemiology, including trends, the extent of the disease nationally and internationally, implications of major epidemiologic studies, and strategies for prevention.

**PHC 6050 BIOSTATISTICS I (3)**

PR: CI. Concepts, principles and methods of statistics applied to public health issues.

**PHC 6051 BIOSTATISTICS II (3)**

PR: PHC 6000 and PHC 6050. Intermediate level statistical methods appropriate for health and epidemiologic studies. Emphasis on 2x2 tables, analysis of variance, multiple linear regression, methods of survival analysis, logistic regression, and Cox regression.

**PHC 6542 PUBLIC MENTAL HEALTH EPIDEMIOLOGY (3)**

PR: PHC 6540, PHC 6000, or CI. A study of the factors that determine the frequency and distribution of mental disorders in human populations. Mental health intervention strategies also will be explored.

**PHC 6700 RESEARCH METHODS IN EPIDEMIOLOGY (3)**

PR: PHC 6000, PHC 6050 and CI. Planning, execution, analysis and interpretation of epidemiological studies.

**PHC 7015 EPIDEMIOLOGIC STUDY DESIGN AND PROTOCOL DEVELOPMENT (3)**

PR: PHC 6000, PHC 6700, PHC 6051 and CI. The course will provide the student with the opportunity to acquire knowledge and skill in formulating

a research problem and developing an appropriate epidemiologic study design. A detailed proposal will be developed, presented and defended.

**PHC 7017 DESIGN AND CONDUCT OF CLINICAL TRIALS (3)**

PR: PHC 6050, PHC 6000 and CI. The course will familiarize students with the issues in the design and conduct of clinical trials. Factors involved in organizing a trial, randomizing subjects, implementation, and analyzing data from the study will be considered.

**PHC 7018 ENVIRONMENTAL EPIDEMIOLOGY (3)**

PR: PHC 6000 and CI. 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.

**PHC 7019 OCCUPATIONAL EPIDEMIOLOGY (3)**

PR: PHC 6000 and CI. The course will examine the existing epidemiologic data pertaining to the health effects of specific occupational exposures and the epidemiologic methods involved in the conduct of occupational studies.

**DEPARTMENT of HEALTH POLICY  
and MANAGEMENT**

*Chairperson:* T.N. Chirikos; *Professors:* S.N. Baroub, T.N. Chirikos, P.J. Levin; *Associate Professors:* A.M. Sear, W.E. Steslicke, J. Wolfson; *Assistant Professors:* D.D. Bradham, L.Y. Huang, J.H. Skinner.

**HSA 6197 MANAGEMENT OF PUBLIC HEALTH INFORMATION SYSTEMS (3)**

PR: CI. Introduction to concepts of management information systems applied to public health settings. Emphasis on practical application using computers.

**PHC 6101 HEALTH CARE ORGANIZATIONS (3)**

PR: PHC 6102 or CI. This course presents an overview of principles in the design and structure of health care organizations and their relationship to the regulatory environment at the federal, state, and local levels.

**PHC 6102 (formerly HSC 6160) PUBLIC HEALTH ADMINISTRATION (3)**

PR: CI. General principles of planning, management, evaluation, and behavior of public and private health care organizations at the local, state, and national levels.

**PHC 6110 INTERNATIONAL HEALTH AND HEALTH CARE SYSTEMS (3)**

PR: CI. 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.

**PHC 6146 (formerly HSC 6175) HEALTH SERVICES PLANNING AND EVALUATION (3)**

PR: PHC 6050 or CI. Study of health services planning concepts/methods, and evaluation, with an emphasis on facilities and manpower planning, providing an indepth orientation to information requirements for health planning, and methods to cover gaps of information.



**PHC 6150 HEALTH POLICY ANALYSIS (3)**

PR: PHC 6102. A detailed study of policies, policy making, and policy analysis in health services and their relationship to health planning, management, and health care delivery.

**PHC 6160 HEALTH CARE FINANCIAL MANAGEMENT (3)**

PR: At least one undergraduate course in Financial or Managerial Accounting and PHC 6102, or CI. An introduction to the application of financial management practices in health care organizations, cost behavior analysis, working capital management, financial statement analysis, and capital decision making.

**PHC 6161 HEALTH CARE FINANCE APPLICATIONS (3)**

PR: PHC 6102. A case method approach to the financial management of health care organizations. Quantitative decision analysis techniques, costing methods, and financial policy analysis skills are emphasized.

**PHC 6162 SEMINAR ON INDUSTRY AND HEALTH (3)**

PR: CI. A study of the role that business organizations play in the financing, provision, and consumption of health care services, and an examination of health care reimbursement methods, health benefit plan design and cost containment methods.

**PHC 6180 HEALTH SERVICES MANAGEMENT (3)**

PR: PHC 6102 and undergraduate accounting course or CI. Advanced study of specific topics in health care organization management including the managerial process, organizational theory, resource utilization and control, and human resource management.

**PHC 6190 MANAGEMENT OF PUBLIC HEALTH PROGRAMS (3)**

PR: PHC 6102 and CI. Application of principles and methods for organization and management of government and non-government public health programs.

**PHC 6430 HEALTH ECONOMICS (3)**

PR: ECO 2023 or equivalent and CI. Microeconomic analysis of the structure of the health care industry and economic incentives facing physicians, patients, and hospitals.

**PHC 6540 PUBLIC MENTAL HEALTH (3)**

PR: CI. Current state of community mental health emphasizing history and future of the movement, involvement of public agencies; methods, goals, and evaluation of treatment, and funding and administration of programs.

**PHC 6541 PUBLIC MENTAL HEALTH ADMINISTRATION (3)**

PR: PHC 6540, PHC 6102 or CI. General principles of management theory, methods, administrative processes, and organizational structure of public and private mental health organizations in hospital and ambulatory care settings.

## **College Of Social And Behavioral Sciences**

### **AFRICAN AND AFRO-AMERICAN STUDIES**

*Director:* F.U. Ohaegbulam; *Professor:* F.U. Ohaegbulam; *Associate Professors:* N.A. Allen, K.R. Glover, J.C. Renick.

**AFH 5205 SEMINAR: AFRICA FROM COLONIAL TIMES TO THE PRESENT (3)**

PR: Cl. An in-depth examination of Africa's colonial heritage and post-independence efforts at nation building, economic development, and eradication of the remnants of colonialism, and other topics such as relations between African states and the former colonial powers and other major world powers.

**AFH 5295 SEMINAR: AFRICA CONTEMPORARY ISSUES (3)**

PR: Cl. An in-depth examination of major contemporary social and political issues in the African continent including their domestic and international dimensions.

**INR 5257 SEMINAR: AFRICA AND THE UNITED STATES IN WORLD AFFAIRS (3)**

PR: Cl. An in-depth examination of African-American relations since colonial days in the New World and in Africa with emphasis on the post World War II period.

**SSI 5934 SELECTED TOPICS (1-3)**

PR: Cl plus senior standing or graduate status. May be repeated. To provide advanced students with interdisciplinary study of selected topics. (Also offered under Interdisciplinary Social Sciences.)

**ANTHROPOLOGY**

*Chairperson:* M.V. Angrosino; *Professors:* M.V. Angrosino, R.T. Grange, Jr., G. Kushner, A. Shiloh, J.R. Williams, A.W. Wolfe; *Associate Professors:* S. Greenbaum, J.J. Smith, L.M. Whiteford, C.W. Wienker; *Assistant Professors:* R.D. Baer, S.B. Burkhalter, P.P. Waterman, N.M. White; *Other Faculty:* J.N. Henderson, M.D. Vesperi.

**ANT 5904 DIRECTED READING (1-4)**

PR: Cl. Individual guidance in concentrated reading on a selected topic in Anthropology. Contract required prior to registration. (S/U only.)

**ANT 5915 INDIVIDUAL RESEARCH (2-4)**

PR: Cl. Individual guidance in selected research project. Contract required prior to registration. (S/U only.)

**ANT 5937 SEMINAR IN ANTHROPOLOGY (2-4)**

PR: Senior or graduate standing. Topics to be chosen by students and instructor.

**ANT 6186 SEMINAR IN ARCHAEOLOGY (2)**

PR: Senior or Graduate standing. One of four core courses required of all students. A critical survey of archaeology emphasizing contributions to applied anthropology. Open to non-majors.

**ANT 6196 METHODS IN PUBLIC ARCHAEOLOGY (3)**

PR: Graduate standing. Field techniques, methods of collection, analysis, and interpretation of data. May be repeated up to 6 credit hours as topics vary. Open to non-majors. Lec.-lab.-field trips.

- ANT 6197 SELECTED TOPICS IN PUBLIC ARCHAEOLOGY (3)**  
PR: Graduate standing. Current topical issues in Public Archaeology. May be repeated up to 6 credit hours as topics vary. Open to non-majors.
- ANT 6198 REGIONAL PROBLEMS IN PUBLIC ARCHAEOLOGY (3)**  
PR: Graduate standing. Contemporary problems in Public Archaeology in the context of a specific region. May be repeated up to 6 credit hours as topics vary. Open to non-majors.
- ANT 6447 SELECTED TOPICS IN URBAN ANTHROPOLOGY (3)**  
PR: Graduate standing. Current topical issues in Urban Anthropology. May be repeated up to 6 credit hours as topics vary. Open to non-majors.
- ANT 6448 REGIONAL PROBLEMS IN URBAN ANTHROPOLOGY (3)**  
PR: Graduate standing. Contemporary problems in Urban Anthropology in the context of a specific region. May be repeated up to 6 credit hours as topics vary. Open to non-majors.
- ANT 6463 REGIONAL PROBLEMS IN MEDICAL ANTHROPOLOGY (3)**  
PR: Graduate standing. Contemporary problems in Urban Anthropology in the context of a specific region. May be repeated up to 6 credit hours as topics vary. Open to non-majors.
- ANT 6469 SELECTED TOPICS IN MEDICAL ANTHROPOLOGY (3)**  
PR: Graduate standing. Current topical issues in Medical Anthropology. May be repeated up to 6 credit hours as topics vary. Open to non-majors.
- ANT 6490 SEMINAR IN CULTURAL ANTHROPOLOGY (2)**  
PR: Graduate standing. One of four core courses required of all students. A critical survey of Cultural Anthropology emphasizing contributions to Applied Anthropology. Open to non-majors.
- ANT 6588 SEMINAR IN PHYSICAL ANTHROPOLOGY (2)**  
PR: Graduate standing. One of four core courses required of all students. A critical survey of Physical Anthropology emphasizing contributions to Applied Anthropology. Open to non-majors.
- ANT 6676 SEMINAR IN ANTHROPOLOGICAL LINGUISTICS (2)**  
PR: Graduate standing. One of four core courses required of all students. A critical survey of Anthropological Linguistics emphasizing contributions to Applied Anthropology. Open to non-majors.
- ANT 6706 CONTEMPORARY APPLIED ANTHROPOLOGY (3)**  
PR: Graduate standing. 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.
- ANT 6766 RESEARCH METHODS IN APPLIED ANTHROPOLOGY (3)**  
PR: Graduate standing. 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.

- ANT 6908 INDEPENDENT STUDY (VAR.)**  
Independent study in which students must have a contract with and instructor. Repeatable. (S/U only.)
- ANT 6915 DIRECTED RESEARCH (INTERNSHIP) (VAR.)**  
PR: Gr. Master's level. Repeatable. (S/U only.)
- ANT 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)
- ANT 7703 HISTORY AND THEORY OF APPLIED ANTHROPOLOGY (4)**  
PR: Cl. The history and theoretical development of Applied Anthropology including cultural resources management are discussed in the context of the over-all development of Anthropology as a discipline and profession. Open to non-majors.
- ANT 7704 LEGAL AND ETHICAL ASPECTS OF APPLIED ANTHROPOLOGY (4)**  
PR: Cl. Examination of the 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. Open to non-majors.
- ANT 7760 RESEARCH METHODS IN APPLIED ANTHROPOLOGY (4)**  
PR: Cl. Critical review of specific approaches to the development, management, and analysis of sociocultural data. Emphasis on qualitative and quantitative applications of field oriented research designs. Repeatable as topics vary. Open to non-majors.
- ANT 7902 DIRECTED INDIVIDUAL STUDY (1-15)**  
PR: Cl. 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. Repeatable. (S/U only.)
- ANT 7912 DIRECTED RESEARCH (1-15)**  
PR: Cl. An advanced directed research program in a selected topic of Applied Anthropology under the supervision of an anthropology faculty member. Repeatable. (S/U only.)
- ANT 7932 SEMINAR IN APPLIED ANTHROPOLOGY (1-4)**  
PR: Cl. A critical examination of problems and issues relevant to contemporary Applied Anthropology, such as the professional practice of Applied Anthropology. Repeatable as topics vary. Open to non-majors.
- ANT 7933 SELECTED TOPICS IN APPLIED ANTHROPOLOGY (4)**  
PR: Cl. An overview of Applied Anthropology in its relation to a major mode of public/private activity, e.g. planning, clinical practice, policy process, advocacy. Repeatable as topics vary. Open to non-majors.
- ANT 7934 THE CLIENTELE OF APPLIED ANTHROPOLOGY (4)**  
PR: Cl. Review of the literature and practice of Applied Anthropology focusing on a specific segment or interest group within contemporary society. Typical offerings include: ethnic minorities, age categories, communities,

the poor, migrants, public/private organizations and industry. Repeatable as topics vary. Open to non-majors.

**ANT 7936 APPLIED ANTHROPOLOGY AND HUMAN PROBLEMS (4)**

PR: Cl. Examination of specific problem areas of social significance and policy relevance. Typical offerings include: substance abuse, disease, mental health, international development, urban design, education. Repeatable as topics vary. Open to non-majors.

**ANT 7945 DOCTORAL INTERNSHIP IN APPLIED ANTHROPOLOGY (1-15)**

PR: Admission to Doctoral Candidacy, Cl. 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 adviser, and the agency supervisor prior to registration. Repeatable. (S/U only.)

**ANT 7980 DISSERTATION: DOCTORAL (1-15)**

PR: Admission to Doctoral Candidacy, Cl. Repeatable. (S/U only.)

**DEPARTMENT of COMMUNICOLOGY**

*Chairperson:* E.R. Silliman; *Distinguished Professor:* S.O. Richardson; *Professors:* J. Davis, A.M. Guilford, S.W. Kinde, S.I. Ritterman, J.F. Scheuerle, D.C. Shepherd, E.R. Silliman; *Associate Professors:* J.B. Crittenden, W. Strange; *Assistant Professor:* P.A. Gordon; *Instructors:* R.L. Carlson, W.T. Collins, C.F. Kuffel, J.B. Reice, J.L. Sarkis; *Lecturer:* E.A. Kasan; *Other Faculty:* K. Hollahan.

**SPA 5132 AUDIOLOGY INSTRUMENTATION (4)**

PR: Cl. Calibration, usage and specific applications of specialized instruments available in dealing with the identification and measurement of hearing disorders.

**SPA 5150 ADVANCED SPEECH SCIENCE (3)**

PR: SPA 3117 or equivalent. Must be taken with SPA 5150L. Advanced study of the acoustics, production and perception of normal and disordered speech.

**SPA 5150L SPEECH SCIENCE LABORATORY (1)**

PR: SPA 3117 or equivalent. Must be taken with SPA 5150. Laboratory exercises in the use of audio recording, acoustic analysis and synthesis instrumentation.

**SPA 5201 COMMUNICATION DISORDERS: ARTICULATION (3)**

PR: Cl. An examination of normal and deviant articulatory acquisition and behavior. Presentation of major theoretical orientations and the therapeutic principles based upon them.

**SPA 5210 COMMUNICATION DISORDERS: VOICE (3)**

PR: Cl. A comprehensive study of the medical and physical aspects of voice disorders. Primary emphasis is on therapeutic management.

**SPA 5225 COMMUNICATION DISORDERS: STUTTERING (3)**

PR: Cl. A comprehensive study of disfluent speech behavior. Differential diagnosis, principles of therapeutic intervention procedures for children and adults will be studied. Major theories and models of the development and origin of stuttering are also presented.

- SPA 5303 AUDIOLOGY: HEARING SCIENCE (4)**  
 The study of the physiological acoustics of the auditory periphery; the neuratomy and electrophysiology of the central auditory suystem; and psychoacoustic principles as they relate to clinical audiologic measurement paradigms.
- SPA 5312 PERIPHERAL AND CENTRAL AUDITORY TESTS (4)**  
 PR: CI. The study of behavioral and electrophysiologic clinical tests designed to assess the functions of the peripheral and the central auditory system. Tests that incorporate nonspeech stimuli and those that utilize speech stimull will be included.
- SPA 5385 AMERICAN SIGN LANGUAGE LABORATORY (1)**  
 A laboratory course designed to offer students added practice with the material being presented in the manual communications coursework through video and audio tapes. To be taken concurrently with each level of manual communication.
- SPA 5387 INTERMEDIATE AMERICAN SIGN LANGUAGE (4)**  
 PR: SPA 4336 and CI. A continuation of the basic course that expands the student's signing skills and introduces American Sign Language (ASL) idioms. Provides a greater opportunity for skill development in ASL structure and idiomatic usage. One-hour laboratory course (SPA 5380) to be taken concurrently.
- SPA 5389 ADVANCED AMERICAN SIGN LANGUAGE (4)**  
 PR: SPA 5384 and CI. A continuation of the study of American Sign Language (ASL) at the advanced skill level. Added emphasis on idioms, body language, and facial expression as an integral part of ASL. One-hour laboratory course (SPA 5380) to be taken concurrently. Open to all majors.
- SPA 5402 COMMUNICATION DISORDERS: LANGUAGE (3)**  
 PR: CI. Examination of research and clinical literature presenting major theoretical orientations pertaining to the etiology, evaluations, and treatment of those factors that hinder or interrupt normal language acquisition or function.
- SPA 5503 SPEECH PATHOLOGY AND AUDIOLOGY PRACTICUM (1-8)**  
 PR: CI. Participation in Speech Pathology and Audiology Practicum in the University clinical laboratory and selected field settings.
- SPA 5552 EVALUATION OF ORAL COMMUNICATION DISORDERS (4)**  
 PR: Admission to the program or CI. The administration, evaluation, and reporting of diagnostic tests and procedures used in assessment of speech and language disorders.
- SPA 5558 METHODS FOR ORAL COMMUNICATION DISORDERS (4)**  
 PR: CI. An in-depth analysis of classic and contemporary methods employed int he management of communicatively impaired individuals.
- SPA 5600 MANAGEMENT OF COMMUNICATION DISORDERS (3)**  
 PR: CI. The planning of programs for individuals with speech, language, and hearing impairments. Includes administration of programs in public schools, clinics, and private practice.

- SPA 6106 NEUROLOGICAL CORRELATES OF LANGUAGE (3)**  
PR: CC or delegate. Review of the anatomy and physiology of the nervous system. Discuss neurological correlates or receptive and expressive language in verbal and non-verbal transmission and feedback.
- SPA 6232 CEREBRAL PALSY (3)**  
PR: CI. A study of the medical, physical, occupational, speech, language, and hearing problems of the cerebral palsied. Therapy techniques are reviewed and evaluated.
- SPA 6245 CLEFT PALATE (3)**  
PR: CI. An indepth study of speech, lanaguage, and hearing problems associated with cleft lip and cleft palate. Consideration is given to a multidisciplinary approach to therapy and rehabilitation.
- SPA 6305 CHILD AUDIOLOGY (3)**  
PR: SPA 5312. 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.
- SPA 6322 TECHNIQUES OF AUDITORY TRAINING AND SPEECH READING (4)**  
PR: CI. A careful analysis of the visual and auditory sense modalities as input systems used to facilitate communication in the hearing impaired. Methods employed in the habilitation of both modalities will be presented.
- SPA 6326 PROCEDURES AND MATERIALS FOR THE HEARING IMPAIRED (3)**  
PR: Major in Aural (Re)Habilitation or CI. Curricular adaptation, methods and techniques, organization necessary for the teaching the hearing impaired.
- SPA 6329 READING FOR THE HEARING IMPAIRED (2)**  
PR: RED 4310, RED 4515, major in Aural (Re)Habilitation and CI. Techniques and materials for teaching reading to children with auditory disorders. Evaluation and analysis of contemporary programs and methods.
- SPA 6345 HEARING AIDS (3)**  
Interpretation of hearing test data as it relates to the selection of hearing aids and the planning of rehabilitation programs for the hearing impaired.
- SPA 6354 HEARING CONSERVATION (3)**  
An investigatin 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.
- SPA 6388 ADVANCED MANUAL COMMUNICATIONS AND BASIC INTERPRETING (2)**  
PR: SPA 4333 or equivalent and CI. A continuation of basic course that expands students signing skills and presents an exposition of sign systems aimed at signing in an English language context.
- SPA 6401 PEDIATRIC LANGUAGE DISORDERS (3)**  
PR: CI. An examination of the pre-verbal and language skills of the infant and preschool child, and of the Speech Pathologist's role in the diagnosis, treatment, and as parent-trainer for these children.

- SPA 6410 APHASIA** (3)  
PR: Ci. A consideration of the neurological and psychological aspects of aphasia as they relate to communication disorders. Specific language therapy approaches are discussed and evaluated.
- SPA 6421 LANGUAGE FOR THE HEARING IMPAIRED** (4)  
PR: SPA 3020, SPA 3110, SPA 4363 or Ci. Techniques and materials of teaching language to children with auditory disorders. Evaluation and analysis of contemporary methods.
- SPA 6422 SPEECH FOR THE HEARING IMPAIRED** (4)  
PR: SPA 3020, SPA 3110, SPA 4363. Application and evaluation of techniques for teaching symbolic functioning to children with hearing impairments. Consideration of developmental and remedial aspects of reading.
- SPA 6505 PRACTICUM** (1-8)  
PR: Ci. Participation in speech pathology and audiology practicum in the University clinical laboratory and selected field settings.
- SPA 6553 ADVANCED DIFFERENTIAL DIAGNOSIS AND TREATMENT PLANNING** (3)  
PR: Ci. 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 more advanced evaluation techniques not covered in SPA 5552.
- SPA 6805 RESEARCH PROCEDURES IN SPEECH PATHOLOGY AND AUDIOLOGY** (3)  
PR: Ci. Advanced research and experimental design techniques employed in clinical and laboratory settings in speech pathology and audiology.
- SPA 6906 INDEPENDENT STUDY** (VAR.)  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- SPA 6910 DIRECTED RESEARCH** (VAR.)  
PR: GR. Master's level. Repeatable. (S/U only.)
- SPA 6930 SELECTED TOPICS** (3)  
PR: Ci. A reading program of topics in speech pathology and/or audiology conducted under the supervision of a faculty member. May be repeated three times.
- SPA 6971 THESIS: MASTER'S** (VAR.)  
Repeatable. (S/U only.)
- SPA 7931 SEMINAR IN COMMUNICATION DISORDERS** (1-4)  
PR: Ci. Seminars addressing the central research and clinical issues related to the diagnosis and treatment of communication disorders.

## CRIMINAL JUSTICE

*Acting Chairperson:* W.R. Blount; *Professors:* W.R. Blount, R. Dembro, I. Silverman, M. Silverman, L. Territo, H.J. Vetter; *Associate Professors:* J. Halsted, K.M. Heide, J.T. Reilly, M. Vega; *Assistant Professors:* R. Moore, R.M. Stanford.



- CCJ 6205 THE JUDICIAL PROCESS (3)**  
PR: CCJ 6285 or CI. Designed to equip the student with an understanding of the evolution and current features that characterize the structure and operations of county, state, and federal courts.
- CCJ 6285 LAW AND CRIMINAL JUSTICE (3)**  
An exposition of historical and contemporary legal principles, procedures, and issues as reflected in Constitutional provision, statutes, and case law.
- CCJ 6305 THEORY, PRACTICE, AND RESEARCH (3) IN CORRECTIONS**  
Examination of the complex interrelationships between theory and practice in corrections, as these are affected by empirical research and systematic program evaluation.
- CCJ 6345 SUPERVISION AND TREATMENT STRATEGIES (3)**  
Designed to acquaint the beginning graduate student with general conditions, skills, and techniques required to provide effective correctional treatment or intervention with adult and juvenile offenders.
- CCJ 6402 THEORY, PRACTICE, AND RESEARCH (3) IN LAW ENFORCEMENT**  
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.
- CCJ 6405 LAW ENFORCEMENT ADMINISTRATION (3)**  
This course is designed to examine the major elements of law enforcement administration and management. Special attention is given to the organization theory and scientific management of law enforcement agencies.
- CCJ 6455 CORRECTIONAL ORGANIZATION AND ADMINISTRATION (3)**  
This course is intended to provide a comprehensive overview of the state of the art of correctional organization and administration. This course blends together the most current information from the managerial and behavioral sciences.
- CCJ 6605 THEORETICAL APPROACHES (3) TO CRIMINAL BEHAVIOR**  
An introduction to, and comparison of, major historical and contemporary theories that seek to explain criminal behavior.
- CCJ 6705 SYSTEMATIC INQUIRY IN (3) CRIMINAL JUSTICE**  
Introduces the basic concepts, terminology, techniques, approaches, and issues in Criminal Justice research, with emphasis on relationships among theory and research, legal bibliography, and ethical issues involved in systematic inquiry.
- CCJ 6709 RESEARCH AND EVALUATION IN (3) CRIMINAL JUSTICE**  
PR: CCJ 6705. Introduction to empirical research techniques and principles, statistics, data management, and management information procedures.
- CCJ 6725 CORRECTIONAL PLANNING (3)**  
Provides an in-depth examination of urban correctional planning processes, with emphasis on personnel development, budgeting, and facility plans, and their implementation.

**CCJ 6726 LAW ENFORCEMENT PLANNING (3)**

This course will examine contemporary law enforcement planning and will focus on techniques and skills required to forecast future needs of police agencies in rapidly expanding metropolitan areas.

**CCJ 6910 DIRECTED RESEARCH (VAR.)**

PR: Master's level. Repeatable. A maximum of 3 hours may be counted toward the minimum number of hours required by the department for the Master's degree. (S/U only.)

**CCJ 6920 PRO SEMINAR IN CRIMINAL JUSTICE (1-2)**

One hour is required for all students. Provides a forum for presentation and discussion of research ideas by faculty, students, and guests, with view toward development of thesis topics. Should be taken during first semester in program.

**CCJ 6935 TOPICS IN CRIMINAL JUSTICE (3)**

PR: Graduate standing in Department of Criminal Justice. This course provides opportunity for analysis and discussion of topics of major concern in criminal justice that are not covered in regular courses. May be repeated with different subject matter.

**CCJ 6971 THESIS: MASTER'S (VAR.)**

PR: CCJ 6705. Repeatable. A maximum of six hours may be counted toward the minimum number of hours required for the Master's degree. (S/U only.)

**CCJ 6974 AREA PROJECT (3)**

PR: Graduate standing in the Department and CI. Repeatable. Required of students not using the thesis option. A maximum of three hours may be counted toward the minimum number of hours required for the Master's degree. (S/U only.) May be repeated up to 12 credit hours.

## **GEOGRAPHY**

*Chairperson:* TBA; *Professor:* D.M. Stowers; *Professor Emeritus:* H.H. Neuberger, R.H. Fuson, S.C. Rothwell; *Associate Professor:* J.W. Stafford; *Assistant Professor:* R.C. Holmes; *Courtesy Faculty Professor:* N.J. Ashford.

**GEA 6195 SEMINAR IN ADVANCED (3)****REGIONAL GEOGRAPHY**

PR: Graduate standing in Geography. Analytic study of a selected region of the world. May be repeated once for credit, but region may not be repeated.

**GEO 5065 GEOGRAPHIC LITERATURE (3)  
AND HISTORY**

PR: Senior or graduate standing in Geography, or CI. 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.

**GEO 6119 SEMINAR IN ADVANCED TECHNIQUES (3)  
AND METHODOLOGY**

PR: Graduate standing in Geography. Analytic study of a technique or investigation into an aspect of methodology. May be repeated once for credit, but topic may not be repeated.

**GEO 6209C SEMINAR IN ADVANCED (3)**

**PHYSICAL GEOGRAPHY**

PR: Graduate standing in Geography. Analytic study of a problem selected from one or more aspects of the cultural landscape (urban, political, economic, population, settlement). May be repeated once for credit.

**GEO 6428 SEMINAR IN ADVANCED (3)**

**CULTURAL GEOGRAPHY**

PR: Graduate standing in Geography. Analytic study of a problem selected from one or more aspects of the cultural landscape (urban, political, economic, population, settlement). May be repeated once for credit.

**GEO 6908 INDEPENDENT STUDY (VAR.)**

Independent study in which students must have a contract with an instructor. (S/U only.)

**GEO 6918 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**GEO 6944 INTERNSHIP IN GEOGRAPHY (3)**

PR: Graduate standing in Geography. The internship in Geography is designed to provide students the opportunity to work in an appropriate governmental agency to gain practical field experience. (S/U only.)

**GEO 6945 ACADEMIC METHODOLOGY (3)**

PR: Graduate standing in Geography. Current trends in college Geography, with the emphasis on the Junior College program. Not available to thesis students.

**GEO 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

## **GERONTOLOGY**

*Chairperson:* T.A. Rich; *Professors:* J.I. Kosberg, T.A. Rich, S.V. Saxon, H. Shepherd; *Associate Professors:* J.L. Garcia, A.S. Gilmore, W.P. Mangum, L.C. Mullins; *Assistant Professor:* K. Sohn; *Visiting Faculty (Professor):* W. Vasey; *Other Faculty:* H. Briggs, B. Burton, M.J. Etten, J.A. Giordano, J.N. Henderson, L. Leavengood.

**GEY 5620 SOCIOLOGICAL ASPECTS OF AGING (3)**

PR: CI. 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.

**GEY 5630 ECONOMICS AND AGING (3)**

PR: CI. 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.

**GEY 5642 PERSPECTIVES ON DEATH AND DYING (3)**

PR: CI. 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.

**GEY 6325 SOCIAL POLICY AND PLANNING (3)**  
**FOR GERONTOLOGISTS I**

PR: CI. This course is designed to provide an empirical and analytical base for the 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.

**GEY 6326 SOCIAL POLICY AND PLANNING FOR GERONTOLOGISTS II (3)**

PR: GEY 6325 or CI. This course builds upon the historical and background content provided in Social Policy and Planning for Gerontologists I and provides the student with a specific focus on policy analysis and development.

**GEY 6450 GERONTOLOGICAL RESEARCH AND PLANNING (3)**

PR: CI. 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.

**GEY 6455 GERONTOLOGICAL RESEARCH AND PLANNING II (3)**

PR: CI. As a continuation of GEY 6450, this course will center on quantitative methodology as it applies to the field of Gerontology. It will be aimed at preparing the student for more advanced data analysis.

**GEY 6456 NEEDS ASSESSMENT AND PROGRAM PLANNING (3)**

PR: GEY 6325, GEY 6450 or CI. Methods and techniques for assessing needs of older persons and evaluating programs designed to meet their needs. May not be repeated.

**GEY 6500 SEMINAR IN PRINCIPLES OF ADMINISTRATION I (3)**

PR: CI. 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.

**GEY 6501 SEMINAR IN PRINCIPLES OF ADMINISTRATION II (3)**

PR: GEY 6500 or CI. This advanced seminar in administration builds upon GEY 6500. It will examine sophisticated administrative processes and methods of organizational change and development. May not be repeated.

**GEY 6600 PHYSICAL AND PSYCHOLOGICAL ASPECTS OF AGING (3)**

Study of normal functioning of major organ systems of the body and basic psychological processes as related to the aging process, changes in functioning in perceptual, motor, and cognitive areas from the developmental perspective.

**GEY 6612 MENTAL HEALTH AND AGING (3)**

PR: CI. Emphasizes knowledge and understanding of the basic concepts of mental health and aging and presents a positive approach to the mental well-being of older adults.

**GEY 6613 PHYSICAL CHANGE, BEHAVIOR, AND AGING (3)**

PR: CI. 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.

**GEY 6614 PSYCHOPATHOLOGY AND AGING I (3)**

PR: CI. Examination of the basic principles of abnormal psychopathology and basic concepts of psychopathology. Major theories about behavior and behavior change will be explored. Common gerontological mental health issues will be studied with particular focus upon adjustment to change and loss.

**GEY 6615 PSYCHOPATHOLOGY AND AGING II (3)**

PR: GEY 6614 or CI. This course is a continuation of Psychopathology and Aging I. It will familiarize the student with the Psychopathology of aging. Major topics in the DSM-III will be covered.

**GEY 6616 MENTAL HEALTH ASSESSMENT OF OLDER ADULTS (3)**

PR: CI. Designed to provide the mental health counselor with a basic understanding of evaluation principles and the application of assessment approaches to older adults.

**GEY 6617 GERONTOLOGICAL MENTAL HEALTH COUNSELING I (3)**

PR: CI. Examination of mental health treatment modalities and approaches to counseling with older adults. Personality theories and their relationship to counseling will be included. Development of a treatment plan through integration of assessment data will be emphasized.

**GEY 6618 GERONTOLOGICAL MENTAL HEALTH COUNSELING II (3)**

PR: GEY 6617 and CI. 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.

**GEY 6619 MENTAL HEALTH SYSTEMS (3)**

An examination of community resources at the local, state and national levels. Methods of linking the mental health system to other systems will be explored. Issues of advocacy, competency, guardianship, ethics, and prevention will be addressed.

**GEY 6901 DIRECTED READING (1-4)**

PR: CI. A reading program of selected topics under the supervision of a faculty member. May be repeated up to 4 credit hours. (S/U only.)

**GEY 6910 DIRECTED RESEARCH (1-4)**

PR: CI. Master's level. May be repeated up to 4 credit hours. (S/U only.)

**GEY 6934 SPECIAL TOPICS IN GERONTOLOGY (3)**

PR: CI. Courses on topics such as pre-retirements, mental health, human services organization, and senior center administration. May be repeated for credit with different subject matter up to 6 credit hours.

**GEY 6940 FIELD PLACEMENT (6)**

PR: CI. Internship in an agency or setting. An assignment to an agency or organization engaged in planning or administering programs for older people or in providing direct services to older people. (S/U only.)

**GEY 6941 FIELD PLACEMENT IN MENTAL HEALTH (6)**

PR: CI. A highly structured supervised counseling experience providing mental health services to older adults. (S/U only.)

**GEY 6971 THESIS: MASTER'S**  
PR: Cl. Repeatable. (S/U only.)

(VAR.)

## HISTORY

*Chairperson:* James M. Swanson; *Graduate Research Professor:* L.A. Perez, Jr.; *Professors:* J.B. Belohlavek, C.B. Currey, S.F. Lawson, G.H. Mayer; *Professor Emeritus:* J.W. Silver; *Associate Professors:* R.O. Arsenault, T.P. Dilkes, N.A. Hewitt, R.P. Ingalls, G.H. Kleine, G.R. Mormino, K.A. Parker, E.M. Silbert, J.M. Swanson; *Assistant Professors:* D.R. Carr, W.M. Murray, G.K. Tipps, R.J. Van Neste.

**HIS 5215 HISTORY WRITING** (2)

A course for graduate and advanced undergraduates to combine library, archival and research skills with an examination of various writing styles. Analytic and synthetic skills are stressed in writing articles, reviews and essays.

**HIS 6085 INTERNSHIP IN HISTORY** (1-4)

PR: Cl. Supervised field placement in a local agency involved in historical planning and preservation. Students will receive practical experience in the fields of archival management, architectural preservation, and state and local research. (S/U only.)

**HIS 6112 ANALYSIS OF HISTORICAL KNOWLEDGE** (4)

PR: Graduate standing. 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.

**HIS 6908 INDEPENDENT STUDY** (VAR.)

PR: Cl. Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)

**HIS 6914 DIRECTED RESEARCH** (VAR.)

PR: Cl. Master's level. Repeatable. (S/U only.)

**HIS 6925 COLLOQUIUM IN HISTORY** (4)

PR: Cl. A readings and discussion course 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. Repeatable as topics vary.

**HIS 6939 SEMINAR IN HISTORY** (4)

PR: Cl. Research in selected topics within the fields selected by the instructor. Repeatable as topics vary.

**HIS 6971 THESIS: MASTER'S** (VAR.)

Repeatable. (S/U only.)

## HUMAN SERVICES

*Coordinator:* T.A. Rich; *Professors:* J.I. Kosberg, T.J. Northcutt, Jr., S.V. Saxon; *Associate Professors:* J.L. Garcia, A.S. Gilmore, W.P. Mangum; *Visiting Faculty Professor:* W. Vasøy; *Other Faculty:* B. Burton, J.A. Giordano.

**HUS 5325 INTERVENTION TECHNIQUES** (3)

PR: HUS 3001 or Cl. Attention will be given to techniques of intervention at individual, small group, and community levels. The need for crisis intervention program in modern society.

## POLITICAL SCIENCE

*Chairperson:* J.E. Benton; *Professors:* R.L. Bowman, R.A. Factor, H.E. Vanden; *Associate Professors:* J.E. Benton, W.E. Hulbary, A.E. Kelley, A.B. Levy, D. Paulson, P.N. Rigos; *Assistant Professors:* M.T. Gibbons, R. Khator, M.M. Milani, G.L. Zuk; *Other Faculty:* M. Amen, K. Glover, S.A. MacManus, H. Nelsen, D. Slider, J.B. Snook, S. Stoudinger.

**CPO 5934 SELECTED TOPICS IN COMPARATIVE POLITICS (3)**

Studies specific substantive areas in Comparative Politics, such as political economy or the politics of specific countries or regions. May be repeated for credit as topics vary.

**CPO 6007 SEMINAR IN COMPARATIVE POLITICS (3)**

Extensive examination of the major theories and approaches used in the study of Comparative Politics. Seminar format.

**CPO 6036 POLITICS OF DEVELOPING AREAS (3)**

Advanced study of ideologies, politics, political institutions, and the socio-economic conditions that influence them in developing nations.

**INR 5088 ISSUES IN INTERNATIONAL RELATIONS (3)**

Explores specific topics and provides the student with an opportunity for indepth study of historical and contemporary problems in international politics. May be repeated for credit as topics vary.

**INR 6007 SEMINAR IN INTERNATIONAL RELATIONS (3)**

Advanced study of international relations, including survey of basic literature, analysis of numerous theoretical and methodological approaches, and analysis of major issues.

**INR 6036 SEMINAR IN INTERNATIONAL POLITICAL ECONOMY (3)**

PR: POS 5734 or Cl. 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.

**INR 6107 AMERICAN FOREIGN POLICY (3)**

Objectives, formulation, and execution of foreign policy; critical issues and problems confronting the United States. Study of various conceptual, methodological, and theoretical approaches.

**POS 5094 ISSUES IN AMERICAN NATIONAL AND STATE GOVERNMENT (3)**

Selected topics of study in American Government. May be repeated for credit as topics vary.

**POS 5155 ISSUES IN URBAN GOVERNMENT AND POLITICS (3)**

Selected issues and topics in Urban Government and Politics. May be repeated for credit as topics vary.

**POS 5734 POLITICAL RESEARCH METHODS (3)**

PR: POS 3713 or equivalent. A graduate level, introductory survey of empirical research methodology, including statistics and computer data analysis. Topics include measurement, sampling, research design, and selected bivariate analysis techniques.

- POS 6045 SEMINAR IN AMERICAN GOVERNMENT & POLITICS** (3)  
Advanced study of selected topics of institutions and processes of American national government and politics.
- POS 6095 SEMINAR IN INTERGOVERNMENTAL RELATIONS** (3)  
Advanced study of selected topics of institutions, processes, and behavior of American state governments and Florida government. May be repeated as topics vary.
- POS 6127 ISSUES IN STATE GOVERNMENT AND POLITICS** (3)  
Advanced study of selected topics in institutions, processes, and behavior of American state governments and Florida government. May be repeated as topics vary.
- POS 6157 SEMINAR IN URBAN GOVERNMENT AND POLITICS** (3)  
Analysis of literature with emphasis on urban political behavior, development of various theories, and propositions regarding governmental structure and the formation and implementation of public policy.
- POS 6247 ISSUES IN POLITICAL BEHAVIOR AND SOCIALIZATION** (3)  
Advanced study of selected topics in political behavior and socialization, including participation and activism, voting, public opinion, and leadership. May be repeated as topics vary.
- POS 6415 THE AMERICAN PRESIDENCY** (3)  
Analysis of problems and powers of the modern Presidency with emphasis on crisis management, staffing, legislative leadership, and decision making.
- POS 6427 THE LEGISLATIVE PROCESS** (3)  
Analysis of formal and informal decision-making processes in legislative bodies, with emphasis on U.S. House of Representatives and U.S. Senate. Executive-legislative conflict and cooperation; input/output analysis.
- POS 6455 POLITICAL PARTIES AND INTEREST GROUPS** (3)  
Analysis of statutes, functions, and characteristics of political parties and interest groups, as well as their interactions with political processes, actors, and institutions.
- POS 6607 CONSTITUTIONAL LAW** (3)  
PR: Graduate standing or CI. Advanced study of legal, political, philosophic, and methodological problems in constitutional law.
- POS 6698 SEMINAR IN LAW AND POLITICS** (3)  
PR: Graduate standing. Advanced study of institutions and processes in the field of law and politics. May be repeated as instructor and content vary.
- POS 6706 SCOPE AND METHODS OF POLITICAL SCIENCE** (3)  
Introduction to advanced study; the major approaches and methodologies for acquiring political knowledge, intellectual foundations, and applications in various subfields.



**POS 6909 INDEPENDENT STUDY (1-3)**

PR: 3.0 average in Political Science. Specialized independent study determined by the student's needs and interests and with the consent of the instructor. (S/U only.)

**POS 6919 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

**POS 6934 SELECTED TOPICS IN POLITICAL SCIENCE (3)**

Selected topics, issues, and problems in political science for advanced graduate students. May be repeated for credit as topics vary.

**POS 6942 FIELD WORK IN POLITICAL SCIENCE (1-3)**

PR: 3.0 average in Political Science and CI. Application of research models now employed in governmental agencies, including development of a structured research proposal.

**POS 6971 THESIS: MASTER'S (VAR.)**

Repeatable. (S/U only.)

**POT 5626 ISSUES IN POLITICAL PHILOSOPHY AND LAW (3)**

PR: Graduate or senior standing and CI. Selected topics in political philosophy and law. May be repeated as topics vary.

**POT 6007 SEMINAR IN POLITICAL THEORY (3)**

PR: Graduate standing or CI. Provides students who are capable of independent work with the opportunity to explore advanced problems of political theory.

**PUP 5607 PUBLIC POLICY AND HEALTH CARE (3)**

The study of health care policy as it relates to the policy process in the American setting.

**URP 6056 CITY AND REGIONAL PLANNING (3)**

A review of goals, objectives, and interrelationships between regional and city planning; intergovernmental and policy issues. (Also offered under Public Administration.)

## **PSYCHOLOGY**

*Chairperson:* L.A. Penner; *Graduate Research Professors:* H.D. Kimmel, C.D. Spielberger; *Professors:* J.M. Anker, J.L. Brown, E.L. Gesten, M.S. Goldman, M.W. Hardy, J.J. Jenkins, R.C. LaBarba, E.L. Levine, H.H. Meyer, C.E. Nelson, D.L. Nelson, L.A. Penner, R.W. Powell, W.A. Russell, J. Sandler, J.B. Sidowski, F. Sistrunk, D.E. Stenmark, P.N. Strong; *Associate Professors:* J.A. Becker, J.M. Clingman, S.B. Filskov, M.A. Finkelstein, R.L. Fowler, S.J. Garcia, B.N. Kinder, D. McGuinness, W.P. Sacco, P.E. Spector; *Assistant Professors:* M. Brannick, M.D. Coover, T. Sanocki, J.K. Thompson; *Other Faculty:* D. Anderson, W.D. Anton, W.R. Biersdorf, P.W. Drash, D.A. Eberly, R. Friedman, A. Gessner, E.B. Kimmel, W. McReynolds, T.A. Rich, J.A. Schinka, H.H. Smith, Jr., H.J. Vetter, C. Wheaton, J.H. Williams, L. Zheutlin, J. Zusman.

**CLP 6166 PSYCHOPATHOLOGY (3)**

PR: Admission to graduate program in Psychology or CI. Exploration of current approaches to the understanding of pathological behavior and implications for theories of personality. A survey of treatment methods is included.

**CLP 6438 PSYCHOLOGICAL ASSESSMENT (3)**

PR: Cl. Courses cover theory, research, and applications of psychological assessment in areas such as interviewing, intellectual and cognitive functioning, neuropsychological diagnostics, and personality testing. May be repeated for credit with different subject matter.

**CLP 6937 TOPICS IN CLINICAL-COMMUNITY PSYCHOLOGY (3)**

PR: Cl. Courses on topics such as humanistic psychology, community psychology, and clinical neuropsychology. May be repeated for credit with different subject matter.

**CLP 7188 PSYCHOTHERAPY AND BEHAVIOR CHANGE (3)**

PR: Cl. Study of the theoretical, empirical, and applied foundations of the major systems of therapeutic intervention. May be repeated for credit with different subject matter.

**CLP 7379 GRADUATE SEMINAR IN CLINICAL-COMMUNITY PSYCHOLOGY (1-3)**

PR: Cl. Seminars on topics such as psychopathology, community psychology, clinical issues, personality, and developmental psychology. May be repeated for credit with different subject matter.

**DEP 6058 DEVELOPMENTAL PSYCHOLOGY (2)**

PR: Admission to graduate program in Psychology or Cl. Basic survey of research and theory in human development with an emphasis on early developmental processes. Core requirement for all graduate students in Psychology.

**DEP 6136 LANGUAGE DEVELOPMENT (3)**

PR: Admission to graduate program in Psychology or Communicology or Cl. Explores the course of and processes underlying normal language development. Presents data and theory on phonological, semantic, syntactic, and pragmatic development, with an emphasis on recent research.

**EXP 6208 PERCEPTION (3)**

PR: Admission to graduate program in Psychology or Cl. Current data and theory of perceptual processes. Consideration of psychological variables in perception, and applications of information theory and signal detection theory.

**EXP 6307 MOTIVATION AND EMOTION (3)**

PR: Cl. A detailed examination of human motivation and emotion from both the physiological and psychological viewpoints.

**EXP 6406 LEARNING (2)**

PR: Admission to graduate program in Psychology or Cl. Survey of research methods, results, and theories in animal and human classical and instrumental (operant) conditioning. Core requirement for all graduate students in Psychology.

**EXP 6526 HUMAN MEMORY (3)**

PR: Admission to graduate program in Psychology or Cl. Review of methods, findings, and theoretical interpretations associated with the acquisition and retention of information.

**EXP 6608 COGNITIVE PSYCHOLOGY (2)**

PR: Admission to graduate program in Psychology or Cl. A survey of the research and theory dealing with higher mental processes. Core requirement for all graduate students in Psychology.

**EXP 6930 TOPICS IN EXPERIMENTAL PSYCHOLOGY (3)**

PR: Cl. Electrophysiological methods, and psychophysiology. May be repeated for credit with different subject matter.

**EXP 7099 GRADUATE SEMINAR IN EXPERIMENTAL PSYCHOLOGY (1-3)**

PR: Cl. Seminars on topics such as learning, perception, memory, cognitive processes, and quantitative methods. May be repeated for credit with different subject matter.

**INP 6056 INDUSTRIAL PSYCHOLOGY (3)**

PR: Admission to graduate program in Psychology or Cl. An introduction to the major areas of Industrial-Organizational Psychology including the topics of selection and placement, training, criterion development and performance appraisal, job satisfaction and motivation, and organizational theory and structure.

**INP 6935 TOPICS IN INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY (3)**

PR: Cl. Courses on topics such as industrial psychology, evaluation of performance in industry, and human factors. May be repeated for credit with different subject matter.

**INP 7097 GRADUATE SEMINAR IN INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY (1-3)**

PR: Cl. Seminars on topics such as industrial psychology, evaluation of performance in industry, and human factors. May be repeated for credit with different subject matter.

**PPE 6058 PERSONALITY (2)**

PR: Admission to graduate program in Psychology or Cl. Survey of research and theories of personality, including its relationship to the development of normal and abnormal behavior. Core requirement for all graduate students in Psychology.

**PSB 6056 PHYSIOLOGICAL PSYCHOLOGY (2)**

PR: Admission to graduate program in Psychology or Cl. Introduction to data and research methods in Physiological Psychology. Topics include neurophysiology and neuroanatomy, sensory and motor systems, and internal regulation. Core requirement for all graduate students in Psychology.

**PSY 6217 RESEARCH METHODS AND MEASUREMENT (4)**

PR: Cl. Courses in research strategies, design and analysis, and measurement theory in psychological experimentation. Inferential statistics, anova correlation methods, and interpretation. May be repeated for credit with different subject matter.

**PSY 6218 GRADUATE RESEARCH METHODS (1-3)**

Special course to be used primarily for the training of graduate research assistants. Variable credit, repeatable. Limited to a cumulative total of 5 credits per student. (S/U only.)

**PSY 6907 INDEPENDENT STUDY (VAR.)**

Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**PSY 6917 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

- PSY 6946 PRACTICUM AND INTERNSHIP IN CLINICAL PSYCHOLOGY** (1-15)  
PR: Cl. Supervised training in community and university settings in the application of Psychology. May be repeated for credit.
- PSY 6947 GRADUATE INSTRUCTION METHODS** (1-3)  
Special course to be used primarily for the training of graduate teaching assistants. Variable credit, repeatable. Limited to a cumulative total of 5 credits per student. (S/U only.)
- PSY 6971 THESIS: MASTER'S** (VAR.)  
Repeatable. (S/U only.)
- PSY 7780 PROGRAM EVALUATION** (3)  
PR: PSY 6217 A & B or Cl. CLP 6348, SOP 6669 desirable. An overview of principles and practices of program evaluation, including historical background, purposes and methods, planning and implementation, political context, ethics, and utilization.
- PSY 7908 DIRECTED READINGS IN PSYCHOLOGY** (1-15)  
PR: Cl. 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. May be repeated for credit.
- PSY 7918 DIRECTED RESEARCH** (VAR.)  
PR: GR. Ph.D. level. Repeatable. (S/U only.)
- PSY 7931 SEMINAR IN ETHICS AND PROFESSIONAL PROBLEMS** (2)  
PR: Second year in Ph.D. program in Psychology or Cl. Ethical issues and professional problems in the practice of psychology.
- PSY 7980 DISSERTATION: DOCTORAL** (VAR.)  
PR: Must be admitted to Doctoral Candidacy. Repeatable. (S/U only.)
- SOP 8059 SOCIAL PSYCHOLOGY** (2)  
PR: Admission to graduate program in Psychology or Cl. Introduction to theory and research in social psychology. Topics include social recognition, social influence, attitudes, interpersonal interactions, and group behavior. Core requirement for all graduate students in Psychology.
- SOP 6669 TOPICS IN SOCIAL-ORGANIZATIONAL PSYCHOLOGY** (3)  
PR: Cl. Courses on topics such as experimental social psychology, organizational psychology, attitudes, and group process. May be repeated for credit with different subject matter.
- SOP 7609 GRADUATE SEMINAR IN SOCIAL-ORGANIZATIONAL PSYCHOLOGY** (1-3)  
PR: Cl. Seminars on topics such as social psychology, scientific communications, and decision making. May be repeated for credit with different subject matter.

## **PUBLIC ADMINISTRATION**

*Director:* D.C. Menzel; *Professors:* J.E. Jreisat, S.A. MacManus, D.C. Menzel; *Associate Professors:* J.C. Renick, F.W. Swierczek; *Assistant Professors:* J.L. Daly, P.T. Paluch.

**PAD 5035 ISSUES IN PUBLIC ADMINISTRATION (3)**  
**PUBLIC POLICY**

Selected issues and topics in Public Administration and Public Policy. May be repeated for credit as topics vary.

**PAD 5333 CONCEPTS AND ISSUES IN PUBLIC (3)**  
**PLANNING**

PR: URP 4050 or URP 6056. Analysis of basic concepts, issues, and strategies of planning, policy determination, collection of information, and decision-making.

**PAD 5605 ADMINISTRATIVE LAW (3)**

An examination of the constitutional and statutory bases and limitations of the administrative process, administrative adjudication, rule making, and the judicial review of such actions.

**PAD 5812 ADMINISTRATIVE REGULATION (3)**

Analysis of the regulatory functions and processes in the American political system: regulatory commissions, their functions, powers, management, reforms, and relationship with other branches of government.

**PAD 5700 RESEARCH METHODS IN PUBLIC (3)**  
**ADMINISTRATION**

This course provides the student with the fundamental skills and knowledge of how research is designed, implemented, analyzed, and utilized in public sector agencies. Available to majors and non-majors.

**PAD 5807 ADMINISTRATION OF URBAN AFFAIRS (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.

**PAD 5836 COMPARATIVE PUBLIC ADMINISTRATION (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.

**PAD 6037 BUREAUCRACY AND PUBLIC POLICY (3)**

Analysis of the formal, informal, and societal characteristics of public bureaucracies. A study of the implementation of public policy by bureaucratic agencies.

**PAD 6044 ENVIRONMENT OF PUBLIC ADMINISTRATION (3)**

Examination of the legal, political, and ethical environment in which public managers work. Majors and non-majors.

**PAD 6060 PUBLIC ADMINISTRATION THEORY (3)**

Examination of major theoretical and practical developments in Public Administration with focus on organization theory and current research trends in the field.

**PAD 6101 PUBLIC ORGANIZATIONS (3)**

An indepth study of the nature of public organizations, with emphasis on the structure and process of modern bureaucracy. Topics include com-

parison of private and public organizations and sources of organizational change. Majors and non-majors.

- PAD 6105 PUBLIC ORGANIZATION CHANGE (3)**  
Introduction to problems, diagnosis, strategies, and methodology of changing public organizations.
- PAD 6207 PUBLIC FINANCIAL ADMINISTRATION (3)**  
Examination of the fiscal organization of federal, state and local governments. Current problems in budgeting, revenue and indebtedness are considered.
- PAD 6221 PUBLIC BUDGETING (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. Majors and non-majors.
- PAD 6222 ISSUES IN FLORIDA—  
BUDGETING AND FINANCE (3)**  
Selected issues in public financial management and budgeting related to state agencies or local governments in Florida. Majors and non-majors.
- PAD 6306 URBAN POLICY ANALYSIS (3)**  
Examination of the organizational and administrative aspects of planning, program development, reporting, and evaluation at local level by state, regional, and other agencies.
- PAD 6307 POLICY ANALYSIS (3)**  
An introduction to the systematic analysis of public problems, solutions, alternatives, and consequences. The role of the policy analyst/manager is also examined. Majors and non-majors.
- PAD 6312 POLICY DESIGN (3)**  
The design of public policies and programs, including techniques to assess problems, alternatives, and consequences. Topics include problem analysis, needs assessment, goal setting, cost-effectiveness, and control/monitoring techniques. Majors and non-majors.
- PAD 6327 PUBLIC PROGRAM EVALUATION (3)**  
Focus on program cycle-planning, development, implementation and evaluation, needs assignment, goal setting, designing alternative program structures, and grant writing.
- PAD 6365 POLICY AND PROGRAM IMPLEMENTATION (3)**  
The factors and conditions that explain why public policies are implemented in a more or less successful way. Attention is also given to how public managers can be effective implementators. Majors and non-majors.
- PAD 6417 PUBLIC PERSONNEL MANAGEMENT (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.
- PAD 6427 PUBLIC SECTOR LABOR RELATIONS (3)**  
A political-legal approach to understanding public sector collective bargaining in the United States. Topics include civil service reform, affirmative action, and equal employment opportunity. Majors and non-majors.
- PAD 6703 QUANTITATIVE AIDS FOR PUBLIC MANAGERS (3)**  
PR: POL 5734, SOC 6526, or CI. Survey of techniques and models used in analyzing managerial/policy problems. Topics include microcomputer

applications of statistical techniques, cost-benefit analysis, decision theory, linear programming, PERT, and Delphi. Majors and non-majors.

**PAD 6710 COMPUTER APPLICATIONS IN PUBLIC ADMINISTRATION (3)**

Introduction to computers and information management systems in public sector organizations. Topics include microcomputers, data management, structured systems analysis, algorithm development, data base design concepts, and design support systems. Majors and non-majors.

**PAD 6907 INDEPENDENT STUDY (1-3)**

PR: Cl. A flexible format for conceptual or theoretical studies in public administration. Majors and non-majors. May be repeated up to 4 credit hours. (S/U only.)

**PAD 6909 PROBLEM REPORT (3)**

Analysis of a significant administrative or policy problem facing a public agency or manager. Majors only.

**PAD 6915 DIRECTED RESEARCH (1-3)**

PR: Cl. A flexible format for structured field research in Public Administration. Majors and non-majors. May be repeated up to 6 credit hours. (S/U only.)

**PAD 6926 GRADUATE COLLOQUIUM (1)**

Variable topics in public affairs and administration using guest lectures and student-practitioner-faculty panels. May be repeated as topics vary. Majors and non-majors. (S/U only.)

**PAD 6934 SELECTED TOPICS IN PUBLIC ADMINISTRATION (1-4)**

A flexible format to offer specialized courses not available within the regular curriculum. Majors and non-majors. May be repeated as topics vary.

**PAD 6935 ADVANCED STUDY IN PUBLIC ADMINISTRATION (3)**

PR: Doctoral level standing or 6 credits in PAD. A variable topics course intended for doctoral level students in related fields and master's level students who wish to pursue a Ph.D. in Public Administration. May be repeated as topics vary. Majors and non-majors.

**PAD 6946 INTERNSHIP IN PUBLIC ADMINISTRATION (4-6)**

PR: Cl. Structured learning and work experience in a public agency or non-profit organization. Majors only. May be repeated up to 6 credit hours. (S/U only.)

**URP 5131 IMPLEMENTATION MEASURES IN URBAN/REGIONAL PLANNING (3)**

Basic legal concepts of land-use planning and implementation, with the use of legal reference materials and academic works; zoning, subdivision regulation, public uses, and environmental issues. Majors and non-majors. Cross-listed with Political Science.

**URP 6056 CITY AND REGIONAL PLANNING (3)**

A review of goals, objectives, and interrelationships between regional and city planning; intergovernmental and policy issues. Majors and non-majors. Cross-listed with Political Science.

## REHABILITATION COUNSELING

*Chairperson:* C.M. Pinkard; *Professors:* W.G. Emener, J.D. Rasch; *Associate Professors:* J.F. Dickman, P. Gross, M.J. Landsman, C.M. Pinkard, T.J. Wright.

**EGC 5065 REHABILITATION: CONCEPTS AND THEORETICAL ISSUES (4)**

An introduction to the rehabilitation process in the public and private sector. An integration of concepts and procedures from the medical, socio-psychological, and human service disciplines.

**EGC 5376 MEDICAL ASPECTS OF DISABILITY (4)**

A survey of medical conditions and disabilities encountered by rehabilitation counselors. Examines the relationship of client handicaps to rehabilitation programming.

**EGC 5493 SEMINAR IN PRINCIPLES AND PRACTICES OF REHABILITATION COUNSELING I (3)**

PR: CI. Counseling and case management procedures appropriate to meeting the needs of handicapped individuals in the rehabilitation process. Must be taken concurrently with EGC 5850. (S/U only.)

**EGC 5496 THEORETICAL ISSUES IN APPLIED ALCOHOL ABUSE REHABILITATION COUNSELING (4)**

PR: CI. An information approach to alcohol abuse. Explores the extent and rate of abuse in the United States, causes of alcoholism, biology of alcoholism, psychosocial aspects, legal aspects, and treatment.

**EGC 5725 INTERPERSONAL ASPECTS OF REHABILITATION COUNSELING I (4)**

PR: CI. Focuses on the utilization of one's self in the counseling relationship. Emphasis is on the experiential exploration and development of interpersonal skills.

**EGC 5850 PRACTICUM I (1)**

PR: CI. Supervised experience and participation in counseling in a variety of rehabilitation settings. Must be taken concurrently with EGC 5493. (S/U only.)

**EGC 5905 DIRECTED STUDIES (1-4)**

PR: CI. Supervised rehabilitation studies relevant to student's professional development. May be repeated for a maximum of 8 hours credit.

**EGC 6205 EVALUATION IN THE REHABILITATION PROCESS (4)**

PR: CI. Examines assessment procedures utilized in the rehabilitation process and critical issues in the evaluation of the handicapped.

**EGC 6374 VOCATIONAL EVALUATION AND ADJUSTMENT SERVICES OF THE HANDICAPPED AND DISADVANTAGED (4)**

An introduction to various systems of vocational evaluation including samples, situation assessment, and on-the-job evaluation. Includes adjustment services.

**EGC 6375 PLACEMENT METHODS AND PROCESSES (4)**

PR: CI. An in-depth examination of placement methods and processes with handicapped individuals. Includes a survey of work requirements in different occupations and how these relate to specific functional limitations.



- EGC 6468 PSYCHOSOCIAL ASPECTS OF DISABILITY IN REHABILITATION COUNSELING (4)**  
PR: Cl. Personal, social, psychological, and environmental aspects of disability in America relevant to rehabilitation counseling with handicapped individuals.
- EGC 6470 PRACTICUM IN APPLIED ALCOHOL ABUSE IN REHABILITATION COUNSELING (4)**  
PR: EGC 5496. An extension of EGC 5496 with emphasis on field work in alcoholism and alcoholism treatment.
- EGC 6494 SEMINAR IN PRINCIPLES AND POLICIES OF REHABILITATION COUNSELING II (3)**  
PR: EGC 5493, EGC 5850. Continuation of EGC 5493. Must be taken concurrently with EGC 6851. (S/U only.)
- EGC 6497 THEORETICAL AND EXPERIENTIAL APPROACHES TO COUNSELING THE ALCOHOL ABUSER (4)**  
PR: EGC 5496 and Cl. An extension of EGC 5496 with emphasis on experiential approaches to counseling the alcohol abuser.
- EGC 6566 GROUP WORK IN REHABILITATION COUNSELING (4)**  
PR: Cl. Theoretical and empirical issues of group process are examined in the context of an ongoing group. Emphasis is on application to counseling.
- EGC 6727 INTERPERSONAL ASPECTS OF REHABILITATION COUNSELING II (4)**  
PR: EGC 5725. An extension and intensification of skills developed in EGC 5725.
- EGC 6767 RESEARCH REHABILITATION (4)**  
PR: Cl. The evaluation and utilization of available research studies and the development of research skills. An individual research project is required.
- EGC 6851 PRACTICUM II (1)**  
PR: EGC 5493, EGC 5850. Continuation of EGC 5850. Must be taken concurrently with EGC 6494. (S/U only.)
- EGC 6885 INTERNSHIP IN REHABILITATION (8)**  
PR: Cl. Student placement in an approved intern setting for a minimum of 600 hours of supervised experience. (S/U only.)
- EGC 6906 INDEPENDENT STUDY (VAR.)**  
Independent study in which students must have a contract with an instructor. Repeatable. (S/U only.)
- EGC 6915 DIRECTED RESEARCH (VAR.)**  
PR: GR. Master's level. Repeatable. (S/U only.)
- EGC 6934 SEMINAR IN REHABILITATION COUNSELING (1-4)**  
PR: Cl. Selected issues and problems in rehabilitation counseling with subject and scope to be determined by instructor. May be repeated for credit with different content.
- EGC 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)

## INTERDISCIPLINARY SOCIAL SERVICES

*Director:* K.R. Glover; *Professors:* C.W. Amade, L.L. McAlister, H.W. Nelson, J. Ochshorn, F.U. Ohaegbulam, M.T. Orr, S.M.D. Stamps, Jr., J.H. Williams; *Associate Professors:* N.A. Allen, M.M. Amen, K.R. Glover, A. Hechiche, M. Myerson, D. Slider, J.B. Snook, S.M. Stoudinger; *Assistant Professor:* E.B. Breit.

### ISS 5934 SELECTED TOPICS (1-3)

PR: CI plus senior standing or graduate status. Interdisciplinary studies with course content dependent on student demand and instructor's interest. May be repeated as topics vary.

### ISS 6900 DIRECTED READING (1-3)

PR: CI and graduate status. A supervised program of intensive reading of interdisciplinary materials of specific interest. May be repeated.

### ISS 6910 DIRECTED RESEARCH (VAR.)

PR: GR. Master's level. Repeatable. (S/U only.)

## SOCIAL WORK

*Chairperson:* P.L. Smith; *Professor:* T.J. Northcutt, Jr.; *Associate Professors:* J.A. Giordano, T.U. Hancock, W.S. Hutchison, Jr., P.L. Smith, R.J. Wilk, B.L. Yegidis; *Assistant Professors:* E.B. Breit, K. Sohn, R.L. White; *Visiting Faculty:* W. Vasey; *Courtesy Faculty:* J.I. Kosberg (*Professor*); D. Boone, A.J. Floyd (*Associate Professors*); M.L. Coulter, P.A. d'Oronzio, A.E. Thomas (*Assistant Professors*); L. Middleton (*Instructor*).

### SOW 5930 SELECTED TOPICS IN SOCIAL WORK (1-4)

Restricted to Social Work majors, both graduate and undergraduate; other by Department permission. Course is taken as an elective. Various title course will selectively expand specific social work content areas. May be repeated in varying topic areas.

### SOW 6103 FOUNDATIONS IN HUMAN BEHAVIOR (3)

PR: CC. 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.

### SOW 6104 INDIVIDUAL GROWTH AND DEVELOPMENT THEORY (2)

PR: CC. This course presents various theoretical perspectives in individual growth and development commonly used in clinical practice with individuals, families and groups. Ethnic, cultural and lifestyle differences in normative development will be addressed, as will the influence of poverty, resource deprivation, sexual stereotyping, and illness/disability on social functioning.

### SOW 6120 THEORETICAL PERSPECTIVES ON PHYSICAL AND MENTAL DYSFUNCTIONING (5)

PR: CC. Addresses the spectrum of psychosocial responses to disease, injury, developmental disabilities and stress of both acute and chronic nature; identifies major forms of psychopathology with focus on etiology, typical response patterns, and treatment implications.

**SOW 6126 DYNAMICS OF DYSFUNCTIONING IN CHILDREN AND YOUTH (2)**

PR: CC. Study of specific disease, injury, and stress states; etiology and typical response patterns. Parallels dysfunctional states addressed concurrently in treatment course.

**SOW 6129 DYNAMICS OF DYSFUNCTIONING IN THE ADULT AND ELDERLY (2)**

PR: CC. Study of specific dysfunctional states; etiology and typical response patterns. Parallels dysfunctional states addressed concurrently in treatment course.

**SOW 6234 FOUNDATIONS OF SOCIAL WELFARE POLICY (3)**

PR: CC. 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.

**SOW 6236 SOCIAL WELFARE POLICY ANALYSIS AND DESIGN (3)**

PR: CC. 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.

**SOW 6342 INDIVIDUAL, FAMILY AND GROUP TREATMENT I (3)**

PR: CC. Application of clinical practice to work with individuals. Psychosocial model is emphasized. Professional laboratory develops skills in practice.

**SOW 6346 FUNDAMENTALS OF SOCIAL WORK PRACTICE (3)**

PR: CC. Describes full range of social work interventions, from micro to macro. Historical development of practice methods and survey of current techniques.

**SOW 6348 THEORIES OF CLINICAL PRACTICE (2)**

PR: CC. Survey of theories for clinical practice, with emphasis on the psychosocial model. Exploration of basic skills for clinical practice.

**SOW 6356 TREATMENT METHODS WITH CHILDREN AND YOUTH (2)**

PR: CC. Differential psychosocial treatment related to various dysfunctional states with children and youth. Parallels dysfunctional states addressed in concurrent behavior course.

**SOW 6359 TREATMENT METHODS WITH ADULTS AND THE ELDERLY (2)**

PR: CC. Differential psychosocial treatment related to various dysfunctional states encountered in field with adults and the elderly. Parallels dysfunctional states addressed in concurrent behavior course.

**SOW 6362 INDIVIDUAL, FAMILY AND GROUP TREATMENT III (3)**

PR: CC. Emphasizes selection of techniques in the psychosocial model of treatment. Primary focus on family, couple, and parent-child problems. Group treatment modalities are introduced.

- SOW 6368 INDIVIDUAL, FAMILY AND GROUP TREATMENT II** (3)  
 PR: CC. Continuation of SOW 6362. Primary focus on psychosocial model of group treatment. Comparison with individual and family modality.
- SOW 6375 MACRO PRACTICE SEMINAR** (3)  
 PR: SOW 6435, SOW 6368, SOW 6535. Restricted to MSW students; other by Department permission. Studies various 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.
- SOW 6405 FOUNDATIONS OF SOCIAL WORK RESEARCH AND STATISTICS** (3)  
 PR: CC. This is the first of three research methods courses intended to introduce students to the various methods, designs, measurements and statistical techniques in social work research. Emphasis will be on group designs and their application in social work practice.
- SOW 6433 CLINICAL RESEARCH I: PRACTICE EVALUATION** (2)  
 PR: CC. This is the second in a series of three required research courses. It focuses on the conduct of single subject research for the purpose of evaluating the social worker's interventions.
- SOW 6434 CLINICAL RESEARCH II: PROGRAM EVALUATION** (2)  
 PR: CC. This is the third and final required research course. It focuses on the development and implementation of program evaluation studies by social work practitioners.
- SOW 6534 FIELD INSTRUCTION I** (4)  
 PR: CC. Supervised field instruction in a social service agency, consisting of approximately 20 hours per week, plus a 2-hour practice seminar. (S/U only.)
- SOW 6535 FIELD INSTRUCTION II** (6)  
 PR: CC. Supervised field instruction in a social service agency, consisting of approximately 32 hours per week, plus a 2-hour practice seminar. (S/U only.)
- SOW 6536 FIELD INSTRUCTION III** (4)  
 PR: CC. Supervised field instruction in a social service agency, consisting of approximately 20 hours per week, plus a 2-hour practice seminar. (S/U only.)
- SOW 6900 DIRECTED READINGS** (1-3)  
 PR: Admission to MSW program. A reading program in selected topics under supervision of a faculty member. A formal contract must be approved by departmental chair.
- SOW 6931 SELECTED TOPICS IN SOCIAL WORK** (1-4)  
 PR: CI. Restricted to MSW students; others by Department permission. Variable topic courses will selectively expand on the four sequence areas in the social work curriculum.

## SOCIOLOGY

*Chairperson:* M.B. Kleiman; *Graduate Research Professor:* S.P. Turner;  
*Professors:* W.B. Cameron, R.G. Francis, E.G. Nesman, R.H. Wheeler; *As-*

*sociate Professors:* G.A. Brandmeyer, C.S. Ellis, B.G. Gunter, R.A. Hansen, D.P. Johnson, D.L. Jorgensen, M.B. Kleiman, H.A. Moore; *Assistant Professor:* L.W. Kutcher, M. Orru, C.H. Wiswell.

**SYA 5949 SOCIOLOGICAL INTERNSHIP (1-6)**

PR: Senior or graduate standing in Sociology plus Cl. Supervised placement in community organization or agency for a minimum of 10 hours of volunteer work per week, and a weekly seminar on applying sociological skills and methods in the placement setting. May be repeated up to 6 credit hours. (S/U only.)

**SYA 6126 CONTEMPORARY SOCIOLOGICAL THEORY (3)**

PR: Undergraduate course in sociological theory or Cl. Emphasizes logical and conceptual dimensions of theory and theory construction.

**SYA 6145 TRADITION, CUSTOM, AND MORALS (3)**

PR: Graduate standing. An examination of the place of tradition, custom, and morals in social life, with special attention to politics, work, social structure, and the problems of the reproduction of social relations.

**SYA 6175 THEORIES IN COMPARATIVE HISTORICAL SOCIOLOGY (3)**

An introduction to theoretical ideas and classic texts in comparative historical sociology and closely related areas of discourse.

**SYA 6305 METHODS OF RESEARCH (3)**

PR: Course in social investigation or Cl. Logic and practice of research; problems of observation and data collection, data processing, and evaluation.

**SYA 6348 SURVEY RESEARCH I (3)**

The design and execution of a community social survey project. It is anticipated that the student will enroll in SYA 6349 (Survey Research II) the following semester to participate in analyzing the data collected in SYA 6348. (S/U only.)

**SYA 6349 SURVEY RESEARCH II (3)**

Analysis of data and writing a research report using data collected in the course in Survey Research I. It is normally expected that the student will have taken SYA 6348 the previous term. (S/U only.)

**SYA 6405 SOCIOLOGICAL STATISTICS (4)**

PR: STA 3122 or Cl. Logic and application of parametric and non-parametric statistical analysis for sociological data.

**SYA 6475 COMMUNITY ANALYSIS (3)**

PR: Course in urban sociology or Cl. Theories of community and community organization. Methods of community study; problems of urban areas.

**SYA 6505 THE COMMUNICATION OF SOCIOLOGY (1)**

PR: SYA 6305, SYA 6405, SYA 6126, or Cl. Designed to help student define and formalize more effective efforts at communicating sociology. Majors only.

**SYA 6909 INDEPENDENT STUDY (VAR.)**

Independent study in which student must have a contract with an instructor. Repeatable. (S/U only.)

**SYA 6912 DIRECTED RESEARCH (VAR.)**

PR: GR. Master's level. Repeatable. (S/U only.)

- SYA 6933 SPECIAL TOPICS-SOCIOLOGY (3)**  
PR: Ci. Content varies according to interests of students and instructor. May be repeated for credit.
- SYA 6971 THESIS: MASTER'S (VAR.)**  
Repeatable. (S/U only.)
- SYO 5365 INDUSTRIAL SOCIOLOGY (3)**  
PR: SYG 2000 or Ci; upper division standing. Interaction, communication, and authority in economic organization; the factory as a social system.
- SYO 6125 FAMILY ANALYSIS (3)**  
PR: Course in family or Ci. Theory of interpersonal relations and interaction in the modern family. Analysis of functions and roles.
- SYO 6406 SOCIOLOGY OF HEALTH AND ILLNESS (3)**  
Survey of core concepts and current research in the sociology of health and illness: social correlates of disease, health care utilization, physician-patient relations, medical compliance, and illness behavior. Open to all graduate level students. Not offered on S/U basis.
- SYO 6545 COMPLEX ORGANIZATIONS (3)**  
PR: Course in social organizations or Ci. Organizational theory, bureaucratic models, authority, power legitimation, and types of formal organization.
- SYP 5035 SOCIOLOGY OF SMALL GROUPS (3)**  
PR: SYG 2000 or Ci; upper division standing. Theory of small group structure, mechanics of interaction, observation of small groups.
- SYP 5055 SOCIAL INTERACTION (3)**  
PR: 3000 or Ci; upper division standing. Interpersonal influence, complex behavior, role, conflict, and social situational factors.
- SYP 5405 SOCIAL CHANGE (3)**  
PR: 3000 or Ci; upper division standing. Major theories of social and cultural change, and mechanisms of change in various societies.
- SYP 6005 SOCIAL PSYCHOLOGY SEMINAR (3)**  
PR: Course in social psychology or Ci. Stresses contemporary developments in social psychological theory and empirical research.
- SYP 6575 DEVIANCE AND CONTROL (3)**  
PR: Course in criminology or juvenile delinquency or Ci. Theories of control and deviance, with research application of problem areas.

## WOMEN'S STUDIES

*Coordinator:* J. Ochshorn; *Professors:* L. Lopez-McAlister, J. Ochshorn, J. Williams; *Associate Professors:* M. Myerson, J. Snook; *Assistant Professor:* E. Breit; *Courtesy Appointments:* R. Banes, L. Dietrich, L. Whiteford.

- WST 5934 SELECTED TOPICS (1-4)**  
PR: Graduate status, undergraduate senior standing, or Ci. Study of current research methods and scholarship on women from a multi-disciplinary perspective. May be repeated as topics vary.
- WST 6900 DIRECTED READINGS (1-3)**  
Supervised program of intensive readings of an interdisciplinary nature focusing on women. Student must have contract with instructor. May be repeated. May be repeated up to variable credit hours.



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## GRADUATE FACULTY

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### College of Arts and Letters

#### American Studies

Banes, Ruth A., Ph.D., University of New Mexico, 1978  
 Brewer, Prissilla J., Ph.D., Brown University, 1987  
 Harkness, Donald R., Ph.D., University of Minnesota, 1954  
 Moore, Jack B., Ph.D., University of North Carolina, 1963  
 Nye, Russel B., Ph.D., Visiting Professor  
 Snyder, Robert E., Ph.D., Syracuse University, 1979

#### Classics

Mandell, Sara R., Ph.D., New York University, 1969  
 Motto, Anna L., Ph.D., University of North Carolina, 1953  
 Noonan, John D., Ph.D., Columbia University, 1973

#### Communication

Bochner, Arthur P., Ph.D., Bowling Green State University, 1971  
 Carter, David A., Ph.D., University of Iowa, 1976  
 Cissna, Kenneth N., Ph.D., University of Denver, 1975  
 Downs, Bernard F., M.A., Northwestern University, 1970  
 Jablonski, Carol J., Ph.D., Purdue University, 1979  
 James, Navita C., Ph.D., Ohio State University, 1981  
 Newcombe, P.J., Ph.D., Northwestern University, 1963  
 Pettegrew, Loyd S., Ph.D., University of Michigan, 1977  
 Porter, Thomas D., Ph.D., Florida State University, 1974  
 Schneider, Raymond J., Ph.D., University of Michigan, 1965  
 Vanderford, Marsha L., Ph.D., University of Minnesota, 1981

#### English

Baum, Rosalie M., Ph.D., University of Detroit, 1976  
 Bentley, Joseph G., Ph.D., Ohio State University, 1961  
 Broer, Lawrence R., Ph.D., Bowling Green State University, 1968  
 Chisnell, Robert E., Ph.D., Auburn University, 1971  
 Clark, John R., Ph.D., University of Michigan, 1965  
 Cole, Roger W., Ph.D., Auburn University, 1968  
 Collins, Paschal J., Ph.D., University of Florida, 1978  
 Deats, Sara M., Ph.D., University of California at Los Angeles, 1970  
 Deer, Harriet A., M.A., University of Minnesota, 1964  
 Deer, Irving, Ph.D., University of Minnesota, 1956  
 Dietrich, Richard F., Ph.D., Florida State University, 1965  
 Fabry, Frank J., Ph.D., University of Texas, 1964  
 Figg, Robert M., Ph.D., University of North Carolina, 1965  
 Garrett, William, Ph.D., University of Florida, 1958  
 Hall, Robert E., M.A., John Carroll University, 1958  
 Hall, Sallie J., Ph.D., University of Florida, 1971  
 Harmon, Maryhelen, C., Ph.D., Florida State University, 1981  
 Hatcher, John S., Ph.D., University of Georgia, 1968  
 Heim, William J., Ph.D., Indiana University, 1974



Henley, Elton F., Ph.D., Florida State University, 1962  
Hewitt, Regina L., Ph.D., Columbia University, 1987  
Hinz, John P., Ph.D., Columbia University, 1959  
Hirshberg, Edgar W., Ph.D., Yale University, 1951  
Iorio, John J., M.A., Columbia University, 1951  
Kaufmann, Donald L., Ph.D., University of Iowa, 1966  
Kiefer, H.C., Ph.D., Columbia University, 1961  
Mason, Frank T., Ph.D., Michigan State University, 1974  
Metzger, Elizabeth A., Ph.D., State University of New York at Buffalo, 1977  
Moore, Jack B., Ph.D., University of North Carolina, 1963  
Morris, William E., Ph.D., University of North Carolina, 1963  
Moxley, Joseph M., Ph.D., State University of New York at Buffalo, 1984  
Ochshorn, Myron G., Ph.D., University of New Mexico, 1963  
O'Hara, Robert C., M.A., University of Louisville, 1953  
Olson, Gary A., Ph.D., Indiana University of Pennsylvania, 1980  
Parrish, James A., Ph.D., Florida State University, 1955  
Pawlowski, Robert S., Ph.D., University of Denver, 1968  
Reader, Willie D., Ph.D., University of Florida, 1962  
Rogers, J. Patrick, Ph.D., University of Cambridge, 1968  
Ross, William T., Ph.D., University of Virginia, 1970  
Rubin, Steven J., Ph.D., University of Michigan, 1969  
Ruffo-Fiore, S., Ph.D., University of Pittsburgh, 1970  
Scheuerle, William H., Ph.D., Syracuse University, 1964  
Sipiora, Phillip J., Ph.D., University of Texas at Austin, 1985  
Smith, Elton E., Ph.D., Syracuse University, 1961  
Tyson, Nancy J., Ph.D., Ohio State University, 1981  
Walther, John D., Ph.D., Vanderbilt University, 1972  
Wells, Daniel A., Ph.D., Duke University, 1972  
Wyly, R. Donald, Ph.D., Ohio State University, 1964  
Zbar, Flora J., M.A., Florida State University, 1962

### **Humanities**

Cooper, Clara B., Ph.D., Florida State University, 1969  
Gaggi, Silvio L., Ph.D., University of Ohio, 1972  
Hoffman, Theodore B., Ph.D., University of the Pacific, 1959  
Juergensen, Hans, Ph.D., Johns Hopkins University, 1951  
Kashdin, Gladys S., Ph.D., Florida State University, 1965  
Rutenberg, Daniel, Ph.D., University of Florida, 1967  
Sparks, Amy J., Ph.D., Louisiana State University, 1964  
Zylstra, Sape A., Ph.D., Emory University, 1969

### **Language**

Cafilisch, Jacob C., Ph.D., Indiana University, 1974  
Camp, John B., Ph.D., Florida State University, 1964  
Cano, Carlos J., Ph.D., Indiana University, 1973  
Capsas, Cleon W., Ph.D., University of New Mexico, 1964  
Cargill-Vroman, C., Ph.D., Georgetown University, 1974  
Cherry, R. Adrian, Ph.D., University of Kentucky, 1960  
Cole, Roger W., Ph.D., Auburn University, 1968  
Esformes, Maria, Ph.D., University of Colorado, 1977  
Grothmann, Wilhelm H., Ph.D., University of Kansas, 1968  
Hampton, Warren R., Ph.D., Tulane University, 1968  
Hechiche, Analk J., Ph.D., University of Florida, 1980  
Ierardo, Domenick, Ph.D., New York University, 1974

McLean, Edward J., Ph.D., Duke University, 1961  
 Neugaard, Edward J., Ph.D., University of North Carolina, 1964  
 O'Hara, Robert C., M.A., University of Louisville, 1953  
 Peppard, Victor E., Ph.D., University of Michigan, 1974  
 Preto-Rodas, R.A., Ph.D., University of Michigan, 1966  
 Probes, Christine M., Ph.D., Tulane University, 1968  
 Scruggs, C. Eugene, Ph.D., University of Kentucky, 1968  
 Stelzmann, Rainulf A., Ph.D., University of Freiburg, 1953  
 Tatum, James C., Ph.D., Tulane University, 1968

### **Mass Communication**

Bagley, Dan S., Ph.D., University of Tennessee, 1977  
 Brown, Karen F., Ph.D., University of Tennessee, 1982  
 Counts, Tilden M., Ph.D., University of North Carolina, 1972  
 Dickerson, Donna L., Ph.D., Southern Illinois University, 1977  
 Fudge, William G., Ph.D., Florida State University, 1975  
 Garcia, Mario R., D.A., University of Miami, 1976  
 Katz, Elaine F., Ed.D., Vanderbilt University, 1982  
 Kerns, Robert L., M.A., Syracuse University, 1970  
 Leslie, Larry Z., Ph.D., University of Tennessee, 1986  
 Lucoff, Manny, Ph.D., University of Iowa, 1971  
 Sasser, Emery L., Ph.D., University of Illinois, 1967

### **Philosophy**

Anton, John P., Ph.D., Columbia University, 1954  
 Beil-Waugh, Joanne, Ph.D., University of Southern California, 1980  
 Bell, James A., Ph.D., Boston University, 1969  
 Gould, James A., Ph.D., University of Michigan, 1953  
 Shrader-Frechette, Kristin, Ph.D., Notre Dame, 1971  
 Silver, Bruce S., Ph.D., University of Colorado, 1971  
 McAlister, Linda L., Ph.D., Cornell University, 1969  
 Taylor, Richard, M., Yale University, 1969  
 Truitt, Willis H., Ph.D., Boston University, 1968  
 Weatherford, Roy C., Ph.D., Harvard University, 1972  
 Wiredu, Kwasi, Ph.D., Oxford University, 1960

### **Religious Studies**

Fasching, Darrell J., Ph.D., Syracuse University, 1978  
 Gessman, Albert M., Ph.D., University of Vienna, 1950  
 Katz, Nathan, Ph.D., Temple University, 1978  
 Mitchell, Mozella G., Ph.D., Emory University, 1980  
 Shea, William M., Ph.D., Columbia University, 1974  
 Strange, James F., Ph.D., Drew University, 1970  
 Tremmel, William C., Th.D., Iliff School of Theology, 1950

## **College of Business Administration**

### **Accounting**

Bussman, John F., D.B.A., Florida State University, 1973  
 Cox, Robert G., Ph.D., University of Pennsylvania, 1956  
 Dennis, David M., Ph.D., University of Missouri, 1972  
 Donis, Jack P., Ph.D., University of Chicago, 1949  
 Dungan, Christopher, Ph.D., University of Illinois, 1981

Engle, Terry J., Ph.D., University of Missouri, 1983  
Fellows, James A., Ph.D., Louisiana State University, 1977  
Harris, Lebrone C., D.B.A., Florida State University, 1970  
Hooks, Karen L., Ph.D., Georgia State University, 1981  
Keith, Robert M., Ph.D., University of Alabama, 1969  
Lander, Gerald H., D.B.A., University of Kentucky, 1980  
Laursen, Gary A.H., LL.M., University of Miami, 1972  
Martin, James R., Ph.D., University of Alabama, 1976  
Moon, James E., Ph.D., University of Alabama, 1970  
Parrott, William H., Ph.D., University of Illinois, 1971  
Siebel, Jerry D., Ph.D., University of Iowa, 1970  
Smith, Jack L., Ph.D., University of Mississippi, 1969  
Stephens, William, D.B.A., Florida State University, 1971  
West, Robert J., M.S., Florida State University, 1961  
Whittaker, Gerald, Ph.D., Northwestern University, 1974

### **Economics**

Bellante, Donald M., Ph.D., Florida State University, 1971  
Brunhild, Gordon, Ph.D., University of Southern California, 1957  
Cooke, John P., Ph.D., University of Colorado, 1967  
Curtis, Thomas D., Ph.D., Indiana University, 1965  
Cushman, David O., Ph.D., Vanderbilt University, 1980  
DeSalvo, Joseph S., Ph.D., Northwestern University, 1968  
Deyak, Timothy A., Ph.D., State University of New York at Binghamton, 1977  
Dye, Howard S., Ph.D., Cornell University, 1949  
Ford, Edward Jr., Ph.D., Boston College, 1971  
Green, Carole A., Ph.D., University of Illinois, 1982  
Hanni, Eila, Ph.D., Yale University, 1970  
Herander, Mark G., Ph.D., University of North Carolina, 1979  
Herman, W. James, Ph.D., University of Florida, 1965  
Mellish, G. Hartley, Ph.D., University of Virginia, 1965  
Murphy, Robert J., Ph.D., Fordham University, 1964  
Pupp, Roger L., Ph.D., Washington University, 1979  
Rankin, Elizabeth, Ph.D., Virginia Polytechnic Institute and State University, 1983  
Rowe, John G., Ph.D., University of Illinois, 1966  
Shows, E. Warren, Ph.D., Georgia State University, 1968  
Spence, James, Ph.D., University of Oklahoma, 1979  
Thomas, Christopher R., Ph.D., Texas A&M University, 1980  
Wilson, Robert M., Ph.D., Northwestern University, 1977

### **Finance**

Beenhakker, Arie, Ph.D., Purdue University, 1964  
Besley, Scott, Ph.D., Florida State University, 1984  
Bolten, Steven, Ph.D., New York University, 1969  
Bulmash, Samuel, Ph.D., Northwestern University, 1981  
Cox, Robert, Ph.D., University of Pennsylvania, 1956  
Kapplin, Steven, Ph.D., Georgia State University, 1979  
Kares, Peter, Ph.D., Purdue University, 1968  
Long, Susan W., Ph.D., University of South Carolina, 1976  
Meyer, Richard L., Ph.D., University of Wisconsin, 1971  
Pappas, James L., Ph.D., University of California at Los Angeles, 1968  
Rivard, Richard J., Ph.D., Texas A&M University, 1978  
Schwartz, Arthur, Ph.D., University of Oregon, 1975

Trivoli, George W., Ph.D., University of Virginia, 1970  
 Wieand, Kenneth F., Ph.D., Washington University, 1970  
 Information Systems and Decision Sciences  
 Allen, Harold C., Ph.D., University of Florida, 1969  
 Birkin, Stanley J., Ph.D., University of Alabama, 1969  
 Blanton, James E., M.B.A., University of Georgia, 1983  
 Boggs, Roy A., Ph.D., University of Texas at Austin, 1969  
 Cohen, Murray E., Ph.D., Georgia State University, 1975  
 Harrington, Thomas C., Ph.D., University of North Carolina, 1980  
 Hodgson, John S., Ph.D., University of Virginia, 1971  
 Johnson, Thomas E., Ph.D., University of Alabama, 1971  
 McGrath, Roger R., D.B.A., Florida State University, 1982  
 Minifie, Roberta J., Ph.D., University of South Carolina, 1983  
 Pipkin, Jeannette M., Ph.D., University of Alabama, 1969  
 Pyburn, Philip J., D.B.A., Harvard University, 1981  
 Waltz, Alfred J., Ph.D., Georgia State University, 1984  
 White, Michael J., Ph.D., University of Florida, 1972

### **Management**

Balfour, Alan, Ph.D., Michigan State University, 1975  
 Bartlett, Alton C., Ph.D., University of Wisconsin, 1964  
 Cohen, Cynthia F., Ph.D., Georgia State University, 1980  
 Dutton, Richard E., Ph.D., Louisiana State University, 1963  
 Jermier, John, Ph.D., Ohio State University, 1979  
 Karlins, Marvin, Ph.D., Princeton University, 1966  
 Kenerson, David R., Ph.D., University of Florida, 1956  
 Knippen, Jay T., D.B.A., Florida State University, 1970  
 Koehler, Jerry W., Ph.D., Pennsylvania State University, 1968  
 McIntosh, Nancy, Ph.D., University of Florida, 1984  
 Michaels, Charles E., Ph.D., University of South Florida, 1983  
 Nixon, Robert L., Ph.D., Cornell University, 1976  
 Roush, S. Larry, Ph.D., University of Texas, 1958  
 Schilit, Warren Keith, Ph.D., University of Maryland, 1982  
 Schroder, Harold, Ph.D., Ohio State University, 1954  
 Sherman, James J., Ph.D., State University of New York at Buffalo, 1967  
 Van Voorhis, Kenneth, D.B.A., Louisiana State University, 1971  
 Vincelette, Joyce, D.B.A., Indiana University, 1979  
 Walsh, Ruth M., Ph.D., University of South Florida, 1976  
 Wheelen, Thomas L., D.B.A., George Washington University, 1969

### **Marketing**

Anderson, Robert, Ph.D., North Texas State University, 1971  
 Baumgarten, Steven, Ph.D., Purdue University, 1971  
 Boatwright, E.W., Ph.D., University of Arkansas, 1983  
 Bush, Alan J., Ph.D., Louisiana State University, 1983  
 Bush, Robert P., Ph.D., Louisiana State University, 1987  
 Debord, Warren A., Ph.D., University of Illinois, 1969  
 Duffus, Lee R., Ph.D., Purdue University, 1979  
 Hensel, James S., Ph.D., Ohio State University, 1970  
 Lambert, Douglas, Ph.D., Ohio State University, 1975  
 Ness, Thomas E., Ph.D., Purdue University, 1968  
 Ortinau, David J., Ph.D., Louisiana State University, 1979  
 Steeper, David C., Ph.D., Ohio State University, 1965  
 Solomon, Paul J., Ph.D., Arizona State University, 1974

Stamps, Miriam B., Ph.D., Syracuse University, 1982  
Towery, Henry H., D.B.A., Florida State University, 1968

## **College of Education**

### **Adult and Vocational Education**

Cantor, Roger, G., Ed.D., Rutgers University, 1975  
Danenburg, William, Ed.D., University of Tennessee, 1970  
Hill, Raymond, Ed.D., University of Alabama, 1974  
James, Wayne B., Ed.D., University of Tennessee, 1976  
Johnson, Frank, Ed.D., Rutgers University, 1970  
Palmer, Robert, Ph.D., Florida State University, 1969  
Patterson, Gerald, Ph.D., Ohio State University, 1970  
Welter, Clyde, Ph.D., Ohio State University, 1970  
Childhood/Language Arts/Reading Education  
Anderson, Nancy, Ed.D., University of Southern Mississippi, 1982  
Barkholz, Gerald, Ed.D., University of Florida, 1976  
Clarke, Barbara, Ph.D., Florida State University, 1977  
Freshour, Frank, Ed.D., University of Florida, 1970  
Goforth, Frances, Ed.D., Indiana University, 1966  
Greabell, Leon, Ed.D., Syracuse University, 1969  
Hanley, Patricia, Ph.D., University of Florida, 1976  
Helton, Sonia, Ph.D., University of Minnesota, 1976  
Kasten, Wendy, Ph.D., University of Arizona, 1984  
Klesius, Janell, Ph.D., Florida State University, 1980  
Linder, Jean C., Ed.D., State University of New York at Buffalo, 1977  
Long, JoAnn, Ph.D., Florida State University, 1969  
Lowe, Alvin J., Ed.D., University of Virginia, 1967  
Mann, Marcia, Ph.D., University of Nebraska, 1970  
Martowe, Leslie, Ed.D., University of Alabama, 1986  
McClellan, Leslie, Ed.D., University of Missouri, 1961  
Neville, Donald, Ed.D., University of Florida, 1961  
Pfof, H. Phillip, Ed.D., George Peabody College, 1966  
Polito, Josephine T., Ph.D., Syracuse University, 1974  
Searls, Evelyn, Ed.D., University of Miami, 1971

### **Curriculum and Instruction**

Bullock, John, Ed.D., University of Florida, 1972  
Johnston, Roger, Ph.D., University of Minnesota, 1967  
Karl, Herbert, Ph.D., Florida State University, 1970  
Kase-Polisini, Judith, M.A., Case Western Reserve University, 1956  
Levy, John W., Ed.D., University of Georgia, 1970  
Lichtenberg, Betty, Ph.D., University of Illinois, 1967  
Phillips, E. Ray, Ph.D., Purdue University, 1971  
Prince, Fred, Ed.D., University of Houston, 1971  
Puglisi, Dick J., Ph.D., Georgia State University, 1973  
Spector, Barbara, Ph.D., Syracuse University, 1977  
Steiner, H. Edwin, Ph.D., University of Texas, 1970  
Uprichard, A. Edward, Ph.D., Syracuse University, 1969  
West, William W., Ph.D., Syracuse University, 1966

### **Counselor Education**

Anderson, Donna, Ph.D., University of South Florida, 1984

Bott, William K., Ed.D., Duke University, 1962  
 Drapela, Victor, Ph.D., University of North Dakota, 1968  
 Ferguson, Donald, Ed.D., Western Reserve University, 1956  
 Panther, Edward, Ed.D., State University of New York at Buffalo, 1969  
 Story, Coleen, M.S., Florida State University, 1951

### **Educational Leadership**

Anderson, Robert H., Ph.D., University of Chicago, 1949  
 Benjamin, William F., Ph.D., George Peabody College, 1961  
 Bondi, Joseph, Ed.D., University of Florida, 1968  
 Cleary, Lynn, Ph.D., Florida State University, 1970  
 Hunt, John, Ed.D., Harvard University, 1968  
 Karns, L. Tom, Ed.D., University of Oklahoma, 1966  
 Keene, T. Wayne, Ed.D., University of Florida, 1963  
 McClendon, Paul, Ed.D., Florida State University, 1963  
 Orlosky, Donald, Ed.D., Indiana University, 1959  
 Peterson, Donovan D., Ph.D., University of Pittsburgh, 1970  
 Purdom Daniel, Ed.D., University of California at Los Angeles, 1967  
 Shapiro, Arthur, Ph.D., University of Chicago, 1965  
 Snyder, Karolyn, Ed.D., Texas Tech University, 1977  
 Tuttle, Lester W., Ed.D., University of Florida, 1962  
 Villeme, Melvin, Ed.D., Nova University, 1975  
 Wiles, Jon W., Ed.D., University of Florida, 1972

### **Educational Measurement and Research**

Carey, Lou, Ph.D., Florida State University, 1976  
 Hall, Bruce W., Ed.D., Florida State University, 1969  
 Hines, Constance V., Ph.D., Ohio State University, 1981  
 Hutchcraft, Gilbert R., Ed.D., Indiana University, 1970  
 Katzenmeyer, William G., Ed.D., Duke University, 1962  
 Mazur, Joseph, Ph.D., Case Western Reserve University, 1968  
 Robinson, Jack, Ph.D., Harvard University, 1960  
 Stone, Douglas, Ph.D., University of Chicago, 1962  
 Wilk, Roger, Ph.D., University of Minnesota, 1957

### **Instructional Computing**

Breit, Frank, Ph.D., University of Texas, 1968  
 Engel, William, Ed.D., Wayne State University, 1966  
 Troutman, Andria, Ed.D., University of Florida, 1971  
 Tubb, Gary, Ph.D., Texas A&M University, 1974

### **Physical Education**

Beasley, Bob L., Florida State University, 1968  
 Bowers, Louis, Ph.D., Louisiana State University, 1964  
 Hall, W. Dianne, Ph.D., Ohio State University, 1976  
 Heeschen, Richard, Ph.D., Florida State University, 1974  
 Hoffman, Hubert A., P.E.D., Indiana University, 1969  
 Klesius, Stephen E., Ph.D., Louisiana State University, 1968  
 Smith, Charles, Ed.D., Temple University, 1967  
 Weinberg, Herman, Ed.D., Temple University, 1969

### **Psychological and Social Foundations**

Anderson, E. Christian, Ph.D., University of Michigan, 1964  
 Barnard, James, Ph.D., Yale University, 1963

Bostow, Darrell T., Ph.D., Southern Illinois University, 1970  
Bridges, Winston T., Jr., Ph.D., University of Florida, 1975  
Burley, W. Wade, Ph.D., University of North Carolina, 1970  
Caroli, Delos, Ed.D., University of Florida, 1969  
Dickenson, James C., Ph.D., University of Minnesota, 1964  
Foliman, John, Ph.D., Indiana University, 1969  
Geiger, O. Glenn, Ph.D., University of South Carolina, 1968  
Johanningmeier, Erwin U., Ph.D., University of Illinois, 1967  
Kimmel, Ellen, Ph.D., University of Florida, 1965  
Kincald, George H., Ed.D., University of Florida, 1965  
Knoff, Howard, Ph.D., Syracuse University, 1980  
Lantz, Donald, Ph.D., University of Minnesota, 1961  
Mumme, Roy M., Ed.D., University of North Carolina, 1953  
Silverman, Stewart H., Ph.D., Yeshiva University, 1971

### **School of Library and Information Science**

Gates, Jean K, M.S.L.S., Catholic University of America, 1951  
Grover, Robert, Ph.D., Indiana University, 1976  
Knego, John M., Ph.D., Indiana University, 1974  
McCrossan, John, Ph.D., University of Illinois, 1966  
Pfister, Fred, Ph.D., University of Michigan, 1970  
Smith, Alice G., Ed.D., Wayne State University, 1965  
Wilson, Thomas, Ed.D., Wayne State University, 1970

### **Special Education**

Boyd, Herbert, Ph.D., University of Illinois, 1958  
Dwyer, Robert C., Ed.D., George Peabody College, 1966  
Guetzloe, Eleanor C., Ed.D., University of Florida, 1975  
Johnson, Orville, Ed.D., University of Illinois, 1950  
Lavelly, Carolyn, Ph.D., Syracuse University, 1968  
Lax, Bernard, Ph.D., University of Texas, 1970  
Mausser, August, Ed.D., Indiana University, 1968  
Merica, John A., Ph.D., Syracuse University, 1971  
Singh, Surendra, Ed.D., University of California at Los Angeles, 1967  
Sisk, Dorothy, Ed.D., University of California at Los Angeles, 1966  
Sproles, H. Allen, Ed.D., University of Georgia, 1973

## **College of Engineering**

### **Chemical Engineering**

Bhethanabolta, Venkat R., Ph.D., Penn State University, 1987  
Busot, J. Carlos, Ph.D., University of Florida, 1970  
Campbell, Scott W., Ph.D., Northwestern University, 1986  
Garcia-Rubio, Luis, Ph.D., McMaster University, 1981  
Gilbert, Richard, Ph.D., University of South Florida, 1981  
Lee, William E., Ph.D., University of Cincinnati, 1984  
Llewellyn, J. Anthony, Ph.D., University College Cardiff, 1958  
Smith, Carlos A., Ph.D., Louisiana State University, 1972  
Sunol, Aydin K., Ph.D., Virginia Polytechnic Institute and State University, 1982

### **Civil Engineering and Mechanics**

Anderson, Melvin W., Ph.D., Carnegie-Mellon University, 1967  
Carnahan, Robert, Ph.D., Clemson University, 1973

Carpenter, William, Ph.D., North Carolina State University, 1976  
 Devine, James F., M.D., University of Illinois, 1960  
 Franques, John T., Ph.D., Louisiana State University, 1971  
 Griffith, John E., Ph.D., Pennsylvania State University, 1955  
 Kranc, Stanley C., Ph.D., Northwestern University, 1968  
 Murphy, Robert J., Ph.D., University of Oklahoma, 1971  
 Oline, Larry W., Ph.D., Georgia Institute of Technology, 1968  
 Ratliff, John, Ph.D., Ohio State University, 1969  
 Ross, Bernard E., Ph.D., University of Florida, 1964  
 Sen, Rajan, Ph.D., State University of New York at Buffalo, 1984  
 Small, Norman C., Ph.D., Brown University, 1960  
 Stessel, Richard I., Ph.D., Duke University, 1983  
 Suprenant, Bruce A., Ph.D., Montana State University, 1984

### **Computer Science and Engineering**

Al-Arian, Sami, Ph.D., North Carolina State University, 1986  
 Bowyer, Kevin, W., Ph.D., Duke University, 1980  
 Glass, Harvey, D.Sc., Washington University, 1965  
 Hall, Lawrence, Ph.D., Florida State University, 1986  
 Kim, Kwang H., Ph.D., University of California at Berkeley, 1974  
 Maurer, Peter, Ph.D., Iowa State University, 1982  
 Mehrotra, Rajiv, Ph.D., Wayne State University, 1986  
 Naylor, Clark, Ph.D., University of Wisconsin, 1971  
 Varansi, Murali, Ph.D., University of Maryland, 1973

### **Electrical Engineering**

Ammons, James M., Ph.D., University of South Florida, 1980  
 Bowers, James C., Sc.D., Washington University, 1964  
 Buckle, Kenneth, Ph.D., University of Wisconsin, 1984  
 Burdick, Glenn A., Ph.D., Massachusetts Institute of Technology, 1961  
 Chen, Charles T.M., Ph.D., University of Minnesota, 1964  
 Chlou, Yun-Leel, Ph.D., Purdue University, 1969  
 Cottle, James G., Jr., Ph.D., University of South Florida, 1987  
 Donaldson, Merle, R., Ph.D., Georgia Institute of Technology, 1959  
 Garrett, Samuel J., Sc.D., University of Pittsburgh, 1963  
 Gordon, Horace C., Jr., M.S.E., University of South Florida, 1970  
 Henning, Rudolf E., Sc.D., Columbia University, 1954  
 Jain, Vijay K., Ph.D., Michigan State University, 1964  
 Ko, Wal Lee, Ph.D., University of Illinois, Urbana, 1976  
 Kovac, Michael G., Ph.D., Northwestern University, 1970  
 Lachs, Gerard, Ph.D., Syracuse University, 1964  
 Leffew, James T., Ph.D., University of South Florida, 1985  
 Nienhaus, Harry A., M.S., University of St. Louis, 1964  
 Snider, David A., Ph.D., New York University, 1971  
 Stefanakos, Elias K., Ph.D., Washington State University, 1969  
 Vogelsong, Ronald S., Ph.D., University of South Florida, 1985  
 Wiley, Paris H., Ph.D., Virginia Polytechnic Institute and State University, 1973

### **Industrial and Management Systems Engineering**

Babu, A.J.G., Ph.D., Southern Methodist University, 1980  
 Givens, Paul E., Ph.D., University of Texas at Arlington, 1974  
 Khator, Suresh K., Ph.D., University of Utah, 1983  
 Kunak, Denny V., Ph.D., University of Utah, 1983  
 Lulu, Menberu, Ph.D., University of Alabama in Huntsville, 1985



Miller, William A., Ph.D., Clemson University, 1987  
Snyder, Walter S., Ph.D., University of South Florida, 1984  
Weaver, Lee A., Ph.D., University of Florida, 1972  
Wimmert, Robert J., Ph.D., Purdue University, 1957

### **Mechanical Engineering**

Crane, Roger A., Ph.D., Auburn University, 1973  
Kaw, Autar, Ph.D., Clemson University, 1987  
Porteiro, Jose, Ph.D., Rutgers University, 1980  
Scott, Linus A., Ph.D., Case Institute of Technology, 1960  
Smith, William A., Ph.D., University of Florida, 1966  
Wilkinson, Stuart, Ph.D., University of South Hampton, England, 1984  
Ying, Shuh-Jing, Ph.D., Harvard University, 1965

## **College of Fine Arts**

### **Arts**

Covington, Harrison W., M.F.A., University of Florida, 1953  
Cox, Ernest, M.F.A., Cranbrook Academy of Art, 1961  
Davis, Sandra, M.F.A., San Francisco Art Institute, 1978  
Dietrich, Linnea, Ph.D., University of Delaware, 1972  
Eaker, Alan, M.A., University of California at Berkeley, 1969  
Fager, Charles, M.F.A., University of Kansas, 1963  
Freundlich, August L., Ph.D., New York University, 1960  
Gelinas, Robert, M.F.A., University of Alabama, 1958  
Hirt, Victoria, M.F.A., Rhode Island School of Design, 1986  
Houk, Claude W., M.F.A., University of Iowa, 1950  
Kronsnoble, Jeffrey M., M.F.A., University of Michigan, 1963  
Larsen, Mernet, M.F.A., Indiana University, 1965  
Lyman, Charles P., M.S., Illinois Institute of Technology, 1969  
Marcus, Louis, M.F.A., University of Colorado, 1982  
Marsh, Bruce, M.A., California State University, 1965  
McLaughlin, Tom, M.F.A., Indiana University, 1978  
Melaragno, Peter, M.A., Boston University, 1976  
Miller, Margaret, M.A., University of Hawaii, 1970  
Nickels, Bradley, Ph.D., Indiana University, 1966  
Pappas, George, Ed.D., Pennsylvania State University, 1957  
Saff, Donald, Ed.D., Columbia University, 1964  
Schroth, Peter, M.F.A., University of Colorado, 1981  
Wright, David, Ph.D., Princeton University, 1976  
Wujcik, Theo, Certificate, Society of Arts and Crafts, 1962

### **Dance**

Berger, Lawrence, Diploma, The Julliard School, 1963  
Hug, William, M.A., University of Illinois, 1960

### **Music**

Abram, Jacques, Diploma, The Julliard School, 1938  
Albers, Bradley G., D.M.A., University of Illinois, 1978  
Cullison, Larry, M.F.A., University of Iowa, 1973  
Doane, Christopher, Ph.D., Ohio State University, 1981  
Laue, Annamary D., M.Ed., Columbia University, 1963  
Froelich, Ralph Ol, B.S., The Julliard School, 1958

Galos, Andrew, Ed.D., Columbia University, 1958  
 Hawkins, Ann L., M.A., University of South Florida, 1970  
 Heller, Jack J., Ph.D., University of Iowa, 1962  
 Holm, Kathryn C., M.M., Cleveland Institute of Music, 1975  
 Jaworski, Warren, D.M., University of Michigan, 1961  
 Jennings, Vance S., D.M.E., University of Oklahoma, 1972  
 Jones, Hilton, M.M., Eastman School of Music, 1968  
 Khorsandian, Jan, M.S., University of Illinois, 1970  
 Lewis, James, M.M., University of Illinois, 1965  
 McCormick, Robert, M.A., San Jose State University, 1973  
 Monroe, Annetta Y., B.M., Oberlin College, 1977  
 Owen, William, M.M., North Texas State University, 1960  
 Preodor, Edward, M.M., Eastman School of Music, 1937  
 Rearick, Martha, M.M., University of Michigan, 1961  
 Reynolds, Jerald, M.M., University of Oregon, 1963  
 Robison, John, D.M.A., Stanford University, 1975  
 Smith, John, D.M.A., University of Missouri, 1979  
 Stevens, Noel, D.M.A., Eastman School of Music, 1959  
 Summer, Averill, D.M.A., Indiana University, 1979  
 Summer, Robert, D.M.A., Indiana University, 1978  
 Watkins, Armin J., D.M.A., Indiana University, 1957  
 Woodbury, Arthur, M.M., University of Idaho, 1955

### Theatre

Belt, Jack W., M.F.A., University of Florida, 1967  
 Bishop, Monica M., M.F.A., Southern Methodist University, 1978  
 Calandra, Denis, Ph.D., University of Nebraska, 1970  
 Cole, Nancy, M.F.A., Iowa State University, 1964  
 Lee, Barton W., M.A., West Virginia University, 1978  
 Lillehun, Abby G., M.F.A., Florida State University, 1980  
 Lorenzen, William, M.F.A., Tulane University, 1966  
 O'Sullivan, Peter B., M.A., University of North Carolina, 1957  
 Steele, Christopher, M.F.A., Southern Methodist University, 1979  
 Williams, David K., M.F.A., Florida State University, 1980

## Florida Mental Health Institute

Anderson, Carmen, M.A., University of Puerto Rico, 1981  
 Anderson, Kenneth, M.A., Duquesne University, 1982  
 Angrosino, Michael V., Ph.D., University of North Carolina, 1972  
 Bachrach, Leona L., Ph.D., University of Connecticut, 1960  
 Ball, Espy, Ph.D., Pennsylvania State University, 1967  
 Battane, Gary R., M.A., University of Detroit, 1977  
 Baum, Danielle, Ph.D., Ohio University, 1983  
 Bedlington, Martha M., Ph.D., University of Kansas, 1982  
 Blau, Theodore, Ph.D., Pennsylvania State University, 1951  
 Boyd, L. Adlai, Ph.D., Temple University, 1978  
 Bradenburg, Nancy A., Ph.D., University of Texas, 1984  
 Briscoe, Richard V., Ph.D., Florida State University, 1983  
 Burr, Diane W., M.A., University of South Florida, 1984  
 Bursten, Peter M., Ph.D., University of California, Davis, 1982  
 Clark, Hewitt B., Ph.D., University of Kansas, 1972  
 Cotter, Leo P., Ph.D., Florida State University, 1982  
 Dalen, Don V., Ph.D., Columbia Pacific University, 1981

Delgado, Lisa H., R.N., B.A., St. Leo College, 1982  
Dembo, Richard, Ph.D., New York University, 1970  
Dertke, Max C., Ph.D., University of Miami, 1968  
Dow, Michael G., Ph.D., Pennsylvania State University, 1983  
Doyle, James P., M.S., Cornell University, 1966  
Drash, Philip W., Ph.D., Texas Technological University, 1963  
Duchnowski, Albert J., Ph.D., Vanderbilt University, 1969  
Dupree, Larry W., Memphis State University, 1980  
Dwyer, Neal, M.A., University of South Florida, 1982  
Friedman, Robert M., Ph.D., Florida State University, 1970  
Gibertini, Michael, Ph.D., University of Houston, 1984  
Giordano, Nan H., Ph.D., University of Georgia, 1982  
Gonzalez, Eduardo O., M.D., University of Salamanca, Spain, 1966  
Gonzalez, Joe V., M.D., University of Florida Medical School, 1961  
Hussain, Sajjad F., M.D., University of Baroda, India, 1967  
Ichinose, Craig K., Ph.D., University of Portland, 1973  
Jacobson, Brian H., Ph.D., University of Kansas, 1973  
Jenkins, Katura D., Ph.D., University of South Florida, 1984  
Knox, Michael D., Ph.D., University of Michigan, 1974  
Kutash, Krista, M.B.A., University of South Florida, 1984  
Laws, D. Richard, Ph.D., Southern Illinois University, 1969  
Levin, Bruce L, Dr.P.H., University of Texas, 1983  
McEvoy, Cathy L., Ph.D., University of South Florida, 1982  
Moon, James R., Ph.D., Virginia Polytechnic Institute and State University, 1982  
Naster, Barry, Ph.D., Southern Illinois University, 1969  
Nyberg, Terry C., M.A., West Virginia University, 1982  
Osborn, Candice, M.A., University of Southern Mississippi, 1974  
Osnes, Pamela, M.A., West Virginia University, 1981  
Panacek, Luanne J., M.A., University of South Florida, 1985  
Paris, Francis M., M.P.H., University of California, 1959  
Peters, Roger, Ph.D., Florida State University, 1986  
Powell, Diane, Ph.D., Florida State University, 1971  
Sanford, Barbara, M.D., University del Noreste, Mexico, 1982  
Schonfeld, Lawrence I., Ph.D., University of South Florida, 1981  
Siiver, Starr E., Ph.D., University of Florida, 1983  
Smith, Linda G., M.A., University of South Florida, 1983  
Stokes, Trevor, Ph.D., University of Kansas, 1977  
Swanson, Richard M., Ph.D., J.D., University of Colorado, 1970  
Trehuba, Sharon, M.A., Nova University, 1981  
Ward, John C., Ph.D., University of South Florida, 1981  
Weinberg, Richard B., Ph.D., University of South Florida, 1983  
West, Helen, Ph.D., University of Pittsburgh, 1972  
Wilder, Bessie, R.N., Methodist Hospital School of Nursing, 1951  
Zusman, Jack, M.D., Albert Einstein College of Medicine, 1960

## College of Medicine

### Anatomy

Brown, H. Keith, Ph.D., Tulane University, 1974  
Cameron, Don, Ph.D., Medical University of South Carolina, 1977  
Chen, Li-Tsun, Ph.D., University of Alberta, 1968  
Gerdes, A. Martin, Ph.D., University of Texas, 1978  
Hibelink, Don R., Ph.D., Medical College of Wisconsin, 1977

Nolan, Michael, Ph.D., Medical College of Wisconsin, 1975  
 Phelps, Christopher, Ph.D., Rutgers University, 1973  
 Rhodin, Johannes ».G., M.D., Karolinska Institute, 1954  
 Saporta, Samuel, Ph.D., University of Southern California, 1973  
 Schnitzlein, Harold N., Ph.D., St. Louis University, 1954

### **Biochemistry**

Adair, W. Lee, Ph.D., Georgetown University, 1972  
 Barber, Michael J., D.Phil., University of Sussex, 1976  
 Eichler, Duane C., Ph.D., University of California at Los Angeles, 1972  
 Keller, Ronald K., Ph.D., Vanderbilt University, 1973  
 Ness, Gene C., Ph.D., University of North Carolina  
 Pollet, Robert J., M.D., Ph.D., New York University, 1969  
 Solomonson, Larry P., Ph.D., University of Chicago, 1969  
 Weber, Lee A., Ph.D., University of Connecticut, 1975  
 Wickstrom, Eric, Ph.D., University of California at Berkeley, 1972  
 Williams, Marvin T., Ph.D., Cornell University, 1976

### **Medical Microbiology and Immunology**

Day, Noorbibi K., Ph.D., McGill University, 1967  
 Djeu, Julie Y., Ph.D., George Washington University, 1973  
 Friedman, Herman, Ph.D., Hahnemann Medical College, 1957  
 Good, Robert A., M.D., Ph.D., University of Minnesota, 1947  
 Grasso, Robert J., Ph.D., State University of New York at Buffalo, 1969  
 Hadden, John W., M.D., Columbia University, 1965  
 Halkias, Demetrios G., Ph.D., Loyola University, 1964  
 Klein, Thomas W., Ph.D., Creighton University, 1972  
 Lancz, Gerald J., Ph.D., Northwestern University, 1970  
 Nonoyama, Meihan, Ph.D., University of Tokyo, 1966  
 Paradise, Lois J., Ph.D., University of Michigan, 1960  
 Specter, Steven, Ph.D., Temple University, 1975  
 Stewart, William E. II, Ph.D., University of Texas Southwestern Medical School, 1969

### **Pathology**

Azar, Henry A., M.D., American University of Beirut, 1952  
 Balis, John U., M.D., National University of Athens, 1957  
 Byvoet, Paul, Ph.D., University of Utrecht, 1958  
 Domen, Ronald E., M.D., University Autonoma de Guadalajara, 1975  
 Espinoza, Carmen, M.D., San Marcos University, 1969  
 Nicosia, Santo V., M.D., Catholic University of Sacred Heart, 1967  
 Rowlands, David T., M.D., University of Pennsylvania, 1955  
 Saba, Sabiha R., M.D., Darbhanga Medical College, 1967  
 Shelley, Sue A., Ph.D., Loyola University, 1974  
 Straumfjord, Jon V., Ph.D., University of Iowa, 1958

### **Pharmacology & Therapeutics**

Audibert, Francoise M., Ph.D., Sorbonne University, Paris, France, 1973  
 Chedid, Louis, M.D. (1947), Ph.D. (1955), University of Paris, Paris, France  
 Coffey, Ronald G., Ph.D., Oregon State University, 1963  
 Fitzpatrick, David F., Ph.D., Vanderbilt University, 1969  
 Hackney, John F., Ph.D., Stanford University, 1972  
 Krzanowski, Joseph, Ph.D., University of Tennessee, 1968  
 Polson, James B., Ph.D., University of Missouri, 1968

Russell, Diane H., Ph.D., Washington State University, 1967  
Szentivanyi, A., M.D., University Medical School, Debrecen, 1950  
Williams, Joseph, Ph.D., University of Utah, 1970

### **Physiology and Biophysics**

Baker, Carleton, Ph.D., Princeton University, 1955  
Davis, Darrell L., Ph.D., St. Louis University, 1956  
Dietz, John R., Ph.D., University of Nebraska, 1979  
Lindsey, Bruce G., Ph.D., University of Pennsylvania, 1974  
Nazian, Stanley J., Ph.D., Marquette University, 1977  
Price, Joel M., Ph.D., University of California at San Diego, 1976  
Shannon, Roger, Ph.D., University of Kentucky, 1970  
Wilmoth, Frank R., Ph.D., University of Missouri, 1979

### **Biochemistry**

Adair, W. Lee, Jr., Ph.D., Georgetown University, 1972  
Barber, Michael J., D.Phil., University of Sussex, 1976  
Eichler, Duane C., Ph.D., University of California at Los Angeles, 1972  
Farese, Robert V., M.D., Georgetown University, 1958  
Keller, R. Kennedy, Ph.D., Vanderbilt University, 1973  
Neame, Peter J., Ph.D., Liverpool University, 1978  
Ness, Gene C., Ph.D., University of North Dakota, 1971  
Olsson, Ray A., M.D., George Washington University, 1956  
Pollet, Robert J., M.D., Ph.D. New York University, 1969  
Root, Allen W., M.D., Harvard University, 1958  
Rosenberg, Lawrence C., M.D., Medical College of Virginia, 1953  
Sasse, Joachim, Ph.D., University of Munich, 1980  
Solomonson, Larry P., Ph.D., University of Chicago, 1969  
Weber, Lee A., Ph.D., University of Connecticut, 1975  
Wickstrom, Eric, Ph.D., University of California at Berkeley, 1972  
Williams, Marvin T., Ph.D., Cornell University, 1976

## **College of Natural Sciences**

### **Biology**

Alvarez, Marvin R., Ph.D., University of Florida, 1964  
Arendash, Gary W., Ph.D., University of California at San Francisco, 1978  
Bell, Susan S., Ph.D., University of South Carolina, 1979  
Cochrane, Bruce J., Ph.D., Indiana University, 1979  
Cowell, Bruce C., Ph.D., University of California at Los Angeles, 1961  
Essig, Frederick B., Ph.D., Cornell University, 1975  
Friedl, Frank E., Ph.D., University of Minnesota, 1958  
Hickey=Weber, Eileen D., Ph.D., University of Berne, 1970  
Hinsch, Gertrude W., Ph.D., Iowa State University, 1957  
Lawrence, John M., Ph.D., Stanford University, 1966  
Layne, James N., Ph.D., Courtesy Professor  
Lim, Daniel V., Ph.D., Texas A&M University, 1973  
Mansell, Richard L., Ph.D., Indiana University, 1964  
McClung, Norvel M., Ph.D., University of Michigan, 1949  
McCoy, Earl D., Ph.D., Florida State University, 1977  
Meyerricks, Andrew J., Ph.D., Harvard University, 1958  
Michaels, Allan S., Ph.D., University of California at Santa Barbara, 1972  
Mushinsky, Henry R., Ph.D., Clemson University, 1973

Nickerson, Deborah A., Ph.D., University of Tennessee, 1979  
 Riggs, Carl D., Ph.D., University of Michigan, 1953  
 Romeo, John T., Ph.D., University of Texas at Austin, 1973  
 Saunders, Mary Jane, Ph.D., University of Massachusetts, 1982  
 Silver, Warren S., Ph.D., Johns Hopkins University, 1953  
 Simon, Joseph L., Ph.D., University of New Hampshire, 1963  
 Stewart, Gregory J., Ph.D., University of California at Davis, 1984  
 Swihart, Stewart L., Ph.D., Lehigh University, 1964  
 Tetrake, Diana T., Ph.D., Duke University, 1963  
 Weber, Lee A., Ph.D., University of Connecticut, 1975  
 Woolfenden, Glen E., Ph.D., University of Florida, 1960  
 Wunderlin, Richard P., Ph.D., St. Louis University, 1973

### Chemistry

Binford, Jesse S., Ph.D., University of Utah, 1955  
 Braman, Robert S., Ph.D., Northwestern University, 1966  
 Castle, Raymond N., Ph.D., University of Colorado, 1944  
 D'Agostino, Alfred T., Ph.D., Utah State University, 1984  
 Davis, Jefferson, Ph.D., University of California at Berkeley, 1959  
 Fernandez, Jack, Ph.D., University of Florida, 1954  
 Grossman, Steve, Ph.D., Purdue University, 1972  
 Johnston, Milton, Ph.D., Princeton University, 1970  
 Jurch, G., Ph.D., University of California at San Diego, 1965  
 Mandell, Leon, Ph.D., Harvard University, 1951  
 Martin, Dean F., Ph.D., Pennsylvania State University, 1958  
 Maybury, P. Calvin, Ph.D., Johns Hopkins University, 1952  
 Newkome, George R., Ph.D., Kent State University, 1966  
 Olsen, Eugene D., Ph.D., University of Wisconsin, 1960  
 O'Malley, Rebecca, Ph.D., University of Sheffield, 1970  
 Owen, Terence, Ph.D., University of Manchester, 1954  
 Potter, Robert, Ph.D., University of California at San Diego, 1979  
 Raber, Douglas J., Ph.D., University of Michigan, 1968  
 Scheffler, Towner B., Ph.D., University of Mississippi, 1984  
 Schneller, Stewart, Ph.D., Indiana University, 1968  
 Stanko, Joseph A., Ph.D., University of Illinois, 1966  
 Stevens, Brian, Ph.D., D.Sc., Oxford University, 1977  
 Weinzierl, Jon E., Ph.D., California Institute of Technology, 1968  
 Wenzinger, George, Ph.D., University of Rochester, 1960  
 Wickstrom, Eric, Ph.D., University of California at Berkeley, 1972  
 Worrell, Jay H., Ph.D., Ohio State University, 1966

### Geology

Davis, Richard A., Ph.D., University of Illinois, 1964  
 Defant, Marc J., Ph.D., Florida State University, 1985  
 Hooper, Robert J., Ph.D., University of South Carolina, 1986  
 Nocita, Bruce W., Ph.D., Louisiana State University, 1986  
 Stewart, Mark T., Ph.D., University of Wisconsin, 1976  
 Strom, Richard N., Ph.D., University of Delaware, 1975  
 Upchurch, Sam B., Ph.D., Northwestern University, 1970  
 Vacher, Henry L., Ph.D., Northwestern University, 1971

### Marine Science

Betzer, Peter R., Ph.D., University of Rhode Island, 1971  
 Blake, Norman J., Ph.D., University of Rhode Island, 1972

Briggs, John C., Ph.D., Stanford University, 1952  
Byrne, Robert H., Ph.D., University of Rhode Island, 1974  
Carder, Kendall L., Ph.D., Oregon State University, 1970  
Compton, John S., Ph.D., Harvard University, 1986  
Doyle, Larry J., Ph.D., University of Southern California, 1973  
Fanning, Kent A., Ph.D., University of Rhode Island, 1973  
Garrels, Robert M., Ph.D., Northwestern University, 1941  
Gust, Giselher R., Ph.D., Christian-Albrecht Universitat, 1975  
Hine, Albert C., Ph.D., University of South Carolina, 1975  
Hopkins, Thomas L., Ph.D., Florida State University, 1964  
Kirwan, Albert D., Ph.D., Texas A&M University, 1964  
Muller, Pamela H., Ph.D., University of Hawaii, 1977  
Paul, John H., Ph.D., University of Miami, FL, 1980  
Sackett, William M., Ph.D., Washington University, 1958  
Torres, Joseph J., Ph.D., University of California at Santa Barbara, 1980  
Van Vleet, Edward S., Ph.D., University of Rhode Island, 1978  
Vargo, Gabriel A., Ph.D., University of Rhode Island, 1976  
Walsh, John J., Ph.D., University of Miami, 1969  
Weisberg, Robert H., Ph.D., University of Rhode Island, 1972  
Wilson, Raymond R., Ph., University of California at San Diego, 1984

### **Mathematics**

Cerrito, Patricia B., Ph.D., University of Cincinnati, 1982  
Clark, William E., Ph.D., Tulane University, 1964  
Darling, Richard W., Ph.D., Warwick University, 1982  
Goodman, Adolph W., Ph.D., Columbia University, 1947  
Ismail, Nourad A.D., Ph.D., University of Alberta, 1974  
Kartsatos, Athanassios G., Ph.D., University of Athens, 1969  
Lee, Sung J., Ph.D., McMaster University, 1972  
Lian, Joseph J., Ph.D., Ohio State University, 1969  
Lin, Shwu-Yeng, Ph.D., University of Florida, 1965  
Lin, You-Feng, Ph.D., University of Florida, 1964  
Manougian, Manoug N., Ph.D., University of Texas, 1968  
McColm, Gregory L., Ph.D., University of California, 1986  
McWaters, Marcus M., Ph.D., University of Florida, 1966  
Mukherjea, Arunaua, Ph.D., Wayne State University, 1967  
Nagle, R. Kent, Ph.D., University of Michigan, 1975  
Parrott, Mary E., Ph.D., Memphis State University, 1979  
Pothoven, Kenneth L., Ph.D., Western Michigan University, 1969  
Ramachandran, Kandethody M., Ph.D., Brown University, 1987  
Rao, A.N.V., Ph.D., University of Rhode Island, 1972  
Ratti, Jogindar S., Ph.D., Wayne State University, 1966  
Reed, James H., Ph.D., University of Maryland, 1969  
Saff, Edward B., Ph.D., University of Maryland, 1968  
Shekhtman, Boris, Ph.D., Kent State University, 1980  
Snader, Jon C., Ph.D., University of Illinois, 1982  
Stark, William R., Ph.D., University of Wisconsin, 1975  
Thieleker, Ernest A., Ph.D., University of Chicago, 1968  
Williams, Carol A., Ph.D., Yale University, 1967

### **Physics**

Aubel, Joseph L., Ph.D., Michigan State University, 1964  
Block, Sylvan C., Ph.D., Florida State University, 1962  
Brooker, H. Ralph, Ph.D., University of Florida, 1962

Chang, Robert S.F., Ph.D., Cornell University, 1976  
 Deans, Stanley R., Ph.D., Vanderbilt University, 1967  
 Djeu, Nicholas I., Ph.D., Cornell University, 1970  
 Flynn, Robert W., Ph.D., Massachusetts Institute of Technology, 1968  
 Halder, Narayan C., Ph.D., Indian Institute of Technology, 1963  
 Jones, William D., Ph.D., Vanderbilt University, 1963  
 Oleson, Norman L., Ph.D., University of Michigan, 1940  
 Sundaram, Swaminatha, Ph.D., D.Sc., Annmaalai University, 1960

## College of Nursing

### Nursing

Applegate, Minerva I., Ed.D., Columbia University, 1980  
 Burns, Candace M., Ph.D., University of Michigan, 1980  
 Byers, Patricia H., Ph.D., Case Western Reserve University, 1983  
 Carbonell, Frieda W., Ed.D., Boston University, 1961  
 Dowd, Alice G., Ed.D., Boston University, 1972  
 Entrekin, Nina M., M.N., Emory University, 1969  
 Gonzalez, Lois I., M.N., University of Florida, 1971  
 Gregory, S. Joan, Ph.D., University of Florida, 1977  
 Gultiz, Elizabeth B., Ph.D., Illinois State University, 1983  
 Kearney, Rose T., Ph.D., University of Florida, 1987  
 King, Imogene M., Ed.D., Columbia University, 1961  
 MacDonald, Gwendoline R., Ed.D., Columbia University, 1963  
 McMillan, Susan C., Ph.D., University of South Florida, 1983  
 O'Neil, Carol A., Ed.M., Columbia University, 1978  
 Plawecki, Judith A., Ph.D., University of Iowa, 1974  
 Redding, Barbara A., Ed.D., University of Florida, 1982  
 Riffin, Ona Z., Ed.D., Memphis State University, 1976  
 Ross, Vivian M., Ed.D., Nova University, 1975  
 Sasmor, Jeannette L., Ed.D., Columbia University, 1974  
 Sharma, Sandra B., M.S.N., University of Cincinnati, 1978  
 Selleck, Cynthia S., D.S.N., University of Alabama, 1987

## College of Public Health

Banoub, Samir N., M.D., Dr.Ph.H., Alexandria University, 1979  
 Bayona-Celis, Manuel, Ph.D., The Johns Hopkins University, 1985  
 Bradham, Douglas D., Dr.P.H., University of North Carolina at Chapel Hill, 1981  
 Brandenburg, Nancy, Ph.D., University of Texas, 1984  
 Brooks, Stuart M., M.D., University of Cincinnati, 1962  
 Bruce, Rita G., Ed.D., West Virginia University, 1965  
 Chirikos, Thomas, Ph.D., Ohio State University, 1967  
 Coreil, Jeannine, Ph.D., University of Kentucky, 1979  
 Coulter, Martha L., Dr.P.H., University of North Carolina, 1984  
 Cresanta, James L., M.D., University of Pittsburgh, 1971  
 Graven, Stanley, M.D., State University of Iowa, 1956  
 Huang, Y.G. Laura, Dr.P.H., University of North Carolina, 1984  
 Kulkarni, Arun P., Ph.D., Indian Agriculture Research Institute, New Delhi, 1969  
 Kwa, Boo H., Ph.D., University of Malaya, 1977  
 Leaverton, Paul, Ph.D., Iowa State University, 1963  
 Levin, Peter J., Sc.D., Johns Hopkins University, 1969  
 McDermott, Robert J., Ph.D., University of Wisconsin, 1981



Meurer, Jeanne, M.D., Columbia University, 1970  
Morel, Jorge G., Ph.D., Iowa State University, 1987  
Noss, Charles I., Sc.D., Johns Hopkins University, 1983  
Reischl, Uwe, Ph.D., University of California, 1972  
Richards, Ira S., Ph.D., New York University, 1976  
Sear, Alan M., Ph.D., Purdue University, 1971  
Skinner, John H., Ed.D., Columbia University, 1974  
Spaul, Wilbur A., Ph.D., University of California at Berkeley, 1983  
Steslicke, William, Ph.D., University of Michigan, 1965  
Stockwell, Heather G., Sc.D., Johns Hopkins University, 1983  
Szonntag, Eugene L., Ph.D., Technical University of Budapest, 1975  
Taren, Douglas L., Ph.D., Cornell University, 1986  
Vickery, Ann C., Ph.D., University of South Florida, 1980  
Ward, William B., Dr.P.H., University of California at Berkeley, 1978  
Wilson, David P., Ph.D., Johns Hopkins School of Hygiene and Public Health, 1971  
Wolfson, Jay, Dr.P.H., University of Texas, 1981

## **College of Social and Behavioral Sciences**

### **African and Afro-American Studies**

Allen, Nola A., Ph.D., University of Notre Dame, 1979  
Glover, Kofi R., Ph.D., Indiana University, 1975  
Ohaegbulam, Festus U., Ph.D., University of Denver, 1967

### **Anthropology**

Angrosino, M.V., Ph.D., University of North Carolina, 1972  
Baer, Roberta, Ph.D., University of Arizona, 1984  
Burkhalter, S.B., Ph.D., Columbia University, 1982  
Grange, Roger T., Ph.D., University of Arizona, 1962  
Greenbaum, Susan, Ph.D., University of Kansas, 1980  
Henderson, J.N., Ph.D., University of Florida, 1979  
Kushner, Gilbert, Ph.D., University of Arizona, 1968  
Shiloh, Ailon, Ph.D., Dropsie University, 1959  
Smith, J. Jerome, Ph.D., University of Arizona, 1972  
Vesperi, Maria D., Ph.D., Princeton University, 1978  
Waterman, P., Ph.D., University of California at Berkeley, 1978  
White, Nancy M., Ph.D., Case Western Reserve University, 1982  
Whiteford, Linda, Ph.D., University of Wisconsin, 1979  
Weinker, Curtis, Ph.D., University of Arizona, 1975  
Williams, James R., Ph.D., University of Missouri, 1971  
Wolfe, Alvin W., Ph.D., Northwestern University, 1957

### **Communicology**

Carlson, Rebekah, M.S., University of South Florida, 1970  
Crittenden, Jerry, Ph.D., Michigan State University, 1969  
Gordon, Pearl, Ph.D., University of Tennessee, 1984  
Guifford, Arthur, Ph.D., University of Michigan, 1970  
Hollahan, Kelmie, M.A., University of South Florida, 1969  
Kasan, E. Lee, M.S., University of Florida, 1956  
Kinde, Stewart W., Ph.D., Michigan State University, 1972  
Kuffel, Constance, M.A., University of South Florida, 1968  
Richardson, Sylvia, M.D., McGill University, 1948

Ritterman, Stuart, Ph.D., Case Western Reserve University, 1968  
 Scheuerle, Jane, Ed.D., Nova University, 1975  
 Shepherd, David, Ph.D., Syracuse University, 1962  
 Silliman, Elaine, Ph.D., Graduate School and University Center, City University  
 of New York, 1976  
 Strange, Winifred, Ph.D., University of Minnesota, 1972

### **Criminology**

Blount, William R., Ph.D., George Peabody College, 1969  
 Dembo, Richard, Ph.D., New York University, 1970  
 Halsted, James, J.D., Southern Methodist University, 1973; Ph.D., Florida State  
 University, 1981  
 Heide, Kathleen, Ph.D., State University of New York at Albany, 1978  
 Moore, Richard, Ph.D., University of Nebraska-Lincoln, 1972  
 Reilly, John Tim, J.D., Stetson University, 1958  
 Silverman, Ira J., Ph.D., Ohio State University, 1970  
 Silverman Mitchell, Ph.D., Ohio State University, 1968  
 Stanford, Rose Mary, Ph.D., Florida State University, 1984  
 Territo, Leonard, Ed.D., Nova University, 1975  
 Vega, Manuel, Ph.D., Florida State University, 1964  
 Vetter, Harold J., Ph.D., State University of New York at Buffalo, 1955

### **Geography**

Ashford, Norman, Ph.D., Courtesy Professor  
 Fuson, Robert H., Ph.D., Louisiana State University, 1958  
 Holmes, Roland C., Ph.D., University of Chicago, 1979  
 Stafford, John W., Ph.D., Michigan State University, 1971  
 Stowers, Dewey, Ed.D., Duke University, 1961

### **Gerontology**

Etten, Mary Jean, Ed.D., Nova University, 1978  
 Garcia, Juanita L., Ed.D., Nova University, 1975  
 Gilmore, Alden S., M.A., Florida State University, 1957  
 Kosberg, Jordan I., Ph.D., University of Chicago, 1971  
 Mangum, Wiley P., Ph.D., University of Southern California, 1971  
 Mullins, Larry C., Ph.D., Yale University, 1978  
 Rich, Thomas A., Ph.D., University of Florida, 1957  
 Saxon, Sue V., Ph.D., Florida State University, 1963  
 Sheppard, Harold, Ph.D., University of Wisconsin, 1948  
 Sohn, Kisang, Ph.D., Brandeis University, 1988

### **History**

Arsenault, Raymond, Ph.D., Brandeis University, 1980  
 Belohlavek, John, Ph.D., University of Nebraska, 1970  
 Carr, David R., Ph.D., University of Nebraska, 1971  
 Currey, Cecil B., Ph.D., University of Kansas, 1964  
 Dilkes, Thomas P., Ph.D., University of Iowa, 1964  
 Hewitt, Nancy A., Ph.D., University of Pennsylvania, 1981  
 Ingalls, Robert R., Ph.D., Columbia University, 1973  
 Kleine, Georg H., University of Erlanger-Nurnberg, 1967  
 Lawson, Stephen F., Ph.D., Columbia University, 1974  
 Mayer, George H., Ph.D., University of Minnesota, 1948  
 Mormino, Gary R., Ph.D., University of North Carolina, 1977  
 Murray, William H., Ph.D., University of Pennsylvania, 1982

Parker, Keith A., Ph.D., University of Maryland, 1965  
Perez, Louis A., Ph.D., University of New Mexico, 1970  
Silbert, Edward M., Ph.D., University of Florida, 1966  
Swanson, James M., Ph.D., Indiana University, 1968  
Tippis, G. Kelly, Ph.D., University of Colorado, 1971  
Van Neste, Roy J., Ph.D., University of Wisconsin, 1972

### **Political Science**

Benton, J. Edwin, Ph.D., Florida State University, 1978  
Bowman, Lewis, Ph.D., University of North Carolina, 1964  
Factor, Regis, Ph.D., University of Notre Dame, 1974  
Gibbons, Michael, Ph.D., University of Massachusetts, 1983  
Hulbary, William, Ph.D., University of Iowa, 1972  
Kelley, Anne E., Ph.D., Florida State University, 1961  
Khator, Renu, Ph.D., Purdue University, 1985  
Levy, Arthur, Ph.D., Harvard University, 1969  
Milani, Mohsen, Ph.D., University of Southern California, 1985  
Paulson, Darryl, Ph.D., Florida State University, 1975  
Rigos, Platon N., Ph.D., Michigan State University, 1974  
Vanden, Harry, Ph.D., The New School for Social Research, 1976  
Zuk, Gary, Ph.D., Florida State University, 1983

### **Psychology**

Anker, James M., Ph.D., Catholic University of America, 1957  
Becker, Judith Ann, Ph.D., University of Minnesota, 1981  
Blomquist, A.J., Ph.D., University of Wisconsin, 1960  
Brannic,, M.T., Ph.D., Bowling Green State University, 1986  
Brown, John Lott, Ph.D., Columbia University, 1952  
Clingman, Joy, Ph.D., Florida State University, 1971  
Coovert, M.T., Ph.D., Ohio State University, 1985  
Filskov, Susan, Ph.D., University of Vermont, 1975  
Finkelstein, M.A., Ph.D., Columbia University, 1981  
Fowler, Robert, Ph.D., University of Tennessee, 1963  
Garcia, Sandra, Ph.D., University of Southern California, 1971  
Gesten, Ellis, Ph.D., University of Rochester, 1974  
Hardy, Miles, Ph.D., Florida State University, 1960  
Jenkins, James, Ph.D., University of Minnesota, 1950  
Kimmel, Herbert D., Ph.D., University of Southern California, 1958  
Kinder, Billy N., Ph.D., University of South Carolina, 1975  
LaBarba, Richard, Ph.D., University of Tennessee, 1965  
Levine, Edward L., Ph.D., New York University, 1970  
McGuinness, Diane, Ph.D., University of London, 1974  
Meyer, Herbert H., Ph.D., University of Michigan, 1949  
Nelson, Carnot E., Ph.D., Columbia University, 1966  
Nelson, Douglas L., Ph.D., University of Wisconsin, 1967  
Penner, Louis A., Ph.D., Michigan State University, 1969  
Powell, Robert W., Ph.D., Florida State University, 1966  
Russell, Wallace, Ph.D., University of Iowa, 1949  
Sacco, William, Ph.D., Florida State University, 1979  
Sandler, Jack, Ph.D., Florida State University, 1969  
Sanocki, Thomas A., Ph.D., University of Wisconsin Madison, 1986  
Sidowski, Joseph, Ph.D., University of Wisconsin, 1956  
Sistrunk, Frank, Ph.D., University of Miami, 1963  
Spector, Paul, Ph.D., University of South Florida, 1975

Spielberger, Charles D., Ph.D., University of Iowa, 1954  
 Stenmark, David E., Ph.D., University of Alabama, 1969  
 Strong, Pascal H., Ph.D., University of Tennessee, 1955  
 Thompson, J. Kevin, Ph.D., University of Georgia, 1982

### **Public Administration**

Daly, John L., Ph.D., Indiana University, 1987  
 Jreisat, Jamil E., Ph.D., University of Pittsburgh, 1968  
 MacManus, Susan A., Ph.D., Florida State University, 1975  
 Menzel, Donald C., Ph.D., Pennsylvania State University, 1973  
 Paluch, Peter T., Ph.D., Michigan State University, 1984  
 Renick, James C., Ph.D., Florida State University, 1980  
 Swierczek, F.W., Ph.D., University of Pittsburgh, 1978

### **Rehabilitation Counseling**

Dickman, Fred, Ed.D., University of Florida, 1967  
 Emener, William G., Ph.D., University of Georgia, 1971  
 Gross, Pincus, Ph.D., University of Florida, 1967  
 Landsman, Murray, Ph.D., University of Florida, 1964  
 Pinkard, Calvin, Ph.D., University of Florida, 1959  
 Rasch, John D., Ph.D., University of Wisconsin, 1977  
 Wright, Tennyson, Ph.D., University of Georgia, 1976

### **Social Interdisciplinary Sciences**

Allen, Nola A., Ph.D., University of Notre Dame, 1979  
 Amen, Michael M., Ph.D. Universite of Geneve, 1976  
 Arnade, Charles W., Ph.D., University of Florida, 1955  
 Breit, Etta B., Ph.D., University of Pennsylvania, 1984  
 Glover, Kofi R., Ph.D., Indiana University, 1975  
 Hechiche, Abdelwahab, D.E.S., Sorbonne, 1966  
 McAlister, Linda L., Ph.D., Cornell University, 1969  
 Myerson, Marilyn, Ph.D., State University of New York at Buffalo, 1976  
 Nelson, Harvey W., Ph.D., George Washington University, 1972  
 Ochshorn, Judith, Ph.D., Union Graduate School, 1978  
 Ohaegbulam, Festus U., Ph.D., University of Denver, 1967  
 Orr, Mark T., Ph.D., University of North Carolina, 1954  
 Slider, Darrell, Ph.D., Yale University, 1981  
 Snook, Janice B., Ph.D., University of Maryland, 1969  
 Stamps, Spurgeon David, Ph.D., Washington State University, 1974  
 Stoudinger, Susan M., Ph.D., Indiana University, 1970  
 Williams, Juanita H., Ph.D., Temple University, 1963

### **Social Work**

Giordano, Jeffrey A., Ph.D., Georgia State University, 1983  
 Hancock, Tina U., D.S.W., University of Alabama, 1981  
 Hutchinson, William S., M.S.W., University of Georgia, 1968  
 Northcutt, Travis J., Ph.D., Florida State University, 1958  
 Smith, Phillip L., M.S.W., University of Georgia, 1968  
 Sohn, Kisang, M.S.W., Florida State University, 1982  
 Vasey, Wayne, M.A., University of Denver, 1936  
 White, Robert L., M.S.W., University of North Carolina, 1963  
 Wilk, Ruta J., D.S.W., University of California, 1981  
 Yegidis, Bonnie L., Ph.D., University of South Florida, 1983

## **Sociology**

Brandmeyer, Gerard A., Ph.D., University of California at Los Angeles, 1962  
Cameron, William, Ph.D., University of Wisconsin, 1952  
Ellis, Carolyn, Ph.D., State University of New York at Stonybrook, 1981  
Francis, Roy G., Ph.D., University of Wisconsin, 1950  
Gunter, Billy G., Ph.D., University of Tennessee, 1964  
Hansen, R., Ph.D., University of California at Los Angeles, 1967  
Johnson, Doyle P., Ph.D., University of Illinois, 1969  
Jorgenson, Danny, Ph.D., Ohio State University, 1979  
Kleiman, Michael, Ph.D., Pennsylvania State University, 1979  
Kutcher, Louis W., Ph.D., University of Minnesota, 1972  
Moore, Harvey A., Ph.D., Case Western Reserve University, 1972  
Nesman, Edgar G., Ph.D., University of Florida, 1969  
Orru, Marco, Ph.D., University of California at Davis, 1984  
Turner, Stephen, Ph.D., University of Missouri, 1975  
Wheeler, Raymond, Ph.D., University of Michigan, 1962  
Wiswell, Candace H., Ph.D., University of Texas, Austin, 1987

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## COMMUNICATING WITH THE UNIVERSITY

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Communications regarding the services and programs listed below should be directed by letter or by phone to the appropriate office on the Tampa, St. Petersburg, Fort Myers, or Sarasota campuses. Mailing address and general telephone numbers for the campuses are listed within this publication. See Table of Contents for specific page numbers. The offices listed below (on the Tampa Campus, unless otherwise indicated) may be dialed direct at the telephone numbers shown.

**Academic Advising**

Office of the Dean of the appropriate college.

**Applications and Admissions**

Office of Graduate Admissions, SVC 126 ..... 974-3350

College of Medicine:

Associate Dean for Admissions, MDC Box 3 ..... 974-2229

**Athletics (Intercollegiate)**

Director of Athletics, PED 214 ..... 974-2125

**Career Development**

Counseling Center for Human Development

SVC 207 ..... 974-2831 or 974-2866

**Career Resource Center**

Alumni Placement Services, SVC 243 ..... 974-2171

Career Planning and Advising, SVC 243 ..... 974-2171

Cooperative Education Program, SVC 243 ..... 974-2171

**Continuing Education Courses and Conferences**

School of Continuing Education, CEB 012 ..... 974-2403

**Counseling**

Counseling Center for Human Development

SVC 207 ..... 974-2831 or 974-2866

**Disabled Student Academic Services**

Coordinator of Disabled Students, LIB 620

VOICE/TTY ..... 974-4309

**Disabled Student Social Services**

University Center Program Office, CTR 124 ..... 974-3180

**Financial Assistance (scholarships, loans, employment)**

Office of Financial Aids, SVC 262 ..... 974-2621

Office of Student Employment, SVC 262 ..... 974-2297

**Graduate Studies**

Graduate School, FAO 126 ..... 974-2846

**Handicapped Student Services**

Coordinator of Handicapped Services, LIB 620 ..... 974-4309

**Health Services (Student)**

Health Center, CTR 312 ..... 974-2331

**Housing: Campus Residence Halls**

Office of Housing and Food Service, RAR 223 ..... 974-2310

**Housing: Off-Campus**

Student Government Office, CTR 156A ..... 974-2401

**International Students**

Office of Student Organizations CTR 217 ..... 974-3180

**Library Resources:**



<b>Tampa Campus: Office of the Director of of Libraries, LIB 207</b>	974-2721
<b>Fort Myers Campus: ECC/USF Learning Resources Center</b>	489-9220
<b>St. Petersburg Campus: Office of the University Librarian</b>	893-9125
<b>Sarasota Campus: Office of the Librarian</b>	355-7671
<b>Mature Student Advising</b>	
School of Continuing Education, CEB 012	974-2403
<b>Minority Student Advising</b>	
Academic Services, SVC 255	974-2645
<b>Parking and Traffic Services</b>	
University Police Department, UPB 002	974-2540
<b>Reading Study Skills</b>	
Counseling Center for Human Development, SVC 207	974-2831
<b>Records, Registration</b>	
Office of the Registrar, SVC 136	974-4029
<b>Speakers Service</b>	
Office of Media Relations and Publications ADM 264	974-2181
<b>Student Affairs</b>	
Office of Student Affairs, ADM 151	974-2151
<b>Transcripts (USF)</b>	
Office of the Registrar, SVC 136	974-4080
<b>Veterans Affairs</b>	
Office of Veterans Affairs, SVC 209	974-2291