Armando J. Hoare

Curriculum Vitae

Contact Information

Department Address
Department of Mathematics and Statistics
University of South Florida
140 7th Ave S.
St Petersburg, Florida 33701
Phone: (727) 873-4737

E-mail: ahoare2@usf.edu

Academic Qualifications

Doctor of Philosophy in Mathematics with a concentration in Statistics, May 2008, University of South Florida, Tampa, FL, U.S.A; *Dissertation*: **Parametric, Non-Parametric and Statistical Modeling of Stony Coral Reef Data**

Master of Arts in Mathematics, 2004, University of South Florida, Tampa, FL, U.S.A.

Master of Education in Educational Leadership, Certificate of Award in Mathematics, 2002, University of North Florida, Jacksonville, FL, U.S.A.

Bachelor of Science in Mathematics and Chemistry, 1992, Regis University, Denver, CO, U.S.A.

Associates degree in Natural Science (Mathematics and Chemistry), 1990, St. John's College Sixth Form, Belize City, BZE

Special Courses and Workshop

2021 Teaching & Learning in the Diverse Classroom, Course of Study, Cornell University, NY

2020 Bay to Bay Learning Symposium, *Civic & Community Engagement across Curriculum*, University of South Florida – Saint Petersburg, FL February 14

2020 Fall USF Certified as Online Educator

2019 Summer Teaching Symposium (STS-06) , *Teaching the Next Generation*, University of South Florida, Tampa, FL May 8-9

2019 Bay to Bay Learning Symposium, *Diversity in Action*, University of South Florida – Saint Petersburg, FL February 8

2018 Summer Teaching Symposium (STS-05) , *Motivating Students*, University of South Florida, Tampa, FL May 9-10

2018 State University System Math Action Planning Syposium, Orlando, FL May 6 - 7

2018 Bay to Bay Learning Symposium, *Critical thinking unmasked: how to infuse it into a disciplin-based course*, University of South Florida – Saint Petersburg, FL February 9

2017 Summer Teaching Symposium (STS-04), *Gamification*, University of South Florida, Tampa, FL May 10-11

2017 Bay to Bay Learning Symposium, University of South Florida – Saint Petersburg, FL February 10

2016 Summer Teaching Symposium (STS-03), *Flip It*, University of South Florida, Tampa, FL May 11-12

2016 Bay to Bay Learning Symposium, University of South Florida – Saint Petersburg, FL February 12

2015 Summer Teaching Symposium (STS-02), *The Science of Learning*, University of South Florida, Tampa, FL

Workshop for Interdisciplinary and Inquiry Based Teaching of Calculus, University of South Florida, Tampa 2014

Numerical Analyses of Biological and Environmental Data, University College of London, UK, 2011

American Diploma Project (ADP) Algebra II judgment study workshop, in Cleveland, Ohio, 2009

The Statistics of Environmental Impact, online course, 2005

Main Research Interest

Statistical Modeling
Statistical Analysis of Environmental Problems
Forecasting Analysis

Professional Experience

Fall 2022 to present **Associate Professor of Instruction** University of South Florida – St Petersburg, FL

Fall 2020-2020 **Instructor II** University of South Florida-St Petersburg, St Petersburg, FL

Fall 2020 to 2023 **Precalculus Algebra and trigonometry Course Coordinator**
University of South Florida- St Petersburg, FL

2018 - 2019 **Business Calculus Course Coordinator**
University of South Florida-St Petersburg, St Petersburg, FL

2015 – Spring 2018 **Calculus I Course Coordinator**
University of South Florida-St Petersburg, St Petersburg, FL

2016- 2017, Summer 2018 Mathematics and Statistics Program Coordinator
University of South Florida-St Petersburg, St Petersburg, FL

2014- 2017 Mathematics and Statistics Upper Unit Director

University of South Florida-St Petersburg,
St Petersburg, FL

2014- 2016 Mathematics and Statistics Program Assistant Coordinator

University of South Florida-St Petersburg,
St Petersburg, FL

2014-2020 Instructor I Mathematics University of South Florida-St Petersburg,
St Petersburg, FL

Courses taught:

STA 5166	Statistical Methods I
STA 3024	Introductory Statistics II
MAC 2311	Calculus I
MAC 2233	Business Calculus
MAC 1147	Precalculus Algebra and trigonometry
MGF 1107	Mathematics for Liberal Arts

2008-2014 Assistant Professor Mathematics University of South Florida-St Petersburg,
St Petersburg, FL

Courses taught:

STA 5166	Statistical Methods I
STA 2023	Introductory Statistics I
MAC 2312	Calculus II
MAC 2311	Calculus I
MAC 1147	Precalculus Algebra and trigonometry
MAC 1105	College Algebra

2013-2014 Interim ESP Graduate Coordinator University of South Florida-St Petersburg,
St Petersburg, FL

2007-2008 Assistant Visiting Instructor University of South Florida- St Petersburg,
St Petersburg, FL

Courses taught:

STA 5166	Statistical Methods I
STA 2023	Introductory Statistics I
MGF 1106	Finite Mathematics
MAC 1105	College Algebra

2001-2007 Graduate Teaching Associate University of South Florida, Tampa, FL

Courses taught:

	MAC 2281	Engineering Calculus I
	MAC 1147	Precalculus Algebra & Trigonometry
	MAC 1105	College Algebra
	MGF 1106	Finite Mathematics
	MGF 1107	Mathematics for Liberal Arts
	STA 1022	Basic Statistics
Facilitated Help Sessions For:		
	MAC 2230	Business Calculus
	MAC 1105	College Algebra
	MGF 1107	Mathematics for Liberal Arts
Grader For:	STA 4442	Introduction to Probability

Summer 2006-2007

Write programs to create multiple choice questions for a test bank designed for College Algebra using MAPLE TA

Summer 2006 Adjunct Faculty USF-St. Petersburg, St. Petersburg, FL

Course taught: MAC 1105 College Algebra

Mathematics Instructor

1993-2001 St. John's College Junior College Belize City, Bze

Taught college mathematics to business and science students
Taught Advanced Level mathematics to math majors in preparation for Cambridge Advance Level examinations
Reconstructed mathematics curriculum for increased efficacy and for the placement of students into their desired program of study

Mathematics and Chemistry Teacher

1992-1993 San Pedro High School San Pedro, Ambergris Caye, Bze

Taught mathematics and chemistry to students sitting CXC examinations in both disciplines

Funding

Biostatistical Analyses of 2010 and 2011 Data for Gum Springs Flow Diversion Study and

Periphyton Sampler Analyses, **Southwest Florida Water Management District**. PI (USD 45,000 – June 2011 – December 2012)

Data Analysis

2012 Report Biostatistical Analyses of Pre-Diversion Ecological Data and Periphyton Colonization, **Southwest Florida Water Management District**

2012 Report Antidegradation Analysis of Clam Bayou, Florida, **Florida Department of Environmental Protection, Tallahassee, Florida**

2011 Report Gum Springs Flow Diversion Study: 2010 Periphtyon and Macrophyte Assessment, **Southwest Florida Water Management District**

2005, 2006 and 2007 Reports Performed the data analyses for the consultant report prepared for the **EPA** and **Florida Keys National Marine Sanctuary**, Water Quality Protection Program, Coral Reef/Hardbottom Monitoring Project, Florida Marine Institute, St. Petersburg.

Publications

Cook, M.M., Symonds, E.M., Gerber, B., **Hoare, A**., Van Vleet, E. S. and Breitbart, M., 2016 *Removal of Six Estrogenic Endocrine-Disrupting Compounds (EDCs) from Municipal Wastewater Using Aluminum Electrocoagulation,* Water *, 8, 128*

Jaward, F.M., Alegria, H.A., Reyes, J.G.G., **Hoare, A.** 2012 Levels of PAHs in the Waters, Sediments, and Shrimps of Estero de Urias, an Estuary in Mexico, and their Toxicological Effects, The Scientific World Journal Doi:10.1100/2012/687034

Breithaupt, J.L., Smoak, J.M., Smith, T.J., Sanders, C.J., **Hoare, A.** 2012 *Organic Carbon Burial Rates in Mangrove Sediments: Strengthening the Global Budget*, Global Biogeochemical Cycles, vol. 26, GB3011 Doi:10.1029/2012GB004375

Tokotch, B., Meindl, C., **Hoare, A.** and Jepson, J. 2012 *Stakeholder Perceptions of the Northern Gulf of Mexico Grouper and Tilefish Individual Fishing Quota Program,* Journal of Marine Policy, 36, 34–41.

Hoare, A. and Tsokos, C. P. 2011 *Non-parametric Analysis of Stony Coral Species Diversity Data, J*ournal of Problems of Nonlinear Analysis in Engineering Systems, 1(35), 36-56

Hoare, A. and Tsokos, C.P. 2009 *Statistical analysis and modeling of coral reef habitats*. Nonlinear Analysis: Theory, Methods and Applications, 71(2), 1360-1369.

Technical Reports

Hoare, A., Riedinger-Whitmore, M., Lauterman, F., Whitmore, T., Price, R. 2012 Gum Springs Flow Diversion Study: Biostatistical Analyses of Pre-Diversion Ecological Data and Periphyton Colonization, Southwest Florida Water Management District

Price, R.A., Whitmore, T. J., Riedinger-Whitmore, M.A., Kenny III, W.F., **Hoare, A.**, Stephens, T.W., and Flocks, J.G. 2012 Antidegradation Analysis of Clam Bayou, Florida, Florida Department of Environmental Protection, Tallahassee, Florida

Dixon, B., **Hoare, A.** and Riedinger-Whitmore 2011 Special Report: Graduate Program External Review Report for the Environmental Science and Policy Master's Program, University of South Florida- St. Petersburg, Florida

Riedinger-Whitmore, M., Whitmore, T. J., Slade, J.G., **Hoare, A.**, Jones, D., Jacono, C., Netherland, M. and Brenne, M. 2011 Gum Springs Flow Diversion Study: 2010 Periphtyon and Macrophyte Assessment, Southwest Florida Water Management District

Tsokos, C.P., **Hoare, A.J.** 2007 Statistical Analysis of Florida Keys Coral Reef Data (1996-2006 Video Point Count Data and 1996-2006 species inventory and disease) . US EPA Florida Keys National Marine Sanctuary Water Quality Protection Program. Florida Marine Institute, St. Petersburg, Florida.

Tsokos, C.P., **Hoare, A.J.**, Yanev, G.P. Statistical Analysis of Species Inventory and Disease/Condition Coral Reef Data, 1996-2005. US EPA Florida Keys National Marine Sanctuary Water Quality Protection Program. Florida Marine Institute, St. Petersburg, Florida.

Tsokos, C.P., **Hoare, A.J.**, Yanev, G.P. 2006 Statistical Analysis of Florida Keys Coral Reef Data (1996-2005 Video Point Count Data) . US EPA Florida Keys National Marine Sanctuary Water Quality Protection Program. Florida Marine Institute, St. Petersburg, Florida.

Tsokos, C.P., **Hoare, A.J.**, Yanev, G.P. 2005 Statistical Analysis of Florida Keys Coral Reef Data (1996-2004 Video Point Count Data) . US EPA Florida Keys National Marine Sanctuary Water Quality Protection Program. Florida Marine Institute, St. Petersburg, Florida.

Grants, Scholarships, Awards Received and Achievements

2014 Lead person in the creation of an autonomous Math Unit at the University of South Florida- Saint Petersburg

2007 Certificate of Recognition for outstanding performance as a graduate teaching assistant

2004-2006 Fred L. & Helen M. Tharp End Scholarship from USF
(*This is awarded to the top 20 students in the Department of Mathematics and Statistics.)*
2001-2008 Latin American/Caribbean Scholarship

1998 St. John Berchman's Award for Teacher of the Year, St. John's College Junior College

1992 Graduation Honors: Magna Cum Laude

1990-1992 Regis Natural Science Scholarship in Mathematics and Chemistry
(*Awarded to the top 2 students on the basis of academic excellence on competitive examinations)*

1991 Nominee for Alpha Sigma Nu Society for Natural Sciences

Presentations/Conferences

2018 The Teaching Professor Conference, Atlanta, GA June 1-3

2017 The Teaching Professor Conference, St. Louis, MO June 2-4

2017 Pearson Sunshine Symposium in Orlando, FL February 23 -24

2017 Joint Meetings of FL-MAA and FTYCMA, Bradenton, FL February 17-18

2013 Joint Mathematics Meetings in San Diego, CA, January 9-12

2010 Forecasting model for rainfall precipitations in the State of Florida. Fourth International Conference on Neural, Parallel and Scientific Computations, Atlanta, GA. (Oral Presentation)

2008 Statistical analysis and modeling of coral reef habitats. Fifth World Congress of Nonlinear Analysts, Orlando, FL. (Oral Presentation)

2005 Statistical Analysis of Coral Reef Data. Statistics Seminar: Frontiers in Statistics. University of South Florida, Tampa, FL. (Oral presentation)

1992 Chromium (VI) Co-oxidation of Maleic Acid and Citric Acid: Reaction Products. Sixth Undergraduate Research Conference in Chemistry. Minneapolis, MN. (Poster presentation)

1992 Chromium (VI) Co-oxidation of Maleic Acid and Citric Acid: Reaction Products. Undergraduate Research Symposium in Chemistry. Greeley, CO. (Oral presentation)

Published Abstracts/Poster

Beckhorn, R.M., Smoak, J.M., Poore, R.Z., **Hoare, A.** 2013 *700-year record of sea-surface temperature variability derived from Mg/Ca in planktonic foraminifera from the northern Gulf of Mexico*, Florida Statewide Graduate Student Research Symposium, USF Tampa, Florida

Riedinger-Whitmore, M.A., Whitmore, T.J., **Hoare, A.**, M., Price, R., Lauterman, F. 2013 *Inter-annual, Substrate, and Seasonal Variation in Pheriphyton Communities in a Subtropical, Spring-fed Florida Stream*. ASLO, New Orleans, Louisiana.

Breithaupt, J. L., Smoak, J.M., Smith III, T.J., Sanders, C.J., **Hoare, A.** 2012. *Strengthening the Century-Scale Global Estimate of Mangrove Organic Carbon Burial Rates.* 9th INTECOL International Wetlands Conference, Orlando, Florida.

Price, R., Whitmore, T.J., Riedinger-Whitmore, M.A., Kennedy, W.F., **Hoare, A.**, Flocks, J.G. 2012 *Historical Analysis of Polycyclic Aromatic hydrocarbon, Pesticide, and Metal Contamination in Clam Bayou, Florida*, 9th INTECOL International Wetlands Conference, Orlando, Florida

Beckhorn, R.M., Smoak, J.M., Poore, R.Z., **Hoare, A.** 2012 *400 year long record of mean annual and winter sea-surface temperatures derived from Mg/Ca in planktonic foraminifera from the Fisk Basin in the northern Gulf of Mexico*, Graduate Expo, USFSP

Professional Affiliations

American Statistical Association
Institute of Mathematical Statistics
American Mathematical Society

Languages

English, Spanish

Computer Skills

Experienced in SAS, R, S-Plus, SPSS, Minitab, MAPLE, MAPLE T.A., MatLab, Primer-e, Excel.

University, College, Department committees

- Member of Department, Interdisciplinary Committee 2022
- Member of Department, Student Award Committee 2021
- Upper Unit Director, Mathematics Fall 2014 to Fall 2017
- Interim Program Coordinator, Mathematics Fall 2016 to summer 2017 & summer 2018.
- Assistant Program Coordinator , Mathematics Fall 2014 – Summer 2016
- Interim Graduate Coordinator, ESP Spring 2013 - Spring 2014
- Member of CAS Faculty Council (Fall 2010 – Spring 2012)
- Member of ESP&G Graduate Committee (Fall 2010 – 2014)
- Member of ESP&G Ad hoc balloting committee (Fall 2009-2014)
- Member of ESP&G Bylaws committee (Fall 2008 – 2014)
- Member of ESP&G Annual review Committee (2012 and 2013)
- Member of ESP&G Ad hoc workload committee (Fall 2009)
- ESP Comprehensive Exam examiner (Summer 2008, 2009; Spring 2009, 2010, 2011, 2012, 2013, 2014; and Fall 2009, 2010, 2011, 2012, 2013)
- General Assessment Report: GE courses(2007 - present)
- College Algebra Common Exam panel (2008 – 2011)
- USF Panelist/Reviewer for the Internal Awards program (2009 - 2010)

Ph.D. and Master's Thesis Advisory Committees

- Selena Johson – Ph.D. committee (Department of Marine Science, USF-Tampa). *Untapped Potential of Gorgonian Octocorals for Detecting Environmental Change in Biscayne National Park, Florida, USA.* Completed Fall 2019

- Christopher Mchan – Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). Elusive or Illusive Truth? The Role of

Sensors and Sampling Strategies in Data Collection and its Implication for Scientific Knowledge and the Pursuit of Truth. Completed Spring 2019

- Monica Mion – Ph.D. committee (Department of Marine Science, USF-Tampa). *Input, Fate and Consequential Removal of Steroid Estrogens in a Sewage-Impacted Southwest Florida Marine Environment.* Completed Spring 2015

- Rita Beckhorn - Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). *400 year long record of mean annual and winter sea-surface temperatures derived from Mg/Ca in planktic foraminifera from the Fisk Basin in the northern Gulf of Mexico.* Completed Spring 2014

- Joshua L. Breithaupt - Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). *Blue Carbon in the Coastal Everglades: A Preliminary Measurement of Centennial-scale Burial Rates In Mangrove Soils* Completed Summer 2012

- Renee Price – Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). *Historical Analysis of Polycyclic Aromatic Hydrocarbon, Pesticide, and Metal Contamination in Clam Bayou, Florida*. Completed Spring 2012

- Renee Duffey - Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). *A multi-scale approach for characterizing habitat selection of tidal creek fish in Charlotte Harbor, Florida.* Completed Spring 2012

- Fredrik Bradley - Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). *Development of a comprehensive flow path model to determining factors contributing to the spatial variability of water quality including CDOM Concentrations in selected agricultural watersheds using GIS and RUSLE Model.*
  Completed Fall 2011

- Amy Wallace - Master's thesis committee (Department of Marine Science, USF-Tampa). *Dynamics of Stony Coral Assemblages on Patch Reefs of the Upper Florida Reef Tract, Including Biscayne National Park.* Completed Spring 2011

- Kyle Buck – Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). *Assessment of Environmental and Social Factors in Cancer Risk among Teens.* Completed Spring 2011

- Jaeson Clayborn – Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). *The survivorship and foraging strategies of Solenopsis invicta in beach habitats of Central-West Florida.* Completed Spring 2011

- Britni Tokotch – Master's thesis committee (Department of Environmental Science, Policy and Geography, USF- St. Petersburg). *Stakeholder Perceptions of the Gulf of Mexico Grouper and Tilefish Individual Fishing Quota Program.* Completed Fall 2010

Other Activities

- Member and Treasurer of the Society of Saint Vincent de Paul, Blessed Trinity Parish Conference from 2015 to present

- Volunteer for Lakewood High School, Saint Petersburg, Florida from 2012 to 2016.
- Judge for High School and Middle School for Science Award in 2012 Mayors Youth Showcase of Achievement, Saint Petersburg, Florida
- Coach for Southside Youth Soccer, Saint Petersburg, Florida from 2008 to 2013.
- Served as an Assistant Coach for Southside Youth Soccer, Saint Petersburg, Florida from 2006 to 2008.
- Served as a Volunteer at Douglas Jamerson Elementary School for Remedial Math Sessions and the Chess Club, Saint Petersburg, Florida.
- Served as Supervisor of Saint John's College (SJC) Campus Ministry Project at Youth Hostel, Belize City, Belize.
- Football coach for SJC VI Form Team: Organized the first tertiary level football marathon, Belize City, Belize.
- Head of the Evaluation Committee for the Belize Football League, Belize City, Belize.
- Member of the Executive Committee for the Belize Football League, Belize City, Belize.