Florida State University Department of Statistics

2024 Orientation

Schedule

Monday, August 19th, 9:30am - 3:00pm

Department Orientation

- Graduate programs
- People to know
- Duties and responsibilities
- Program of Study
- Discussion session with graduate students
- Lunch provided

Graduate Programs

- MS
  - Applied Statistics
  - Biostatistics
  - Mathematical Statistics
  - **Statistical Data Science**
  - Thesis Option
- PhD
  - Statistics
  - Biostatistics

MS

MS Degrees

- Specific course requirements
- 36 credits (12 courses)
  - Exception: The MS in Statistical Data Science requires 32 credit hours.
  - 6 credits (2 Courses) can be replaced by a Masters thesis
- The minimum cumulative GPA in all courses is 3.0.
- See Graduate Handbook
  https://stat.fsu.edu/sites/g/files/upcbnu1811/files/Handbook2024_8_2%20%28002%29_2.pdf
- Common courses in Semester I:
  STA5066, STA 5106, STA 5166, STA 5326

MS in Applied Statistics

Course Number	Course Name
STA 5166	Statistics in Applications I
STA 5167	Statistics in Applications II
STA 5326	Distribution Theory and Inference
STA 5327	Statistical Inference

At least two of the following courses

STA 5066	Data Management and Analysis with SAS
STA 5106	Computational Methods in Statistics I
STA 5168	Statistics in Applications III
STA 5856	Time Series and Forecasting Methods

Required courses

Year 1		Year 2	
Fall	Spring	Fall	Spring
STA 5166	STA 5167	Elective	Elective
STA 5326	STA 5327	Elective	Elective
Required Course or Elective	Required Course or Elective	Elective	Elective

Typical course program

MS in Mathematical Statistics

Course Number	Course Name
STA 5106	Computational Methods in Statistics I
STA 5166	Statistics in Applications I
STA 5326	Distribution Theory and Inference
STA 5327	Statistical Inference
At least two of the following courses	
STA 5167	Statistics in Applications II
STA 5707	Applied Multivariate Analysis
STA 6346	Advanced Probability and Inference I
STA 6448	Advanced Probability and Inference II

Required courses

Year 1		Year 2	
Fall	Spring	Fall	Spring
STA 5166	Required Course or Elective	STA 6346 or Elective	STA 6448 or Elective
STA 5326	STA 5327	Elective	Elective
STA 5106	Required Course or Elective	Elective	Elective

Typical course program

MS in Statistical Data Science

(3) STA 5166	Stat Apps I
(3) STA 5167	Stat Apps II
(3) STA 5066	Data Management and Analysis with SAS
(3) STA 5067	Advanced Data Management and Analysis with SAS
(3) STA 5106	Computational Methods in statistics I
(3) STA 5856	Time Series and Forecasting Methods
(3) STA 5635	Applied Machine Learning
(2) STA 5910	Supervised Research: Professional Skills Seminar
(3) STA 5939	Introduction to Statistical Consulting (Capstone project)
Parenthetical numbers are credit hours.	

Required courses

Semester 1	Semester 2	Semester 3
(3) STA 5166 Stat Apps I	(3) STA 5167 Stat Apps II	(3) Elective
(3) STA 5066 Data Management and Analysis with SAS	(3) STA 5067 Advanced Data Management and Analysis with SAS	(3) Elective
(3) STA 5106 Computational Methods in statistics I	(3) STA 5856 Time Series and Forecasting Methods	(3) STA 5635 Applied Machine Learning
(2) STA 5910 Supervised Research: Professional Skills Seminar †		(3) STA 5939 Introduction to Statistical Consulting (Capstone project)

Typical course program

MS in Biostatistics

Course Number	Course Name
STA 5166	Statistics in Applications I
STA 5167	Statistics in Applications II
STA 5326	Distribution Theory and Inference
STA 5198	Epidemiology for Statisticians
STA 5244	Fundamentals of Clinical Trials
STA 5327	Statistical Inference

At least one of the following courses

STA 5179	Applied Survival Analysis
STA 5066	Data Management and Analysis with SAS
STA 5197	Longitudinal Analysis

Required courses

Year 1		Year 2	
Fall	Spring	Fall	Spring
STA 5166	Required Course or Elective	Elective	Elective
STA 5326	STA 5327	Elective	Elective
STA 5198	STA 5244	Elective	Elective

Typical course program

Ph.D.

Course requirements

- All coursework must be taken for letter grade, C- or better
  - Exception: interdisciplinary option for Statistics PhD
  - One of these may be DIS (Directed Individual Study)
  - At least one course each semester (in 4th year, at least two courses total in fall / spring)
- Ten specific, required courses must have minimum grade of B-
- GPA at least 3.0
- See Graduate Student Handbook

Ph.D.

Other requirements

- Qualifying exam
- Essay proposal and defense
- Dissertation defense

Ph.D.

Qualifying exam ("Preliminary")

- Each year at the end of August and early January
- Must take in second year
- Topics from six of the ten required courses

Course Number	Course Name
STA 5106[X]	Computational Methods in Statistics I
STA 5166	Statistics in Application I
STA 5167	Statistics in Application II
STA 5198[Y]	Epidemiology for Statisticians
STA 5326	Distribution Theory
STA 5327	Statistical Inference
STA 6346	Advanced Probability and Inference I

[X] Statistics Majors only
[Y] Biostatistics Majors only

- May retake exam once (following year)
- Lose funding if not passed by end of third year of study

Ph.D.

Essay (“Prospectus”)

- Must pass qualifying exam first
- Then select the PhD committee members
- Write the essay proposal
  - Literature review
  - Preliminary results
  - Research plan for dissertation
- Essay defense
  - 50 minute presentation in front of the committee
  - Closed door committee review

Ph.D.

Dissertation defense

- Copy to committee at least four weeks prior to defense
- 50 minute department seminar
- Closed door committee review

Ph.D.

Timeline

- Required coursework: first two years
- Qualifying exam: before 5th semester
- Essay defense: by the end of 4th year
- Dissertation defense: by the end of 5th year

Ph.D. in Statistics

Course Number	Course Name
STA 5106	Computational Methods in Statistics I
STA 5107	Computational Methods in Statistics II
STA 5166	Statistics in Application I
STA 5167	Statistics in Application II
STA 5168	Statistics in Application III
STA 5326	Distribution Theory
STA 5327	Statistical Inference
STA 6346	Advanced Probability and Inference I
STA 6448	Advanced Probability and Inference II
One additional course approved by the student's major professor.	

Required courses

Ph.D. in Biostatistics

Course Number	Course Name
STA 5198	Epidemiology for Statisticians
STA 5244	Fundamentals of Clinical Trials
STA 5166	Statistics in Application I
STA 5167	Statistics in Application II
STA 5326	Distribution Theory
STA 5327	Statistical Inference
STA 5179	Applied Survival Analysis
STA 5197	Longitudinal Data Analysis
STA 6346	Advanced Probability and Inference I
STA 6448	Advanced Probability and Inference II

Required courses

Graduate Programs

Good references:

- Office of Graduate Studies
  - FSU Graduate Handbook
  - Workshops
  - Insurance
  - Dissertations
  - Much more …
- Statistics Department Graduate Handbook
- Supervisory Committee
- Graduate director website:

  http://statgraddirectorfsu.blogspot.com/

People to Know

- Dr. Eric Chicken
  - Department chair
  - Determines continuance in program
- Dr. Steve Ramsier
  - Large lecture coordinator
  - Runs the consulting center

People to Know

- Me (Dr. Adrian Barbu)
  - Graduate student director
  - Monitor student progress toward degree
  - Handle questions and complaints
- Professor Radha Bose
  - Large lecture guru
- Your (temporary) advisor

People to Know

- Mr. James Stricherz
  - Computer system manager and developer
  - Email accounts, software
- Ms. Pamela McGhee
  - Office administrator
- Ms. Natalie Webster
  - Course related matters
- Ms. Zoe Garcia
  - Administrative support assistant

Duties and Responsibilities

As a student

- Earn a degree in a timely manner
  - Attend all classes
  - 9 – 12 credits each term
  - 3.0 cumulative GPA
  - B- or better in required courses
- Communicate with advisor
- Program of study (due each April)
- Participate in annual review (due each April)

Duties and Responsibilities

As an employee

- RA
- TA
  - Instructor
  - Recitation instructor
  - Grader
  - Department support
- Statistical Consulting Center (SCC)

Duties and Responsibilities

Research assistant (RA)

- Assigned to a single faculty member
- Funded by the faculty member’s grant
- Assist with this faculty member’s research

Duties and Responsibilities

Instructors / Recitation instructors

- University standards for TAs (OGS)
- Attend PIE first (scheduled)
- Take Teaching in the Discipline course
- Pass English competency exam (SPEAK)
  - SPEAK test for International TAs
  - Once every semester
- Have minimum number of hours in the discipline

Duties and Responsibilities

Graders

- Grade for 2 or more classes
  - Faculty led courses
  - Graders do not work for other students
- Proctor exams for large lectures
- Other duties as specified by instructor
- Talk with instructor or coordinator, learn expectations

Duties and Responsibilities

Tutors

- Up to 20 hours a week in Strozier help center
- Assist with low level courses
  - STA 1013 – low math background students
  - STA 2023 – business students
  - STA 2122 – general student population
  - STA 2171 – biology students
  - STA 3032 – technical students

Duties and Responsibilities

Statistical Consulting Center (SCC)

- Run by Dr. Ramsier
- Assist university members outside the department with statistical issues
  - Design of experiments
  - Software
  - Data analysis
  - etc.
- Expectations and hours determined by Dr. Ramsier

Duties and Responsibilities

Program in Interdisciplinary Computing (PIC)

- Support of PIC
- Assisting students
  - Email
  - Chat
  - In-person
- …

Duties and Responsibilities

TA Support

- Overseen by Dr. Ramsier
- Database building (test banks, practice tests, homework)
- Online course development

Duties and Responsibilities

Pay

- Stipend paid every two weeks
- 39 weeks each year
- Three pay levels
  - Instructors
  - Recitation instructors and SCC
  - Everyone else
- RA pay is set by the faculty member
- Tuition waiver (you pay some fees)
- Limited summer support

QUESTIONS?