

Master of Statistics Academic Assessment Plan 2012-13

College of Liberal Arts and Sciences
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Office of the Provost

*University of
Florida*

*Institutional
Assessment*

*Continuous Quality
Enhancement*

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2012-13 Academic Assessment Plan for Master of Statistics

College of Liberal Arts and Sciences

A. Mission

The Master of Statistics degree program aims to train its students to understand and apply a broad range of statistical methods and to prepare them for further graduate study in statistics. Its students are expected to obtain a strong command of basic statistical theory and methods, and the ability to use this knowledge to understand, evaluate, and apply new methodologies for data collection and analysis. The Master of Statistics degree program supports the missions of the College of Liberal Arts and Sciences and the University of Florida by preparing its students for careers in a highly technological society in which science and decision-making are increasingly driven by a rapid expansion in the quantity and availability of data.

B. Student Learning Outcomes and Assessment Measures

| SLO Type | Student Learning Outcome | Assessment Method | Degree Delivery |
|-----------------------|--|--|-----------------|
| Knowledge | 1. Identify and select mathematical results and statistical models appropriate for an analysis. | First year written exam. | Campus |
| Knowledge | 2. Use mathematical results to analyze statistical methods. | First year exam. | Campus |
| Knowledge | 3. Apply statistical methods and models to analyze data. | First year exam. | Campus |
| Skills | 4. Independently acquire and synthesize new knowledge of statistical methods and the analysis of data. | Write a report and give an oral presentation explaining a body of statistical theory, methodology, or applications not covered by coursework within the program. Performance is assessed by the student's masters committee using a common rubric. | Campus |
| Professional Behavior | 5. Clearly and effectively explain, both orally and in writing, statistical methods and their application to data. | Write a report and give an oral presentation explaining a body of statistical theory, methodology, or applications not covered by coursework within the program. Performance is assessed by the student's masters committee using a common rubric. | Campus |

C. Research

The Master of Statistics is not a research degree. However, students in the program are strongly encouraged to enroll in STA 6092, Applied Statistical Practice, where they collaborate as consulting statisticians with scientists in other disciplines.

D. Assessment Timeline

Program Master of Statistics

College of Liberal Arts and Sciences

| Assessment | Assessment 1 |
|-----------------------|---|
| SLOs | |
| Content Knowledge | |
| #1 | First year exam |
| #2 | First year exam |
| #3 | First year exam |
| Skills | |
| #4 | Second year written project and oral presentation |
| Professional Behavior | |
| #5 | Second year written project and oral presentation |

E. Assessment Cycle

Assessment Cycle for:

Program Master of Statistics College of Liberal Arts and Sciences

Analysis and Interpretation: ___May-June_____

Program Modifications: Completed by ___August 31_____

Dissemination: Completed by ___September 30_____

| Year | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 |
|-----------------------|-------|-------|-------|-------|-------|-------|
| SLOs | | | | | | |
| Content Knowledge | | | | | | |
| #1 | | | X | X | X | X |
| #2 | | | X | X | X | X |
| #3 | | | X | X | X | X |
| Skills | | | | | | |
| #4 | | | X | X | X | X |
| Professional Behavior | | | | | | |
| #5 | | | X | X | X | X |

F. Measurement Tools

Overall performance in the required core courses and on the first year exam is assessed by the first year exam committee, consisting of the instructors of the core courses, the graduate coordinator, and the chair of the department. A “PhD pass” indicates a high level of achievement and a substantial probability of success in the PhD program; a “masters pass” indicates adequate progress towards a level of competence appropriate for a working statistician.

Performance on the second year project and oral exam is assessed by the student’s masters committee using a common rubric. The rubric for the oral exam is attached.

G. Assessment Oversight

| Name | Department Affiliation | Email Address | Phone Number |
|----------------|------------------------|--|--------------|
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