2012-2013 M.S. in Biostatistics Academic Assessment Plan

College of Public Health and Health Professions
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Academic Assessment Plan – M.S. in Biostatistics

College of Public Health and Health Professions

A. Mission

From: http://biostat.ufl.edu/about/

Department

The mission of the University of Florida Department Of Biostatistics is to develop, disseminate and apply biostatistical and analytical methods for research in the health sciences, encompassing both research design and analysis. We strive to advance knowledge in biostatistics and health through educational programs for students and researchers, and we provide leadership and outstanding scholarship in research, teaching, and service, in fulfillment of this mission.

College

The mission of the College of Public Health and Health Professions is to preserve, promote, and improve the health and well being of populations, communities, and individuals. To fulfill this mission, we foster collaborations among public health and the health professions in education, research, and service. Our educational mission is to provide excellent educational programs that prepare graduates to address the multifaceted health needs of populations, communities, and individuals.

University

It is the mission of the University of Florida to offer broad-based, exclusive public education, leading-edge research and service to the citizens of Florida, the nation and the world. The fusion of these three endeavors stimulates a remarkable intellectual vitality and generates a synthesis that promises to be the university's greatest strength.

The university maintains its dedication to excellent teaching and researching by creating a strong and flexible foundation for higher education in the 21st century. The university welcomes the full exploration of our intellectual boundaries and supports our faculty and students in the creation of new knowledge and the pursuit of new ideas.

Teaching is a fundamental purpose of this university at both the undergraduate and graduate levels. Research and scholarship are integral to the education process and to the expansion of our understanding of the natural world, the intellect and the senses. Service reflects the university's obligation to share the benefits of its research and knowledge for the public good.

Shared Mission

We seek to produce scholars conducting cutting-edge research to create new knowledge and new ideas. These diverse graduates will be skilled in ethics, professionalism and independent thinking to become the leaders in academic and professional careers.

B. Student Learning Outcomes and Assessment Measures

SLO Type	SLO	Assessment Method	Delivery Mode
Knowledge	1. Communicate the underpinning of biostatistics concepts and methods	1. Student's performance on MS written exam.	Campus
Skills	2. Apply biostatistical	2. Student's	Campus

	concepts and methods, interpret results, communicate	performance on culminating experience.	
Professional Behavior	3. Display ethical behaviors, cultural sensitivity, teamwork, conduct and communications	3. Student's performance on a consulting report	Campus

C. Research

Our M.S. in Biostatistics is not a research degree. However, students are exposed to biostatistical research in some of their coursework, and also through their culminating experience. They are exposed to collaborative research with investigators in other disciplines as part of their consulting course.

D. Assessment Timeline

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Assessment SLOs	Assessment 1 Written Exam	Assessment 2 Culminating Experience	Assessment 3 Biostatistical Consulting
Knowledge			
SLO # 1	Year 1		
Skills			
SLO #2		Year 2	
Professional Behavior			
SLO # 3			Year 2

E. Assessment Cycle

Assessment Cycle for:

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Analysis and Interpretation: May-June
Program Modifications: Completed by: August 31
Dissemination: Completed by: September 30

Year SLOs	10-11	11-12	12-13	13-14	14-15	15-16
Content Knowledge						
SLO #1	X	X	X	X	X	X
Skills						
SLO #2	X	X	X	X	X	X

Professional Behavior						
SLO #3	X	X	X	X	X	X

F. Measurement Tools

Direct Assessments

Assessment metrics were agreed upon by the entire faculty.

The Knowledge SLO is measured by the student's performance on the M.S. written exam. The written exam is graded in terms of pass, conditional pass, or fail. Students have two chances to pass the exam – the first chance occurs after the first year of courses in May, and the second chance occurs in August of the same year. The distribution of exam scores varies from year to year. Instructors of four courses create the exam. A threshold for successfully completing the overall exam is determined by the Exam committee in consultation with the instructors. A student who exceeds the threshold is judged to have passed the exam. A student who is close to the threshold but with low scores on the exam component for one or more courses may be given a conditional pass and have to retake the relevant course(s). Otherwise, the student fails the exam and may take it one more time.

The Skills SLO is measured by the student's performance on the M.S. culminating experience. This is an oral exam and a written report critiquing an article from the statistical research literature. Each student works together with his/her advisor to choose an article, digest it, and report on it. Usually the student simulates data and applies the new statistical method. The grading scheme is pass or fail.

The Professional Behavior SLO is measured by the student's performance on the consulting report, which is graded according to the rubric shown in Appendix A.

Indirect Assessments

We will indirectly assess student performance in our program by relating exiting GPA to entering GPA and GRE, using regression methodology, measuring annual retention rates, and measuring employment rates.

Assessment Oversight

Name	Department Affiliation	Email Address	Phone Number
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Appendix A. Consulting report rubric – M.S. in Biostatistics

Consulting Report Grading Rubric		
Required information	Grading	Comments
What is the objective of the project? What is the background information? What is the significance of the project?	10%	
Data cleaning Data management Data transfer	10%	
Identify appropriate statistical tools for data analysis including literature review Develop a computer program for the data analysis	30%	
Generate tables and graphs to present the data and to summarize the results	20%	
Write a report for the project 1. Abstract 2. Introduction 3. Statistical considerations 4. Results 5. Discussion 6. References	30%	