University of Rochester BS Statistics Program Assessment Plan

Program Learning Objectives

Students will demonstrate:

- 1. Conceptual understanding of fundamental concepts of statistics and probability
- 2. Proficiency in application of statistics and probability concepts and methods to problems in science and society.
- 3. Proficiency in application of foundational calculus, linear algebra, and elementary computer programming necessary for probability and statistics study.
- 4. Conceptual understanding of the mathematical basis and foundations of probability and statistics.
- 5. Ability to write reports or make presentations of the results of statistical analyses giving summaries and conclusions using nontechnical language.
- 6. Ability to use appropriate statistical software for data analysis.

Assessment Methods

Embedded test questions in core and restricted elective courses in the major will assess each program learning objective. Faculty will write a Course Reflective Memo in which they review assessment data and determine if course improvements are needed to improve student learning and performance. (each term)

Senior Survey qustions ask students to self-assess learning (annual).

Alumni Survey questions ask alumni to self-assess learning (every 3 years).

The Statistics Undergraduate Committee will review assessment data annually and determine if curricular changes in addition to course improvements are needed.