## Academic Program Assessment M.S. degree program in Statistics and Analytics (STANMS)

Submitted by Mark Arnold, Program Director 5/1/2019

## **Assessment of Student Learning**

## Indirect:

Curriculum and career advising before each semester (addresses outcomes (1-7). Scripted advising meeting includes student ratings of knowledge, skills and reflections of previous academic term.

All of the students rated their knowledge and skill-set improvement as satisfactory to excellent.

Annual student performance reviews (addresses outcomes 1-8). GSIE annual review form addended with STAN self-assessment form.

42 of 45 STAN MS students as of 12/2018 made "satisfactory progress" toward their degree (our performance only distinguishes between "satisfactory" and "unsatisfactory" progress). One of the students receiving unsatisfactory progress was in the second year of graduate study, and will return to her home country for an undetermined period of time. The other student was on track to graduate this May, but was unable to bring her grade to the requisite level. We will ask GSIE to extend her academic probation through summer 2019. One student in good standing has disappeared (did not graduate and took no classes in 2018). In addition, the students who graduated 12/2018 or are cleared for graduation 5/2019 were not given performance reviews.

Course grades (addresses outcomes 1-8). Graduation requires a grade point average of at least 3.0.

STANMS had an enrollment 45 students in December 2018. The following statistics are based on all 45 as of the end of the Fall 2018 term: The average CGPA (each student weighted equally, not by number of completed hours) is 3.64. The lowest was 2.25, and the standard deviation was 0.4.

Formal exit interviews (addresses outcomes 1-8). Scripted interview requesting student ratings of their growth and their perspective on the health and efficacy of the program. Ten students graduated from the STAN MS program (1/2018-12/2018). Four are working in industry, 3 are enrolled in a PhD program, 1 is a Postdoc and 2 left US for work in their home country. All students indicated agreement with "This program encouraged personal growth toward my career goals" and "This program facilitates stated skill and knowledge development". Three students indicated desire for a STAN PhD degree program.

## **Direct:**

Annual student performance reviews (addresses outcomes 1-8). GSIE annual review form provides ratings of student progress by supervisor.

42 of 45 currently enrolled STAN MS students made "satisfactory progress" toward their degree (our performance only distinguishes between "satisfactory" and "unsatisfactory" progress. In addition, 10 students graduated in 2017.

MS Comprehensive examination (addresses outcomes 1-8). Each track has examination rubric.

Six Students completed STAN *comprehensive examinations*. All 3 passed on first attempt. The following is based on a scale of 0 (not pass), 1 (pass), 2 (good), 3 (very good) and 4 (excellent):

The average score was 2.67.

Four Students defended *MS theses*. All theses were accepted with revisions, and have been submitted. The following is based on a scale of 0 (not pass), 1 (pass), 2 (good), 3 (very good) and 4 (excellent):

The average score was 2.75.