Graduate Program Assessment for NDFS Department

PhD and MS

2016

Mastery of subject material by individual students in the MS and PhD programs is assessed by their supervisory committee following standard procedures required by the graduate school and department. The outcomes data evaluated by the supervisory committees includes plans of study, research proposals, qualifying exams, and theses and dissertations.

In addition, the NDFS Department employs a variety of tools to collect feedback on the overall performance of its graduate programs, including, but not limited to:

PhD and MS in Nutrition and Food Sciences

- Number of students in each degree
- Number of students graduated
- Average time to degree completion
- Average GRE scores of entering students
- Average stipend for MS and PhD assistantships
- Changes to graduate requirements and process stipulated by grad school
- *#* graduate student authorships per student
- *#* graduate student presentations per student
- % students completing degrees in targeted time frames:
- Alumni and employer surveys

The performance of the PhD, MS and MFSQ program for 2015/16 was evaluated using the categories detailed above. The results are summarized below. Results were collected for the period of January 2015 until July 2016.

PhD and MS in Nutrition and Food Sciences

- 1. <u>Total</u> number of students in each degree during time frame:
 - a. PhD_{all}: 17
 - i. PhD₄₈: 11
 - ii. PhD₇₀: 6
 - b. MS: 22
- 2. Number of students graduating during time frame:
 - a. PhD_{all}: 4
 - i. PhD₄₈: 3
 - ii. PhD₇₀:1
 - b. MS: 9
- 3. Average time to degree completion (years \pm standard deviation)
 - a. PhD_{all}: 3.9 ± 1.4 (*n* = 4)

- b.
- i. PhD₄₈: 4 ± 1.8 (n = 3)
- ii. PhD₇₀: 3.7 (n = 1)
- c. MS: 2.1 ± 1.2
- 4. % students completing degrees in targeted timeline:
 - a. 2 years for MS: 22%
 - b. 3 years for PhD_{48} : 0%
 - c. 5 years for PhD₇₀: 0%
- 5. Average GRE scores of entering students
 - a. Quantitative: 64.3
 - b. Verbal: 53.1
- 6. Average stipend for MS and PhD assistantships
 - a. \$1645.70 monthly (\$12,523.5 yearly)
- 7. Changes to graduate requirements and process stipulated by grad school
 - a. Data not collected
- 8. # graduate student authorships
 - a. 35 total
 - b. 0.8 per student
- 9. # graduate student presentations
 - a. 55 total
 - b. 1.3 per student
- 10. Alumni and employer surveys
 - a. Data not collected

Discussion

In the period ranging from January 2015 until August 2016 the NDFS department had 11 PhD₄₈, 6 PhD₇₀, and 22 MS students. Thirteen students graduated during this period (9 MS and 4 PhD) while 7 new students registered in Fall 2016 (6 MS students and 1 PhD student). In general, students did not graduate within the targeted timeline of 2, 3, and 5 years for MS, PhD₄₈, and PhD₇₀ students, respectively. However, the average graduation times were deemed reasonable in consideration of the great variability in graduation times expected with research-based degrees. We expect to continue collecting this type of information on a yearly basis and provide an average of graduating times over several years that will better reflect the tendencies over the years and will minimize the effect of outliers.

The Graduate program at NDFS has recently established an annual review of student performance. Starting in 2016 students will meet annually with their committee members to provide an update on his/her achievements and progress. The student and committee will fill out a form that will provide information about student performance. The form will be handled to the graduate program director and kept on-file. This information will be used for program assessment and to evaluate specific outcomes such as timely completion of plans of study,

research proposals, qualifying exams, and theses and dissertations. The ultimate goal is to ensure that students' performance and learning experience is optimized.

The outcomes of students' research during 2015/16 is average as evidenced by the number of publications in peer-reviewed journals and by the number of presentations in local, regional, and international conferences. Graduate students in the department published an average of 0.8 papers per student and presented in 1.3 conferences. These results are acceptable but there is certainly room for improvement.

Data regarding alumni and employers surveys was not collected this year but we will collect this type of data for next year assessment.

Over the past 3 years the NDFS graduate program has adopted a strong recruiting strategy to increase the number and quality of graduate students. The BUILD Dairy program, the Gandhi Scholarship, and the Office of Graduate Studies have provided scholarship money that helped in the recruitment of talented students. We hope that the program continues to receive this financial support to enhance the quality of our research program.

The NDFS Department has received a \$25,000 Research Award from the College of Agricultural and Applied Sciences. Decision on the use of these funds is still to be made.

This is the first year that we have collected specific data for the PhD and MS program that links back to the expected outcome of the program. We hope to continue with this type of assessment and to evaluate the trajectory of progress of the program over the years. We believe that this information will help us understand the success and growth of our program and identify areas that need improvement.