Graduate Student Learning Goals - Nutrition Graduate Program (MS and PhD)

Approved March 20, 2015

1. Goal Development Process

Goals were developed in consultation with faculty and graduate students in the Nutrition Graduate Program. A Task Force consisting of the Director Graduate Studies, Nutrition and the Associate Director, two faculty members and a graduate student was convened to develop an initial survey of graduate students. A draft list of learning goals was prepared based on the six learning domains and outcomes developed by a subcommittee of an initial University of Minnesota Graduate Student Outcomes Assessment Committee which included faculty representatives from the Senate Committee on Educational Policy; faculty experts in the area of evaluation and assessment; a graduate student representative; and relevant staff from the Provost’s Office, Office of Institutional Research, the Graduate School, and the Office of the Executive Vice Chancellor for Academic Affairs at Duluth.

Nutrition graduate students were asked to rank the level of importance of each learning goal in the draft list (about half of current students responded). Survey results were shared with faculty at a Nutrition Graduate Faculty meeting for comment. The Task Force then refined the draft list to include 11 goals in 5 major categories addressing those considered most relevant by students and faculty. For each goal, the Task Force mapped the program’s current learning experiences expected to help students achieve the goals and assessment methods in place to evaluate whether the goals have been achieved.

The Goal/Experience map was sent to all faculty members for comment/revisions and further revised by the Task Force prior to holding open discussion sessions with students and faculty. Revisions based on feedback were made prior to a final email vote for approval.

2. Goals and Experiences Designed to Help Students Achieve Goals

The purpose of the Nutrition Graduate Program at the University of Minnesota is to prepare students for teaching and/or research careers in an educational setting (college or university), government agency, clinical/healthcare facility meeting for comment. The Task Force then refined the draft list to include 11 goals in 5 major categories addressing those considered most relevant by students and faculty. For each goal, the Task Force mapped the program’s current learning experiences expected to help students achieve the goals and assessment methods in place to evaluate whether the goals have been achieved.

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2. Goals and Experiences Designed to Help Students Achieve Goals

The purpose of the Nutrition Graduate Program at the University of Minnesota is to prepare students for teaching and/or research careers in an educational setting (college or university), government agency, clinical/healthcare facility, commodity food organization, or the food industry. Graduates may also obtain positions involving administration of nutrition, food service, and food or agriculture programs on a national or international level. Master’s students who have completed the requirements to become a Registered Dietitian typically practice as a dietitian in research, clinical, public health, educational or food service settings. Completion of a graduate degree in Nutrition will allow students to develop the knowledge and skills necessary to identify components of a healthful diet enabling individuals to achieve and maintain a healthy weight, promote health, and prevent disease for broad societal benefit.

The Nutrition Graduate Program is interdisciplinary drawing on faculty, courses, and facilities University-wide. With this approach, students can tailor a program to their specific interests, using the resources of departments from several University schools and colleges with expertise in nutrition, food science, epidemiology, kinesiology, biochemistry and molecular biology, medicine, psychiatry, and surgery. Nutrition research is conducted in many areas, including
dietary fiber, cancer, cardiovascular disease, maternal and child nutrition, effects of food component on health (phytochemicals, antioxidants), energy metabolism, exercise and nutrition, obesity, and community nutrition education. The diversity of career options and research fields indicate that a variety of student learning goals can be applied. The attached Goal/Experience Map outlines the learning goals and instructional/learning experiences which are expected to enable students to achieve the learning goals.

3. Assessment Methods for Individual Students and the Overall Nutrition Graduate Program

**Individual students**
At the level of the individual, performance is assessed by successful completion of coursework and maintenance of a 2.8 GPA for MS students and 3.0 for doctoral students. Students are required to complete thesis credits based on successful completion of their research projects and a master’s or doctoral thesis.

Master’s students are required to give a presentation based on their research project to the graduate faculty and students at a graduate seminar. Completion of a master’s thesis allows students to demonstrate familiarity with the tools of research or scholarship in Nutrition, to work independently and present the results of their investigation effectively. Master’s students need to pass a final oral examination to demonstrate a mastery of material broadly related to the thesis topic.

Doctoral students need to pass written preliminary and final oral examinations. The written preliminary exam is a test of the breadth of general nutrition knowledge, as well as the ability to integrate and communicate knowledge regarding specific topics. The student must demonstrate a level of competence greater than expected from examinations in courses and should demonstrate ability to synthesize material and solve problems. The goal of the preliminary oral exam is to assess the student’s ability for critical thought related to nutrition in the context of a presentation of a research topic. A written Proposed Research Summary is provided to examiners before the exam and includes a research hypothesis, and sections providing background and nutritional significance, proposed research methods, preliminary data, or proposed data to be collected, its interpretation and its significance. The preliminary oral exam is a challenge for innovative scientific thinking and typically not a test of the breadth of general nutrition knowledge. The general assessments in the PhD oral preliminary exam are 1) comprehension of nutritional science as it is related to the proposed thesis topic, 2) ability to solve problems, 3) ability to formulate and discuss topics in need of development, 4) ability to synthesize and critically evaluate research literature, and 5) ability to communicate nutrition concepts orally, expressing arguments or ideas in a cogent manner. The oral exam will provide background, context and motivation for the thesis topic proposed. The final oral examination consists of a public seminar in which the candidate presents the thesis followed by a closed meeting with the examining committee limited to the candidate’s thesis subject and relevant areas. Similar to the master’s final exam, doctoral students are expected to demonstrate a mastery of material broadly related to the thesis topic during the exam.
All students are also expected to gain teaching experience by serving as voluntary teaching assistants for several courses. Individual assessment will occur through feedback provided to the teaching assistants by instructors for these courses.

**Nutrition Graduate Program**

Assessment methods for the Nutrition Graduate Program involve aggregating individual level information to provide a summary of the performance of all students in the program. Students and advisors will complete an assessment process during the Annual Progress Review to rate the extent that each learning goal is being achieved by students (see attachment for a detailed explanation of the process – page 8). In addition, the proportion of all students who meet expectations for successful completion of coursework and written and oral preliminary exams and final oral exams will be documented. The proportion of students involved in teaching assistantship opportunities, enrolled in voluntary teaching assistant workshops, presenting abstracts at conferences (national and local), publishing papers on research projects, completing formal ethics training, and having a student membership to a professional society will also be documented.