NUTRITIONAL SCIENCES (M.S.)

https://calsa.unh.edu/agriculture-nutrition-food-systems/program/ms/nutritional-sciences

Description

The program is for students who anticipate a professional career involving research or discovery, with a strong background in the basic biology and chemistry of nutrition. This degree may be most appropriate for students who expect to pursue further advanced study, e.g., additional graduate studies or professional school, after graduation. Graduates of the Master of Science (M.S.) in Nutritional Sciences will be valued in the marketplace as they will have a demonstrated capacity to engage in critical and systems thinking, convey and apply nutrition concepts in clinical, research and community settings, work as individuals and in teams, and identify strategies for lifelong learning.

- **Thesis-based Option**: In this thesis-based program students gain a comprehensive understanding of nutritional science through their coursework and engagement in research. Emphasis is placed on active participation in original hypothesis-driven research of publishable quality.
- **Accelerated Master's Admission**: The accelerated program is designed for UNH undergraduates who have a demonstrated capacity to engage in upper-level course work and desire hands-on practice and research training for an advanced degree.

Requirements

**Master of Science - Thesis Option**

The program of study must include a minimum of 30 graduate credits including 6 credit Master's Thesis based on a research project. Courses will be taken to fulfill expected competency requirements in experimental design and analysis and in scientific writing and communication. In consultation with the student's graduate committee and the area of research specialization, other courses will be taken as appropriate.

1. **Core Course Requirements**:
   - ANFS 899 Master's Thesis (6 credits)
   - ANFS 901 Introduction to Agriculture, Nutrition, and Food Systems Graduate Studies.
     To be taken at the earliest opportunity, typically in the initial fall semester of the graduate program.
   - ANFS 997 Agriculture, Nutrition, and Food Systems Seminar
     All students are required to register and participate in this course (1 credit CR/Fail) for a minimum of 2 credits.

2. **Competency Requirements**: A thesis committee will be appointed early in the program and will consist of at least three members of the graduate faculty; one of these will be the primary mentor. Students will design a program of study in close consultation with their thesis committee, including their academic courses and scientific research project. The student’s committee may require certain undergraduate courses as part of the graduate program if additional competencies would be beneficial to the student. No more than 4 credits of NUTR 895 Investigations can apply toward the total credit count.

3. **Additional Requirements**: All students in the Nutritional Sciences Graduate Programs are expected to:
   - Present their research in ANFS 997 Agriculture, Nutrition, and Food Systems Seminar at least twice (exclusive of the thesis defense).
   - Students are also encouraged to present at professional conferences and acquire teaching and/or mentoring experience.
   - Serve as a teaching assistant for at least one semester.
   - Defend their research proposal, both in written and oral form.
   - Approval form must be on file with department.
   - Thesis

Additional Information:

Additional information can be found in the program graduate handbook, which includes expectations, guidelines, and detailed policies.

Annual Evaluation: The annual evaluation of graduate students ensures that students receive the mentorship they deserve and are making progress toward completion of their degrees. The annual evaluation of graduate students consists of a collaborative effort between faculty adviser and student to:

- Complete a self-assessment;
- Present a professional quality CV suitable for awards, job applications, and internships;
- Produce a narrative of service or other activities not captured on a CV (if applicable);
- Develop annual goals.

Accelerated Master's

Program Requirements

The accelerated path to a M.S. Nutritional Sciences requires a minimum of 34 graduate credits. Qualified students who are admitted under the Accelerated Master’s program may complete up to 12 credits at the 800-level during their senior year, earning dual credit toward their B.S. and M.S. degrees.

During the fifth year (Sept-May), enrolled students will complete a minimum of 22 additional credits toward the program requirements. There are five core courses that include a year-long research experience (i.e. NUTR 960 Research Methods in Nutritional Science I and NUTR 961 Research Methods in Nutritional Science II) during the last year of the student’s program. Students will be required to earn a B- or better in graduate courses to earn credits toward their degree.

Core Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NUTR 809</td>
<td>Nutritional Epidemiology</td>
<td>4</td>
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<tr>
<td>NUTR 850</td>
<td>Nutritional Biochemistry</td>
<td>4</td>
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<tr>
<td>NUTR 851</td>
<td>Nutritional Biochemistry of Micronutrients</td>
<td>4</td>
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<tr>
<td>NUTR 855</td>
<td>Treatment of Adult Obesity</td>
<td>4</td>
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<tr>
<td>NUTR 860</td>
<td>Behavioral Nutrition and Counseling</td>
<td>4</td>
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<tr>
<td>NUTR 880</td>
<td>Critical Issues in Nutrition</td>
<td>4</td>
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<tr>
<td>NUTR 960</td>
<td>Research Methods in Nutritional Science I</td>
<td>4</td>
</tr>
<tr>
<td>NUTR 961</td>
<td>Research Methods in Nutritional Science II</td>
<td>4</td>
</tr>
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</table>
To be taken at the earliest opportunity, typically in the initial fall semester of the graduate program.

**Student Learning Outcomes**

**Master of Science - Thesis Option & Accelerated Option**

**Nutrition knowledge-related**

- Build knowledge and understanding in key content areas of nutritional sciences and public health nutrition issues

**Research design and analysis**

- Identify the strengths and weaknesses of study designs utilized in nutrition-related research
- Conduct nutrition-related data analyses
- Interpret the results and scientific literature to inform dietary recommendations, public policy, or chronic disease intervention

**Scientific method**

- Demonstrate the ability to design and defend an original, hypothesis-driven project to advance the field of nutritional sciences.

**Critical thinking**

- Integrate scientific evidence and critically evaluate research findings in specific fields related to nutritional sciences.

**Communication skills**

- Disseminate evidence-based information on nutritional sciences and public health
- Deliver nutrition research findings to multiple scientific audiences (i.e. research conference, academic journal).
- Incorporate critical feedback in their research and academic work

**Professionalism**

- Conduct research in an ethical manner
- Demonstrate collaboration and leadership skills