# NUTRITIONAL SCIENCES (M.S.)

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

### Description

# **Master of Science - Thesis 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. 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.

### Requirements

## **Master of Science - Thesis Option**

The program of study must include a minimum of **30** graduate credits as well as completion of a 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.

Code	Title	Credits
Core Course Requirements		
NUTR 899	Master's Thesis	6
ANFS 901	Introduction to Agriculture, Nutrition, and Food Systems Graduate Studies	1
ANFS 997	Agriculture, Nutrition, and Food Systems Seminar <sup>2</sup>	1

- <sup>1</sup> To be taken at the earliest opportunity, typically in the initial fall semester of the graduate program.
- <sup>2</sup> 1 cr per semester, to be taken at least twice by M.S. Thesis Option students.

Each candidate must present at least two seminars (exclusive of the thesis defense) and must serve as a teaching assistant for at least one semester. 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 <u>NUTR 995</u> Non-thesis Investigations can apply toward the total credit count. Candidates will be required to pass an oral examination based on their graduate courses and completed thesis. Skills in communicating scientific information will be fostered by presenting one seminar during each year of enrollment.

### Accelerated Master's

### **Master of Science - Accelerated Option**

The accelerated option 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. 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.

#### **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 (<u>NUTR 960</u> Research Methods in Nutritional Science I and <u>NUTR 961</u> 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**

Code	Title	Credits
NUTR 809	Nutritional Epidemiology	4
NUTR 850	Nutritional Biochemistry	4
NUTR 851	Nutritional Biochemistry of Micronutrients	4
NUTR 855	Treatment of Adult Obesity	4
NUTR 860	Behavioral Nutrition and Counseling	4
NUTR 880	Critical Issues in Nutrition	0 or 4
NUTR 960	Research Methods in Nutritional Science I	4
NUTR 961	Research Methods in Nutritional Science II	4
ANFS 901	Introduction to Agriculture, Nutrition, and Food Systems Graduate Studies $^{ m 1}$	1
ANFS 997	Agriculture, Nutrition, and Food Systems Seminar	1

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### **Student Learning Outcomes**

## **Master of Science - Thesis 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, hypothesisdriven 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

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