

# NUTRITION MAJOR: NUTRITIONAL SCIENCES OPTION (B.S.)

<https://colsa.unh.edu/agriculture-nutrition-food-systems/program/bs/nutrition-major-nutritional-sciences-option>

## Description

Nutrition is the study of how nutrients and food components function at molecular, cellular, and whole-body levels to impact human health and disease. Students are grounded in fundamental sciences as they develop nutrition-specific competencies in nutrition and health, foods, nutritional assessment, wellness, life cycle nutrition, and/or metabolic biochemistry.

The nutrition program prepares students for entry-level positions in health care, education, research, or the biotechnology industry, or entry into post-baccalaureate professional programs. Nutrition faculty have expertise in clinical nutrition and food science, as well as assessing risk factors of chronic disease risk (i.e. obesity, diabetes, cardiovascular, cognitive) in diverse populations (pediatric, young adult, older adult), and populations that are underrepresented in research.

Students in the Nutritional Sciences option most often enroll in a post-graduate educational degree program (e.g., medical school, graduate school, physician assistant program, etc.) or enter the biomedical/biotechnology workplace.

## Requirements

### Degree Requirements

**Minimum Credit Requirement:** 128 credits

**Minimum Residency Requirement:** 32 credits must be taken at UNH

**Minimum GPA:** 2.0 required for conferral\*

**Core Curriculum Required:** Discovery & Writing Program Requirements

**Foreign Language Requirement:** No

All Major, Option and Elective Requirements as indicated.

\*Major GPA requirements as indicated.

### Major Requirements

A minimum grade of C- or above is required in all NUTR courses required by the major.

Code	Title	Credits
<b>Foundation Courses</b>		
BMS 507	Human Anatomy and Physiology I	4
BMS 508	Human Anatomy and Physiology II	4
SOC 400	Introductory Sociology	4
or PSYC 401	Introduction to Psychology	
Select one statistics course from the following:		
BIOL 528	Applied Biostatistics I	4
HMP 540	Statistics for Health and Human Service Professionals	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	

<b>Science Core Courses</b>		
BIOL 411	Introductory Biology: Molecular and Cellular	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
CHEM 403	General Chemistry I	4
CHEM 404	General Chemistry II	4
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
GEN 604	Principles of Genetics	4
<b>Nutrition Core Courses</b>		
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
NUTR 476	Nutritional Assessment	4
NUTR 650	Life Cycle Nutrition	4
<b>Nutritional Sciences Option Courses</b>		
MATH 424B	Calculus for Life Sciences	4
NUTR 750	Nutritional Biochemistry	4
NUTR 751	Nutritional Biochemistry of Micronutrients	4
<b>Major Elective Courses</b>		
Two nutrition Electives and a third Elective outside the major are chosen in consultation with the student's advisor, based on the student's career interests.		
<i>Select two NUTR courses (minimum 8 credits)</i>		
NUTR 403	Culinary Arts Skills Development	4
NUTR 405	Food and Society	4
NUTR 506	Nutrition and Wellness	4
NUTR 525	Food and Culture in Italy	4
NUTR 530	Critical Analysis in Food Studies	4
NUTR 535	History of Food in Italy	4
NUTR 546	Nutrition in Exercise and Sports	4
NUTR 550	Food Science: Principle and Practice	4
NUTR 560	Introduction to Research in Nutrition	2
NUTR 595	Mediterranean Diet and Culture	4
NUTR 600	Field Experience in Nutrition	1-4
NUTR 610	Nutrition Education and Counseling	4
NUTR 625	From Farm to the Italian Table	4
NUTR 704	Managerial Skills in Dietetics	4
NUTR 709	Nutritional Epidemiology	4
NUTR 710	Advanced Diabetes Care	2
NUTR 715	Advanced Sports Nutrition	4
NUTR 720	Community Nutrition	4
NUTR 730	From Seed to Sea: Examining Sustainable Food Systems	4
NUTR 740	Nutrition for Children with Special Needs	4
NUTR 755 & NUTR 758	Concepts and Controversies in Weight Management and Practicum in Nutrition and Wellness	5
NUTR 773	Clinical Nutrition	4
NUTR 775	Practical Applications in Medical Nutrition Therapy	4
NUTR 780	Critical Issues in Nutrition	4
NUTR 790	Undergraduate Teaching Experience	1-2
NUTR 799H	Honors Senior Thesis	1-8
<i>Select an additional elective outside the Major at 600- or 700-Level</i>		
		4

### Nutritional Science Capstone Experience

One capstone experience, supervised and approved within the major, is required of all seniors. The capstone explores areas of interest based on the integration of prior learning. The capstone requirement for Nutritional Sciences students is satisfied through the completion of NUTR 720 Community Nutrition or NUTR 751 Nutritional Biochemistry of Micronutrients.

NUTR 751 is a required course; and will only fulfill the university's capstone requirement if taken during the student's senior year.

## Degree Plan

### Sample Degree Plan

This sample degree plan serves as a general guide; students collaborate with their academic advisor to develop a personalized degree plan to meet their academic goals and program requirements.

#### First Year

Fall		Credits
NUTR 400	Nutrition in Health and Well Being	4
NUTR 401	Professional Perspectives on Nutrition	1
ENGL 401	First-Year Writing	4
BIOL 411	Introductory Biology: Molecular and Cellular	4
CHEM 403	General Chemistry I	4
<b>Credits</b>		<b>17</b>
Spring		
NUTR 476	Nutritional Assessment	4
BIOL 412	Introductory Biology: Evolution, Biodiversity and Ecology	4
CHEM 404	General Chemistry II	4
MATH 424B	Calculus for Life Sciences	4
<b>Credits</b>		<b>16</b>

#### Second Year

Fall		
CHEM 545 & CHEM 546	Organic Chemistry and Organic Chemistry Laboratory	5
BMS 507	Human Anatomy and Physiology I	4
Select one of the following:		4
BIOL 528	Applied Biostatistics I	
PSYC 402	Statistics in Psychology	
SOC 402	Statistics	
HMP 540	Statistics for Health and Human Service Professionals	
Discovery Course		4
<b>Credits</b>		<b>17</b>
Spring		
BMS 503 & BMS 504	General Microbiology and General Microbiology Laboratory	5
BMS 508	Human Anatomy and Physiology II	4
SOC 400	Introductory Sociology	4
or PSYC 401	or Introduction to Psychology	
Elective (any course)		4
<b>Credits</b>		<b>17</b>

#### Third Year

Fall		
GEN 604	Principles of Genetics	4
Nutrition Elective		2-4
Discovery Course		4
Elective (any course)		4
<b>Credits</b>		<b>14-16</b>
Spring		
NUTR 650	Life Cycle Nutrition	4

BMCB 658 & BMCB 659	General Biochemistry and General Biochemistry Lab	5
Discovery Course		4
Nutrition Elective		2-4
<b>Credits</b>		<b>15-17</b>

#### Fourth Year

Fall		
NUTR 750	Nutritional Biochemistry	4
Discovery Course		4
Elective (any course)		4
Elective (any course)		4
<b>Credits</b>		<b>16</b>
Spring		
NUTR 751	Nutritional Biochemistry of Micronutrients	4
600 or 700-Level Elective Outside the Major		4
Discovery Course		4
Elective (any course)		4
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>128-132</b>

## Student Learning Outcomes

### Program Learning Outcomes Students will be able to:

- Locate, interpret, evaluate and use professional literature to make ethical, evidence-based conclusions and decisions.
- Apply critical thinking skills.
- Deliver effective and professional oral and written communication.
- Demonstrate cultural humility, awareness of personal biases and an understanding of cultural difference they contribute to diversity, equity, and inclusion.
- Articulate the nutritional requirements for various populations across the lifespan.
- Explain macronutrient and micronutrient metabolism.
- Demonstrate an understanding of the scientific method and how it is used to generate knowledge in nutrition science.