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, or the biotechnology industry, or entry into post-baccalaureate professional programs. Nutrition faculty have expertise in clinical nutrition, sports 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).

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

Requirements

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>NUTR</td>
<td>Major Elective Courses</td>
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<tr>
<td>NUTR 750</td>
<td>Nutritional Biochemistry</td>
<td>4</td>
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<tr>
<td>NUTR 751</td>
<td>Nutritional Biochemistry of Micronutrients</td>
<td>4</td>
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Choose 2 NUTR courses (minimum 8 credits)

- NUTR 403: Culinary Arts Skills Development
- NUTR 405: Food and Society
- NUTR 504: Managerial Skills in Dietetics
- NUTR 506: Nutrition and Wellness
- NUTR 525: Food and Culture in Italy
- NUTR 530: Critical Analysis in Food Studies
- NUTR 535: History of Food in Italy
- NUTR 546: Nutrition in Exercise and Sports

NUTR 650: Food Science Principle and Practice

NUTR 560: Introduction to Research in Nutrition

NUTR 695: Mediterranean Diet and Culture

NUTR 600: Field Experience in Nutrition

NUTR 610: Nutrition Education and Counseling

NUTR 625: From Farm to the Italian Table

NUTR 709: Nutritional Epidemiology

NUTR 710: Advanced Diabetes Care

NUTR 720: Community Nutrition

NUTR 730: From Seed to Sea: Examining Sustainable Food Systems

NUTR 740: Nutrition for Children with Special Needs

NUTR 755: Treatment of Adult Obesity

NUTR 745 & NUTR 758: Research Experience Nutrition I & Research Experience Nutrition II

NUTR 773: Clinical Nutrition

NUTR 775: Practical Applications in Medical Nutrition Therapy

NUTR 780: Critical Issues in Nutrition

NUTR 790: Undergraduate Teaching Experience

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 in Nutrition during their senior year.

NOTE: NUTR 751 Nutritional Biochemistry of Micronutrients is a required course; it will only fulfill the university’s capstone requirement if taken during the student’s senior year.

Degree Plan

SAMPLE Course Sequence for Nutritional Science

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>NUTR 400</td>
<td>Nutrition in Health and Well Being</td>
<td>4</td>
</tr>
<tr>
<td>NUTR 401</td>
<td>Professional Perspectives on Nutrition</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 401</td>
<td>First-Year Writing</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 411</td>
<td>Introductory Biology: Molecular and Cellular</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 403</td>
<td>General Chemistry I</td>
<td>4</td>
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Total Credits: 17

Spring

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<tr>
<th>Course</th>
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<th>Credits</th>
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<tr>
<td>NUTR 476</td>
<td>Nutritional Assessment</td>
<td>4</td>
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</table>
## Nutrition Major: Nutritional Sciences Option (B.S.)

### BIOL 412 Introductory Biology: Evolution, Biodiversity
and Ecology 4
CHEM 404 General Chemistry II 4
MATH 424B Calculus for Life Sciences 4

| Credits | 16 |

### 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:

- BIOL 528 Applied Biostatistics I
- PSYC 402 Statistics in Psychology
- SOC 402 Statistics

Discovery Course 4

| Credits | 17 |

#### Spring

BMS 503 & BMS 504 General Microbiology and General Microbiology Laboratory 5
BMS 508 Human Anatomy and Physiology II 4

SOC 400 or PSYC 401 Introductory Sociology or Introduction to Psychology 4

Elective (any course) 4

| Credits | 17 |

### Third Year

#### Fall

GEN 604 Principles of Genetics 4
Nutrition Elective 2-4
Discovery Course 4

| Credits | 14-16 |

#### 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

| Credits | 15-17 |

### Fourth Year

#### Fall

NUTR 750 Nutritional Biochemistry 4
Discovery Course 4

| Credits | 16 |

#### Spring

NUTR 751 Nutritional Biochemistry of Micronutrients 4
600 or 700-Level Elective Outside the Major 4
Discovery Course 4

| Credits | 16 |

| Total Credits | 128-132 |

## Student Learning Outcomes

- Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based conclusions and decisions.
- Use current information technologies to locate and apply evidence-based guidelines and protocols.
- Apply critical thinking skills.
- Demonstrate effective and professional oral and written communication and documentation.
- Demonstrate an understanding of cultural competence/sensitivity.
- Describe basic concepts of nutritional genomics.
- Demonstrate an understanding of the scientific method and how it is used to generate knowledge in nutrition science.