Food Science & Human Nutrition: Human Nutrition, MS

For the Master of Science in Food Science and Human Nutrition, Human Nutrition Concentration

Research Areas

FSHN faculty address a wide-variety of research areas related to human nutrition. Clinical nutrition, community nutrition, nutritional biochemistry, nutrigenomics, and nutritional toxicology are the general areas of strength for the FSHN human nutrition faculty.

Students focusing on human nutrition will learn from interactions with faculty members whose laboratories focus on research in the following areas:

- pediatric nutrition
- geriatric nutrition
- effects of bioactive compounds naturally found in foods on chronic diseases
- energy metabolism
- epigenetics
- the functions of essential fatty acids
- the influence of diet on cancer development
- ingestive behavior
- molecular mechanisms of food ingredients in disease prevention
- molecular mechanisms of obesity and insulin resistance
- nutrition and exercise
- optimization of nutritional support through enteral and parenteral nutrition

Other research topics are related to nutrition education, dietetics, disease prevention and treatment, and general health and wellness practices.

For additional information click here to visit our website (https://fshn.illinois.edu/academics/graduate-degrees/human-nutrition-ms-phd/).

Admission

In addition to meeting the Graduate College admission requirements, a student planning to pursue a graduate degree in the department should have a baccalaureate degree in a recognized field of biological, physical, agricultural, or engineering science. Background deficiencies may be removed with graduate credit courses designed for this purpose.

Click here to review all Food Science and Human Nutrition Admission requirements (https://fshn.illinois.edu/future-students/admissions/graduate-admissions/).

All applicants whose native language is not English must submit a minimum TOEFL (http://www.toefl.org/) score of 79 (iBT); or minimum International English Language Testing System (IELTS) (http://www.ielts.org/) academic exam scores of 6.5 overall.

Applicants may be exempt from the TOEFL if certain criteria (http://grad.illinois.edu/admissions/instructions/04c/) are met. For those taking the TOEFL or IELTS, full admission status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for scores greater than 102 (TOEFL iBT), or 7.0 (IELTS). Limited status (http://grad.illinois.edu/admissions/instructions/04c/) is granted for lesser scores and requires enrollment in English as a Second Language (ESL) courses (http://linguistics.illinois.edu/students/esl/guidelines/) based on an ESL Placement Test (EPT) taken upon arrival to campus.

The Clinical Community and Nutrition, Food Science, and Human Nutrition MS are STEM-designated programs.

Internship in Dietetics

The Department of Food Science and Human Nutrition offers a dietetic internship for master’s and doctoral students specializing in human nutrition. Completion of the degree and the internship qualifies the student to take the Academy of Nutrition and Dietetics registration examination administered by the Commission on Dietetic Registration. For information on our dietetic internship program please contact Jessica Madson (jamadson@illinois.edu)

Graduate Teaching Experience

Teaching is neither a Graduate College nor a FSHN requirement. A limited number of teaching assistantships are available to FSHN graduate students. Students are selected to be Graduate Teaching Assistants by the Department Head in consultation with the course instructor.

Financial Aid

Financial aid for thesis track graduate students is available in the form of fellowships, teaching and research assistantships, and tuition and partial fee waivers. Qualified candidates are considered for financial support upon application. Click here for additional information on financial aid for graduate students (https://fshn.illinois.edu/future-students/financial-support/graduate-financial-support/).

Financial Aid for the Master of Science in Food Science and Human Nutrition, Human Nutrition Concentration

Undergraduate training must include statistics (ACE 261, CPSC 241, ECON 202, MATH 161, PSYC 235, SOC 280, or STAT 100), nutrition (equivalent to FSHN 220), and systemic physiology (equivalent to MCB 246). These undergraduate courses are not required for admission, but must be completed early in the graduate program and do not count toward concentration requirements. M.S. degrees require at least 12 hours of 500-level course work (including thesis research), and at least 8 of these 12 hours must be in the major field for graduation.

Additional courses may be required beyond the concentration minimum, per Advisory Committee recommendations, depending upon student/advisor learning objectives. A student whose prior education includes course work with identical or similar content to those specified above will be guided by their advisor and Advisory Committee regarding the selection of additional course work needed to meet the minimum hours of the HN concentration.

Students are encouraged to take new courses, rather than retake required courses they have already taken. If you have already taken a required course at the University of Illinois, it is highly recommended that you do not retake it. No petition is required. If you have taken a very similar course at another university, you are strongly encouraged to petition for acceptance of that course in lieu of the required course. Courses should be selected to expand and strengthen your knowledge in core and related disciplines, and/or to increase your research capabilities. Retaking a
course does not meet that objective. For additional advice on this topic, contact your advisor and faculty advisory committee.

Students are required to enroll in another seminar course if they have a conflict that precludes their enrollment in FSHN 597 or NUTR 500. The seminar course may be offered by another department.

Course selection is flexible beyond this list if decided in consultation with advisor/advisory committee.

For additional details and requirements refer to the department’s graduate handbook (http://fshn.illinois.edu/graduate/student-handbook/) and the Graduate College Handbook (http://www.grad.illinois.edu/gradhandbook/).

This degree program can be completed with or without a thesis.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesis</td>
<td>Required Concentration Hours</td>
<td>26-27</td>
</tr>
<tr>
<td>FSHN 597</td>
<td>Graduate Seminar</td>
<td>0 to 1</td>
</tr>
<tr>
<td>or NUTR 500</td>
<td>Nutritional Sciences Seminar</td>
<td></td>
</tr>
<tr>
<td>FSHN 599</td>
<td>Thesis Research (6 hours)</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Hours Thesis Option</strong></td>
<td></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

| Non-Thesis | Required Concentration Hours                    | 26-27 |
| FSHN 597 | Graduate Seminar                                | 0 to 1|
| or NUTR 500 | Nutritional Sciences Seminar              |       |
| **Total Hours Non-Thesis Option** |                                        | **32**|

Other Requirements

Other requirements may overlap

Minimum Hours Required Within the 8 Unit:

Minimum 500-level Hours Required Overall:

Additional courses may be required beyond the concentration minimum per Advisory Committee recommendation

Oral Final Exam: Non-Thesis Only

Final Exam/Theory Defense: Thesis Only Required

Thesis Deposit Required: Thesis Only

Minimum GPA: 3.0

Requirements for Non-Thesis Degree:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Hours for Concentration in Human Nutrition</strong></td>
<td></td>
<td><strong>26-27</strong></td>
</tr>
</tbody>
</table>

**Required Courses:**

- MCB 450: Introductory Biochemistry (or higher) 3
- FSHN 465: Principles of Food Technology 3
- FSHN 440: Applied Statistical Methods I 4
- FSHN 521: Molecular Basis of Metabolic Syndrome and Weight Management 3
- FSHN 522: Dietary Prevention of Cardiovascular and Other Chronic Diseases 3
- FSHN 527: Advanced Vitamins and Minerals: Regulations of Metabolism 3
- FSHN 593: Seminar in Foods and Nutrition 2
- FSHN 597: Graduate Seminar (required for every semester) 0-1

**Electives:**

To meet 26-27 hours minimum, of which at least 3 (thesis MS) or 6 (non-thesis MS) hours need to be graded courses at the 500-level.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSHN 421</td>
<td>Pediatric Clinical Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 424</td>
<td>Biopsychology of Ingestive Behavior</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 428</td>
<td>Community Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 429</td>
<td>Nutrition Assessment &amp; Therapy</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 440</td>
<td>Applied Statistical Methods I</td>
<td>4</td>
</tr>
<tr>
<td>FSHN 480</td>
<td>Basic Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>FSHN 510</td>
<td>Topics in Nutrition Research (Up to 4 hours count toward degree)</td>
<td>1 to 3</td>
</tr>
<tr>
<td>FSHN 520</td>
<td>Advanced Clinical Nutrition (up to 6 hours count toward degree)</td>
<td>2</td>
</tr>
<tr>
<td>FSHN 590</td>
<td>Dietetic Internship I (Restricted to dietetics internship students only. Students enrolled in the Graduate Dietetic Internship may count up to 5 hours of FSHN 590 or FSHN 591 towards 500-level course requirements.)</td>
<td>5</td>
</tr>
<tr>
<td>FSHN 592</td>
<td>Graduate Internship Experience (Up to 2 hours count toward degree)</td>
<td>0 to 2</td>
</tr>
<tr>
<td>FSHN 598</td>
<td>Advanced Special Problems Individual Topics in Nutrition</td>
<td>1 to 8</td>
</tr>
<tr>
<td>NUTR 511</td>
<td>Regulation of Metabolism</td>
<td>4</td>
</tr>
<tr>
<td>NUTR 550</td>
<td>Grantsmanship and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>NUTR 590</td>
<td>Disciplinary Seminar (Up to 2 hours count toward degree)</td>
<td>0 to 2</td>
</tr>
<tr>
<td>ANSC 421</td>
<td>Minerals and Vitamins</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 520</td>
<td>Protein and Energy Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 524</td>
<td>Nonruminant Nutrition Concepts</td>
<td>2</td>
</tr>
</tbody>
</table>

Information listed in this catalog is current as of 12/2023
for the Master of Science in Food Science and Human Nutrition Human: Human Nutrition Concentration

Department of Food Science and Human Nutrition
Department Head: Nicki Engeseth
Associate Head of Graduate Programs: Michael Miller (mille216@illinois.edu)
Department website (https://fshn.illinois.edu)
Graduate Program Overview (https://fshn.illinois.edu/graduate/program-overview/)
Faculty Directory (https://fshn.illinois.edu/directory/faculty/)
260 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801
(217) 244-4498
Food Science and Human Nutrition email (http://catalog.illinois.edu/graduate/aces/food-science-human-nutrition-ms/human-nutrition/mailto:FSHNGradAdmissions@illinois.edu)

College of Agricultural, Consumer & Environmental Sciences
College of Agricultural, Consumer & Environmental Sciences website (http://catalog.illinois.edu/schools/aces/)

Admissions
Food Science & Human Nutrition Graduate Admissions (https://fshn.illinois.edu/graduate/apply/)
Graduate College Admissions & Requirements (https://grad.illinois.edu/admissions/apply/)

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