FOOD SCIENCE & HUMAN NUTRITION: HUMAN NUTRITION, BS

for the degree of Bachelor of Science Major in Food Science & Human Nutrition, Human Nutrition Concentration

This program of study provides the background for students who plan to pursue careers in nutrition and related health sciences. This concentration focuses on the field of human nutrition and reflects the growing need to prepare individuals for careers in health and nutrition. For students who expect to pursue advanced degrees in nutritional sciences or professional degrees in medicine, dentistry or law, the human nutrition concentration may be chosen. The concentration emphasizes a strong science background and allows students to obtain a strong human nutrition preparation that is not available elsewhere on campus. For those interested in practicing nutrition or nutrition counseling, please see Dietetics.

Prescribed Courses including Campus General Education

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Composition I and Speech</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>6-7</td>
</tr>
<tr>
<td></td>
<td>RHET 105 Writing and Research</td>
<td></td>
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<tr>
<td></td>
<td>&amp; CMN 101 and Public Speaking (or equivalent) (see college Composition I requirement)</td>
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<tr>
<td></td>
<td>CMN 111 Oral &amp; Written Comm I</td>
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<tr>
<td></td>
<td>&amp; CMN 112 and Oral &amp; Written Comm II</td>
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<tr>
<td></td>
<td>Advanced Composition</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>Select one course from campus approved list of Advanced Composition courses.</td>
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</tr>
<tr>
<td></td>
<td>Cultural Studies</td>
<td></td>
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<tr>
<td></td>
<td>Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists.</td>
<td>9</td>
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<tr>
<td></td>
<td>Foreign Language</td>
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<tr>
<td></td>
<td>Coursework at or above the third level is required for graduation.</td>
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<td></td>
<td>Quantitative Reasoning I</td>
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<tr>
<td></td>
<td>Select one of the following:</td>
<td>4-5</td>
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<tr>
<td></td>
<td>MATH 220 Calculus</td>
<td></td>
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<tr>
<td></td>
<td>MATH 221 Calculus I</td>
<td></td>
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<tr>
<td></td>
<td>MATH 234 Calculus for Business I (This course does not count for students in the Food Science Concentration; choose from the other two options.)</td>
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</tbody>
</table>

Quantitative Reasoning II

Select one of the following: 3-4

- ACE 261 Applied Statistical Methods
- CPSC 241 Intro to Applied Statistics
- ECON 202 Economic Statistics I
- PSYC 235 Intro to Statistics
- STAT 100 Statistics

Natural Sciences and Technology

Chemistry

- CHEM 101 Introductory Chemistry
- CHEM 102 General Chemistry I
- & CHEM 103 and General Chemistry Lab I
- CHEM 104 General Chemistry II
- & CHEM 105 and General Chemistry Lab II
- MCB 100 Introductory Microbiology
- MCB 101 Intro Microbiology Laboratory

Humanities and the Arts

Select from campus approved list.

Social and Behavioral Sciences

Select from campus approved list and/or see individual concentration.

ACES Prescribed Course

ACES 101 Contemporary Issues in ACES

Required Concentration

Concentration prescribed courses. See specific requirements for each concentration listed below.

Total Hours 6 126 or 130

1. Students in the Food Science Concentration must choose CPSC 116, and one course from Western cultures, and one from U.S. minority cultures from campus approved lists.
2. Students in the Food Science Concentration must select from MATH 220 or MATH 221.
3. Students in the Hospitality Management Concentration must take CHEM 101. All other concentrations take CHEM 102 + 103 & CHEM 104 + 105, which are not required for the Hospitality Management Concentration.
4. Not required for the Food Science Concentration
5. AGED 230 or 260 and 3 hours selected from the campus approved list for students in the Food Science Concentration - 6 hours total.
6. The Food Science Concentration requires a minimum of 130 hours; the Dietetics, Human Nutrition, and Hospitality Management Concentrations each require a minimum of 126 hours.

Other Natural Science and Technology Required

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 232</td>
<td>Elementary Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 233</td>
<td>Elementary Organic Chem Lab I</td>
<td>2</td>
</tr>
<tr>
<td>MCB 244</td>
<td>Human Anatomy &amp; Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>MCB 246</td>
<td>Human Anatomy &amp; Physiology II</td>
<td>3</td>
</tr>
<tr>
<td>MCB 450</td>
<td>Introductory Biochemistry</td>
<td>3</td>
</tr>
</tbody>
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Information listed in this catalog is current as of 03/2020
### Human Nutrition Required

- **FSHN 101** The Science of Food and How it Relates to You 3
- **FSHN 220** Principles of Nutrition 4
- **FSHN 420** Nutritional Aspects of Disease 3
- **FSHN 426** Biochemical Nutrition I 3
- **FSHN 427** Biochemical Nutrition II 3

Select a minimum of two courses from the following list of Restricted Electives:

- **FSHN 249** Food Service Sanitation
- **FSHN 302** Sensory Evaluation of Foods
- **FSHN 322** Nutrition and the Life Cycle
- **FSHN 414** Food Chemistry
- **FSHN 418** Food Analysis
- **FSHN 421** Pediatric Clinical Nutrition
- **FSHN 425** Food Marketing
- **FSHN 428** Community Nutrition
- **FSHN 429** Nutrition Assessment & Therapy
- **FSHN 440** Applied Statistical Methods I
- **FSHN 460** Food Processing Engineering
- **FSHN 461** Food Processing I
- **FSHN 465** Principles of Food Technology
- **FSHN 471** Food & Industrial Microbiology
- **FSHN 480** Basic Toxicology

### Science electives: A minimum of two science courses from below list. Courses cannot be used to fulfill other requirements.

- **ANSC 100** Intro to Animal Sciences
- **ANSC 110** Life With Animals and Biotech
- **ANSC 207** Companion Animal Biology & Care
- **ANSC 221** Cells, Metabolism and Genetics
- **ANSC 222** Anatomy and Physiology
- **ANSC 223** Animal Nutrition
- **ANSC 224** Animal Reproduction and Growth
- **ANSC 350** Cellular Metabolism in Animals
- **ANSC 404** Poultry Science
- **ANSC 409** Meat Science
- **ANSC 420** Ruminant Nutrition
- **ANSC 422** Companion Animal Nutrition
- **ANSC 423** Advanced Dairy Nutrition
- **ANSC 431** Advanced Reproductive Biology
- **ANSC 438** Lactation Biology
- **ANSC 441** Human Genetics
- **ANSC 450** Comparative Immunobiology
- **ANSC 452** Animal Growth and Development
- **ANSC 453** Stem Cell Biology
- **ANTH 240** Biological Anthropology
- **ANTH 246** Forensic Science
- **ANTH 249** Evolution and Human Disease
- **ANTH 441** Human Genetics

### Additional Courses

- **ASTR 100** Introduction to Astronomy
- **ASTR 121** Solar System and Worlds Beyond
- **ASTR 122** Stars and Galaxies
- **ASTR 150** Killer Skies: Astro-Disasters
- **ASTR 210** Introduction to Astrophysics
- **ATMS 100** Introduction to Meteorology
- **ATMS 120** Severe and Hazardous Weather
- **ATMS 140** Climate and Global Change
- **BIOC 455** Techniques Biochem & Biotech
- **CHEM 312** Inorganic Chemistry
- **CHEM 360** Chemistry of the Environment
- **CHLH 100** Contemporary Health
- **CHLH 200** Mental Health
- **CHLH 206** Human Sexuality
- **CHLH 243** Drug Use and Abuse
- **CHLH 250** Health Care Systems
- **CHLH 274** Introduction to Epidemiology
- **CHLH 415** International Health
- **CPSC 112** Introduction to Crop Sciences
- **CPSC 116** The Global Food Production Web
- **CPSC 226** Introduction to Weed Science
- **CPSC 270** Applied Entomology
- **FSHN 232** Science of Food Preparation
- **GEOG 101** Global Development & Environment
- **GEOG 103** Earth’s Physical Systems
- **GEOL 100** Planet Earth
- **GEOL 104** Geology of the National Parks
- **GEOL 107** Physical Geology
- **GEOL 117** The Oceans
- **GEOL 118** Natural Disasters
- **GEOL 380** Environmental Geology
- **HDFS 105** Intro to Human Development
- **HORT 100** Introduction to Horticulture
- **HORT 105** Vegetable Gardening
- **HORT 180** Medicinal Plants and Herbology
- **IB 100** Biology in Today’s World
- **IB 103** Introduction to Plant Biology
- **IB 104** Animal Biology
- **IB 105** Environmental Biology
- **IB 150** Organismal & Evolutionary Biol
- **KIN 121** Survey of Sports Medicine
- **KIN 122** Physical Activity and Health
- **KIN 150** Bioscience of Human Movement
- **KIN 262** Motor Develop, Growth & Form
- **KIN 352** Bioenergetics of Movement
- **MCB 150** Molec & Cellular Basis of Life
- **MCB 250** Molecular Genetics
- **MCB 252** Cells, Tissues & Development
- **MCB 290** Undergraduate Research
- **MCB 314** Introduction to Neurobiology
- **MCB 316** Genetics and Disease
- **MCB 408** Immunology

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<table>
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<tr>
<th>Course Code</th>
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</tr>
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<tbody>
<tr>
<td>NRES 100</td>
<td>Fundamentals of Env Sci</td>
</tr>
<tr>
<td>NRES 102</td>
<td>Introduction to NRES</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>College Physics: Mech &amp; Heat</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>College Physics: E&amp;M &amp; Modern</td>
</tr>
<tr>
<td>PHYS 140</td>
<td>How Things Work</td>
</tr>
<tr>
<td>PHYS 211</td>
<td>University Physics: Mechanics</td>
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<tr>
<td>PHYS 212</td>
<td>University Physics: Elec &amp; Mag</td>
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<tr>
<td>PHYS 213</td>
<td>Univ Physics: Thermal Physics</td>
</tr>
<tr>
<td>PHYS 214</td>
<td>Univ Physics: Quantum Physics</td>
</tr>
<tr>
<td>PLPA 200</td>
<td>Plants, Pathogens, and People</td>
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<tr>
<td>PLPA 204</td>
<td>Introductory Plant Pathology</td>
</tr>
<tr>
<td>PSYC 230</td>
<td>Perception &amp; Sensory Processes</td>
</tr>
<tr>
<td>PSYC 238</td>
<td>Psychopathology and Problems in Living</td>
</tr>
</tbody>
</table>

Elective hours as needed to reach minimum of 126