

# FOOD SCIENCE & HUMAN NUTRITION: HUMAN NUTRITION, BS

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

**department website:** <https://fshn.illinois.edu>  
**department faculty:** <https://fshn.illinois.edu/directory/faculty/>  
**overview of college admissions & requirements:** Agricultural, Consumer & Environmental Sciences (<http://catalog.illinois.edu/schools/aces/academic-units/#academicunitstext>)  
**college website:** <https://aces.illinois.edu/>

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.

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## Prescribed Courses including Campus General Education

Code	Title	Hours
<b>Composition I and Speech</b>		
Select one of the following:		6-7
RHET 105 & CMN 101	Writing and Research and Public Speaking (or equivalent) (see college Composition I requirement)	
CMN 111 & CMN 112	Oral & Written Comm I and Oral & Written Comm II	
<b>Advanced Composition</b>		
Select one course from campus approved list of Advanced Composition courses.		3-4
<b>Cultural Studies</b>		
Select one course from Western culture, one from non-Western culture, and one from U.S. minority culture from campus approved lists. <sup>1</sup>		9
<b>Foreign Language</b>		
Coursework at or above the third level is required for graduation.		
<b>Quantitative Reasoning I</b>		
Select one of the following: <sup>2</sup>		4-5
MATH 220	Calculus	
MATH 221	Calculus I	

MATH 234 Calculus for Business I (This course does not count for students in the Food Science Concentration; choose from the other two options.)

<b>Quantitative Reasoning II</b>		
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	
<b>Natural Sciences and Technology</b>		
Chemistry <sup>3</sup>		3 or 8
CHEM 101	Introductory Chemistry	
CHEM 102 & CHEM 103	General Chemistry I and General Chemistry Lab I	
CHEM 104 & CHEM 105	General Chemistry II and General Chemistry Lab II	
MCB 100	Introductory Microbiology	3
MCB 101	Intro Microbiology Laboratory <sup>4</sup>	2
<b>Humanities and the Arts</b>		
Select from campus approved list.		6
<b>Social and Behavioral Sciences</b>		
Select from campus approved list and/or see individual concentration. <sup>5</sup>		9
<b>ACES Prescribed Course</b>		
ACES 101	Contemporary Issues in ACES	2
<b>Required Concentration</b>		
Concentration prescribed courses. See specific requirements for each concentration listed below.		
<b>Total Hours<sup>6</sup></b>		<b>126 or 130</b>

<sup>1</sup> 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.

<sup>2</sup> Students in the Food Science Concentration must select from MATH 220 or MATH 221.

<sup>3</sup> 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.

<sup>4</sup> Not required for the Food Science Concentration

<sup>5</sup> AGED 230 or 260 and 3 hours selected from the campus approved list for students in the Food Science Concentration - 6 hours total.

<sup>6</sup> 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.

Code	Title	Hours
<b>Other Natural Science and Technology Required</b>		
CHEM 232	Elementary Organic Chemistry I	4
CHEM 233	Elementary Organic Chem Lab I	2
MCB 244	Human Anatomy & Physiology I	3
MCB 246	Human Anatomy & Physiology II	3
MCB 450	Introductory Biochemistry	3

**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** **6**

**Restricted Electives:**

FSHN 249	Food Service Sanitation
FSHN 302	Sensory Evaluation of Foods
FSHN 322	Nutrition and the Life Cycle
FSHN 329	Communication in Nutrition
FSHN 344	Business Etiquette
FSHN 345	Strategic Operations Management
FSHN 398	Undergraduate Seminar
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	
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.** **6**

ANSC 100	Intro to Animal Sciences
ANSC 110	Life With Animals and Biotech
ANSC 207	The Science of Pets and How to Care for Them
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
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	Technqs 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	
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	
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
NRES 100	Fundamentals of Env Sci
NRES 102	Introduction to NRES
PHYS 101	College Physics: Mech & Heat
PHYS 102	College Physics: E&M & Modern
PHYS 140	How Things Work
PHYS 211	University Physics: Mechanics
PHYS 212	University Physics: Elec & Mag
PHYS 213	Univ Physics: Thermal Physics
PHYS 214	Univ Physics: Quantum Physics
PLPA 200	Plants, Pathogens, and People
PLPA 204	
PSYC 230	Perception & Sensory Processes
PSYC 238	Psychopathology and Problems in Living
<b>Elective hours as needed to reach minimum of 126</b>	