

Food and Nutrition Sciences Program (FNS/NUT)

College of Science and Health
Department of Biology

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www.uwlax.edu/academics/nutrition/ (<https://www.uwlax.edu/academics/nutrition/>)

Major

The interdisciplinary **food and nutrition sciences major** will prepare students for a variety of career and graduate school opportunities. Students will complete 17 credits of core food and nutrition coursework taught in multiple departments from the College of Science and Health (CSH). Students will also complete 22 foundational science and math requirements that will prepare them for the core food and nutrition coursework. The elective options students can choose from are focused coursework that will position students for future careers or graduate work. A minimum of eight elective credits are required from CSH and a minimum of three elective credits are required from the other colleges on campus with 24 total elective credits required.

Minor

The **nutrition minor** serves a variety of CSH students, including those in pre-allied health, pre-medicine, exercise and sport science, and health education. Non-CSH majors in psychology, sociology, and business also may be interested in the nutrition minor.

The nutrition minor includes 18 credits of nutrition-related course work meant for students who may enter professions where an understanding of food and nutrition will be helpful and make them more competitive for employment or graduate school. For more information contact Anton Sanderfoot (asanderfoot@uwlax.edu) or Bradley Seebach (bseebach@uwlax.edu). The nutrition faculty offices are located in the basement of the Health Science Center, suite 0016. Stop by and get some food for thought!

The minor **does not** provide enough nutrition coursework or the supervised practice (1200 hours) required to be eligible for the registered dietitian (RD) credential. For more information about accredited dietetics programs leading to the RD credential, please visit: www.eatright.org (<http://www.eatright.org/>).

Major

- Food and nutrition sciences - BS (<http://catalog.uwlax.edu/undergraduate/foodandnutritionsciences/foodandnutritionsciencesbs/>)

Minor

- Nutrition minor (<http://catalog.uwlax.edu/undergraduate/foodandnutritionsciences/nutritionminor/>)

Food and Nutrition Sciences Courses

FNS 100 Cr.1

Careers in Nutrition, Food Science, and Food Systems

This course introduces students to academic and career planning specific to nutrition, food science, and food systems fields. Experts from community and clinical health organizations, industry, government, private practice, and academia are invited to share their career preparation pathways, job details, and opportunities in their subfields. Self and program assessment platforms and soft skills that lead to academic and professional success are introduced. Offered Fall, Summer.

FNS/NUT 200 Cr.3

Human Nutrition

This course examines the basic principles of the science of nutrition including understanding the basic sources of energy and the influences and effects of nutrition on one's overall health and fitness. Cultural and environmental factors that influence food availability and consumption are also investigated. (Cross-listed with FNS/NUT; may only earn credit in one department.) Offered Fall, Spring, Summer.

FNS/NUT 300 Cr.3

Lifecycle Nutrition

This course explores nutrition assessment and nutritional requirements/challenges during preconception, pregnancy, lactation, infancy, childhood, adulthood and older adulthood, and community nutrition programs targeted for each life stage. Prerequisite: FNS/NUT 200. (Cross-listed with FNS/NUT; may only earn credit in one department.) Offered Fall, Spring.

FNS 310 Cr.3

Food Systems and Security

This course provides an overview of the U.S. food system with particular focus on the food system's interrelationships with public health, the environment, equity, and society. Issues covered include food insecurity, social justice, community and worker health concerns, food marketing, nutrition, resource depletion, and ecological degradation. Further, this course examines the complex interrelationships between diet, food production, environment, and human health to advance an ecological perspective in reducing threats to the health of the public and to promote policies that protect health, the global environment, and the ability to sustain life for future generations. Prerequisite: FNS 200. Offered Fall, Spring.

FNS/NUT 350 Cr.3

Functional Foods, Herbs, and Supplements

Consumer interest in the relationship between diet and health has increased the demand for information about functional foods, herbals, and supplements. The purpose of this course is to explore current literature and research in these ever-growing and popular topics. Definitions, purpose, safety, efficacy, and risks of each topic are covered. Additionally, topics of discussion include specific functional components of food, herbals, and supplements. Prerequisite: FNS/NUT 200. (Cross-listed with FNS/NUT; may only earn credit in one department.) Offered Fall, Summer.

FNS 410 Cr.3

Food Safety

Food safety principles, concerns, and management practices across the flow of food from production to consumption are covered in this course. The focus is on understanding, identifying, analyzing, and preventing hazards of human food during production and compliance with the preventive controls rules for human food mandated by the Food Safety Modernization Act (FSMA). Food safety principles and preventive control rules for other animal food are covered. Principles for safety and inspection in food service are also covered as guided by the Food & Drug Administration (FDA) Food Code. Students completing the course may choose to obtain Food Safety Preventive Controls Alliance (FSPCA) certificates to become Preventive Controls Qualified Individuals (PCQI) for human food and/or ServeSafe certification. Certification exams are an extra cost to students and are not required for completion of the course. Prerequisite: MIC 230. Offered Fall.

FNS 420 Cr.3

Food Science

This course examines the principles of food science including the functional role of carbohydrates, protein, and fat in food. Subjective and objective methods of food evaluation are introduced and utilized throughout the course. Students explore the history of foods as well as current topics related to food. Methods of food preservation and packaging are also discussed. Prerequisite: BIO 105; FNS 200. Offered Fall, Spring.

FNS 450 Cr.2-3

Field Experience in Food and Nutrition Sciences

Working with a UWL instructor and field site supervisor, students identify a field site, develop a plan for exposure to appropriate experiences at the field site, participate in food and nutritionally-related professional activities at the field site, and submit a portfolio detailing field experiences. Prerequisite: nine credits completed in the food and nutrition science major or nutrition minor. Consent of instructor. Offered Fall, Winter, Spring, Summer.

FNS 479 Cr.1

Food and Nutrition Teaching Assistant

Working with a faculty mentor(s), students aid in course development, delivery, and student assessment. Potential courses include approved courses in the nutrition minor. Prerequisite: grade of "B" or better in the class in which the student will be assisting and permission from the instructor the student will be assisting. Consent of instructor. Offered Fall, Winter, Spring, Summer.

FNS 491 Cr.1

Food and Nutrition Sciences Capstone

This course calls on students to synthesize concepts and ideas from the courses they have taken throughout their food and nutrition sciences curriculum. Students demonstrate the knowledge they have gained by completing a culminating project. Students also participate in assessment of the food and nutrition sciences major in coordination with assessment activities completed in an earlier course. Prerequisite: FNS 100, FNS 300, FNS 310, FNS 410, FNS 420; senior standing. Offered Spring, Summer.

FNS 499 Cr.1-2

Food and Nutrition Research

Working with a faculty mentor(s), students identify a research topic of interest, develop, plan, carry-out, and report the research in a campus and/or professional meeting. If the research findings are impactful in the fields of food and nutrition sciences, the student submits a manuscript for publication in an appropriate journal. Prerequisite: six credits of FNS core classes completed. Consent of instructor. Offered Fall, Winter, Spring, Summer.

Nutrition Courses

NUT/FNS 200 Cr.3

Human Nutrition

This course examines the basic principles of the science of nutrition including understanding the basic sources of energy and the influences and effects of nutrition on one's overall health and fitness. Cultural and environmental factors that influence food availability and consumption are also investigated. (Cross-listed with FNS/NUT; may only earn credit in one department.) Offered Fall, Spring, Summer.

NUT/FNS 300 Cr.3

Lifecycle Nutrition

This course explores nutrition assessment and nutritional requirements/challenges during preconception, pregnancy, lactation, infancy, childhood, adulthood and older adulthood, and community nutrition programs targeted for each life stage. Prerequisite: FNS/NUT 200. (Cross-listed with FNS/NUT; may only earn credit in one department.) Offered Fall, Spring.

NUT/FNS 350 Cr.3

Functional Foods, Herbs, and Supplements

Consumer interest in the relationship between diet and health has increased the demand for information about functional foods, herbals, and supplements. The purpose of this course is to explore current literature and research in these ever-growing and popular topics. Definitions, purpose, safety, efficacy, and risks of each topic are covered. Additionally, topics of discussion include specific functional components of food, herbals, and supplements. Prerequisite: FNS/NUT 200. (Cross-listed with FNS/NUT; may only earn credit in one department.) Offered Fall, Summer.

NUT 400 Cr.3

Food Science and Safety

This course examines the principles of food science including the functional role of carbohydrates, protein and fat. Emphasis will be placed on current topics of food science and safety in the national and local food industry including genetically modified and functional foods. Biological, chemical, and physical factors that affect the quality and safety of food products will be discussed in addition to the role of microorganisms in foodborne illness and food quality. Students in this course will also explore basic principles of food safety including food processing and food service as well as the role of government in food safety. Prerequisite: NUT 200; BIO 100 or BIO 105 or MIC 100 or MIC 230. Offered Fall, Spring.

NUT 450 Cr.2-3

Field Experience in Nutrition

Working with a UWL instructor and field site supervisor, students will identify a field site, develop a plan for exposure to appropriate experiences at the field site, participate in nutritionally-related professional activities at the field site, and submit a portfolio detailing field experiences. Prerequisite: nine credits completed in nutrition minor. Consent of instructor. Offered Fall, Winter, Spring, Summer.

NUT 479 Cr.1

Nutrition Teaching Assistantship

Working with a faculty mentor(s), students will aid in course development, delivery, and student assessment. Potential courses include approved courses in the nutrition minor. Prerequisite: grade of "B" or better in the class in which the student will be assisting AND permission from the instructor of the class in which the student will be assisting. Consent of instructor. Offered Fall, Winter, Spring, Summer.

NUT 499 Cr.1-2

Nutrition Research

Working with a faculty mentor(s), students will identify a research topic of interest, develop, plan, carry-out, and report the research in a campus and/or professional meeting. If the research findings are impactful in the field of nutrition, the student will submit a manuscript for publication in an appropriate journal. Repeatable for credit - maximum two. Prerequisite: six credits completed in nutrition minor. Consent of instructor. Offered Fall, Winter, Spring, Summer.