# Food Science and Human Nutrition

## Course Search

Not all courses are offered every semester. Refer to the schedule of courses for each term's specific offerings.

More Info

Courses at the University of Florida, with the exception of specific foreign language courses and courses in the online Master of Arts in Mass Communication program, are taught in English.

## Courses

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Prereq: HUN 2201 and HUN 3403

Capstone course for dietetic majors; focuses on professional issues, including ethics, legislative issues, advocating and marketing the profession.

Firsthand, authentic extension experiences in dietetics under the supervision of a faculty member. Projects may involve program planning, development, implementation, and evaluation. (S-U)

Individual research work in various phases of dietetics.

Firsthand, authentic research in dietetics under faculty member supervision. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)

Independent research in dietetics leading to an honors thesis. Student is mentored by a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U) Completed honors thesis proposal on file

Lectures, conference, laboratory or clinical experience covering selected topics in dietetics.

Discussion of current nutrition and food science topics concerning nutritional quality and safety of foods as they relate to one's health. For science and non-science students. (B)

Commodities selected for human consumption and the methods used by food technologists to prolong shelf life, retard spoilage and ensure quality. Principles upon which the various processing methodologies are based. (B)

Lectures, discussions, demonstrations and field trips concerning microbial, chemical and biological safety of food, principles of sanitation for the food processing, food service and retail food industries.

Sources and types of biological contamination and its control during harvesting, processing and storage of foods; food fermentation; biotechnology sanitation; HACCP methods used to examine foods for microbial content.

Methods to enumerate microorganisms in foods.

Demonstrations and illustrations of the chemical and physical properties of foods. Shows the effects of processing, ingredients and storage on food quality and nutrient retention.

More Info

More Info
### General Education - Physical Science

- **FOS 4311 Food Chemistry** 3 Credits
  Relationship of composition to the properties of foods and the changes which occur during processing, storage and utilization.
  - **Prereq:** CHM 2200 or the CHM 2210/2211 sequence
  - **Coreq:** FOS 4310L or FOS 4311L; biochemistry recommended but not required

- **FOS 4311L Food Chemistry Laboratory** 1 Credit
  Laboratory covering the relationship of composition to the properties of foods and the changes which occur during processing, storage and utilization.
  - **Prereq:** CHM 2200L or CHM 2211L
  - **Coreq:** FOS 4311

- **FOS 4318 Flavor Chemistry** 3 Credits
  Learn how flavor chemicals impact sensory perception of food; discuss flavor compounds used in foods, their production, isolation, analysis, and specific attributes.
  - **Prereq:** CHM 2200/2200L or the CHM 2210/2211/2211L sequence
  - **General Education - Physical Science**

- **FOS 4427C Principles of Food Processing** 4 Credits
  Principles of processing foods: cooling, freezing, heating, dehydrating, concentrating, irradiating, fermenting and the use of chemicals.
  - **Prereq:** AOM 4062 or FOS 4222 or FOS 4311

- **FOS 4435C Food Product Development** 3 Credits
  Capstone course integrating food science and related disciplines to value-added food products using traditional and novel commodity, ingredient and process combinations. Class projects emphasize technology, safety, health/nutrition, legal, quality and economic/marketing considerations.
  - **Prereq:** 4AG - FOS majors only

- **FOS 4522C Seafood Technology** 3 Credits
  Processing principles and methods of preparation of various seafood products and control of product quality.
  - **Prereq:** CHM 2045

- **FOS 4722C Quality Control in Food Systems** 3 Credits
  Measurement and control of the major quality parameters of foods, including sensory, color and texture.
  - **Prereq:** STA 2023

- **FOS 4731 Government Regulations and the Food Industry** 2 Credits
  Government laws regulating food wholesomeness; food handling, processing and distribution under sanitary conditions; food ingredients and labeling of food products.
  - **Prereq:** FOS 3042 or FOS major or instructor permission

- **FOS 4905 Special Problems in Food Science** 1-5 Credits
  Individual research work in various phases of food science.

- **FOS 4906 Supervised Extension Experience in Food Science** 3 Credits
  Firsthand, authentic extension experiences in agricultural and life sciences under the supervision of a faculty member. Projects may involve program planning, development, implementation, and evaluation. (S-U)

- **FOS 4911 Supervised Research in Food Science** 3 Credits
  Firsthand, authentic research in food science under the supervision of a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)

- **FOS 4915 Honors Thesis Research in Food Science** 3 Credits
  Independent research in food science leading to an honors thesis. Student is mentored by a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)
  - **Prereq:** junior standing, upper division GPA of 3.75 or higher and completed honors thesis proposal on file

- **FOS 4936 Topics in Food Science** 1-3 Credits
  Lectures, conferences or laboratory covering specially selected topics in food science.

### General Education - Biological Science

- **HUN 2201 Fundamentals of Human Nutrition** 3 Credits
  The properties, functions, requirements, interrelationships and metabolism of nutrients. (B)
  - **Prereq:** BSC 2007 or BSC 2005 or BSC 2102 or CHM 2045 or APK 2100C or APK 2105C or CHM 1030
  - **General Education - Biological Science**

- **HUN 3403 Nutrition through the Life Cycle** 2 Credits
  Nutritional needs and concerns throughout stages of the life cycle including pregnancy and lactation, infancy, adolescence, adulthood, and aging; socioeconomic, cultural and psychological influences on food and nutrition behavior.
  - **Prereq:** HUN 2201

- **HUN 4221 Nutrition and Metabolism** 3 Credits
  Metabolic relationships of nutrients with emphasis upon their functions in biochemical and physiological processes as well as variations in requirements in response to stress. Meets requirements of the American Dietetic Association.
  - **Prereq:** BCH 3025 or BCH 4024

- **HUN 4445 Nutrition and Disease: Part 1** 2 Credits
  Part one of a two-semester sequence that focuses on the biochemical and pathophysiological bases of disease/conditions that require specialized nutrition support/medical nutrition therapy.
  - **Prereq:** HUN 2201 and CHM 2211
  - **Coreq:** APK 2105C or PCB 4723C, BCH 3025 or BCH 4024

- **HUN 4446 Nutrition and Disease: Part 2** 3 Credits
  Part two of the sequence that focuses on the biochemical and pathophysiological bases of disease/conditions that require specialized nutrition support/medical nutrition therapy.
  - **Prereq:** HUN 4445
  - **Coreq:** DIE 4246

- **HUN 4813C Laboratory Techniques in Molecular Nutrition** 3 Credits
  Laboratory techniques relevant to the study of nutrition, ranging from biochemistry, molecular biology, genomics and bioinformatics.
  - **Prereq:** CHM 2211 and CHM 2211L
  - **Coreq:** BCH 3025 or BCH 4024

### One-term Employment in Industry

- **HUN 4902 One-term Employment in Industry** 1-3 Credits
  One-term employment in industry, including extra work according to a pre-approved proposal. Practical work under industrial supervision as set forth in College of Agricultural and Life Sciences regulations. (S-U)

### Independent Research in Food Science

- **HUN 4903 Supervised Extension Experience in Nutritional Sciences** 3 Credits
  Firsthand, authentic extension experiences in agricultural and life sciences under the supervision of a faculty member. Projects may involve program planning, development, implementation, and evaluation. (S-U)

- **HUN 4905 Special Problems in Human Nutrition** 1-5 Credits
  Individual research work in various phases of nutrition.
HUN 4911 Supervised Research in Nutritional Sciences 3 Credits
Firsthand, authentic research in nutritional sciences under the supervision of a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)

HUN 4915 Honors Thesis Research in Nutritional Sciences 3 Credits
Independent research in nutritional sciences leading to an honors thesis. Student is mentored by a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)
Prereq: junior standing, upper division GPA of 3.75 or higher and completed honors thesis proposal on file

HUN 4936 Topics in Human Nutrition 1-3 Credits
Lectures or laboratory covering selected topics in human nutrition.
Prereq: instructor permission

HUN 4941 Full Time Practical Work Experience in Human Nutrition 1-3 Credits
One-term employment in industry or the health field according to a pre-approved outline. Practical work under supervision as set forth in College of Agricultural and Life Sciences regulations. (S-U)
Prereq: previous arrangement with advisor and department permission