

NUTRITION AND FOOD SCIENCES

OVERVIEW

The department mission is to study the relationship between nutrition, food science, health and fitness (preventive nutrition), and between diet and disease (therapeutic nutrition). Faculty research encompasses both basic and applied or community aspects of human nutrition and food science and technology. Research is being conducted on: the impact of attitudes and behaviors toward eating and exercise on body weight and composition; web-based interactive multimedia tools for use in teaching and research; behavior modification programs to improve individual eating behaviors; testing the effectiveness of Internet support on the long term management of obesity; factors affecting the nutritional status of children; milk chemistry and cheese technology (i.e., structure, function, and properties of mozzarella and goat's milk cheese); chemistry and processing of infant formula; and food microbiology.

For more information, contact the Department of Nutrition and Food Sciences, 256 Carrigan Wing, (802) 656-3374.

DEGREES

- Nutrition and Food Sciences M.S.

FACULTY

Berlin, Linda; Extension Assistant Professor, Department of Nutrition and Food Sciences; PHD, Tufts University
Donnelly, Catherine Wright; Professor, Department of Nutrition and Food Sciences; PHD, North Carolina State University Raleigh
Guo, Ming Ruo; Professor, Department of Nutrition and Food Sciences; PHD, University College Cork
Harvey, Jean Ruth; Professor, Department of Nutrition and Food Sciences; PHD, University of Pittsburgh
Johnson, Rachel K; Professor, Department of Nutrition and Food Sciences; PHD, Pennsylvania State University
Kindstedt, Paul Stephen; Professor, Department of Nutrition and Food Sciences; PHD, Cornell University
Niles, Meredith; Assistant Professor, Department of Nutrition and Food Sciences; PHD, University of California-Davis
Oyarzabal, Omar A.; Associate Professor, Extension, Department of Nutrition and Food Sciences; PHD, Auburn University
Pintauro, Stephen Joseph; Associate Professor, Department of Nutrition and Food Sciences; PHD, University of Rhode Island
Pope, Lizzy; Assistant Professor, Department of Nutrition and Food Sciences; PHD, University of Vermont
Trubek, Amy B.; Associate Professor, Department of Nutrition and Food Sciences; PHD, University of Pennsylvania

Courses

NFS 203. Food Microbiology. 3 Credits.

Desirable and undesirable activities of bacteria in foods. Mechanisms of food-borne infection and intoxication. Laboratory methods to enumerate and identify microorganisms associated with food. Prerequisite: NFS 153 or Instructor permission. Co-requisite: NFS 213.

NFS 205. Functional Foods:Prncpl & Tech. 3 Credits.

Examines the constituents that make food products functional and provides laboratory techniques needed to create a functional food. Pre/co-requisites: NFS 153, NFS 154, or Instructor permission.

NFS 223. Nutrition Educ & Counseling. 3 Credits.

Use of appropriate education theory, techniques, and media in nutrition education and counseling theories and negotiation, interviewing and counseling skills in individual and group counseling. Pre/co-requisites: NFS Pre/co-requisites: NFS 043, NFS 053, NFS 054, NFS 143.

NFS 243. Advanced Nutrition. 3 Credits.

Study of nutrients and their specific functions in metabolic process integrating cellular physiology, biochemistry, and nutrition. Prerequisites: NFS 043; P BIO 185; ANPS 019; Junior standing. Spring.

NFS 244. Nutr in Hlth & Disease Prevntn. 3 Credits.

Examination of dietary planning, nutrition assessment, genetics, drug-nutrient interactions, CAM therapies and nutrition related to health and prevention of disease. Pre/co-requisites: CHEM 042, ANPS 020, NFS 053, NFS 054, NFS 143.

NFS 250. Foodservice Systems. 4 Credits.

Emphasis on the foodservice system model for understanding quality control; food procurement, production, and marketing; management and evaluation of foodservice facilities, human and financial resources. Prerequisites: BSAD 060 or CDAE 158; BSAD 120; minimum Junior standing; Dietetics or Nutrition and Food Sciences, and Dietetics, Nutrition and Food Sciences majors only.

NFS 260. Diet and Disease. 3 Credits.

Examination of the physiologic, biochemical, and psychosocial basis of several disease states and the application of medical nutrition therapy in treatment. Prerequisite: NFS 053, NFS 143, NFS 243, NFS 244.

NFS 262. Community Nutrition. 3 Credits.

Study of U.S. public health nutrition policies, programs and practices. Emphasis on community nutrition program planning including needs assessment, intervention development and evaluation. Prerequisite: Junior or Senior standing. Spring.

NFS 263. Nutritional Biochemistry. 3 Credits.

Comprehensive study of metabolism of carbohydrates, lipids, and protein emphasizing diet induced, hormone mediated alterations in metabolism (e.g. starvation and obesity). Prerequisite: NFS 243 or Instructor permission. Spring.

NFS 295. Advanced Special Topics. 1-18 Credits.

Lectures, laboratories, readings, or projects relating to contemporary areas of study. Credits negotiable. Enrollment may be more than once, maximum of twelve hours in NFS 195 and NFS 295 combined. Prerequisite: Department permission.

NFS 296. Field Experience. 1-15 Credits.

Professionally-oriented field experience under joint supervision of faculty and business or community representative. Credit negotiable. Maximum of fifteen hours in NFS 196 and NFS 296 combined. Prerequisite: Departmental permission.

NFS 310. MSD Journal Club. 1 Credit.

Critical review of current scientific, peer-reviewed literature, student-led facilitated discussions, abstract writing on topics related to nutrition, sustainable food systems, hunger and food insecurity, health promotion, chronic disease prevention and management. Prerequisite: Master of Science in Dietetics students only.

NFS 311. Supervised Practice I. 4 Credits.

Through lecture, discussion, presentations, and practical experience, students develop competencies in clinical dietetics, community nutrition, and food service management. Prerequisite: MS D student.

NFS 312. Supervised Practice II. 4 Credits.

Through lecture, discussion, presentations, and practical experience, students develop competencies in clinical dietetics, community nutrition, and food service management. Prerequisite: MS D student.

NFS 313. Food Safety and Public Policy. 3 Credits.

An exploration of issues that impact the development of microbiological food safety policy through analysis of how science and risk assessment are used in establishing policy. Prerequisites: NFS 203 or NFS 253 or Instructor permission. Cross-listed with: ANFS 313.

NFS 350. Nutrition&Food Science Seminar. 1 Credit.**NFS 360. Rsch Meth Nutr & Food Sciences. 3 Credits.**

Advanced research methods, including grant preparation, IRB requirements, data analysis and presentation, and selected topics in advanced nutritional and food sciences. Pre/Co-requisite: Instructor permission.

NFS 391. Master's Thesis Research. 1-18 Credits.**NFS 392. Evidence-based Practice Prjct. 1-2 Credits.**

On site identification, review of literature for background and possible solutions, data collection and analysis, and writing and presenting the results and conclusions of a research problem. Pre/co-requisites: NFS 360, Pre/co-requisites: NFS 360, MS D student.

NFS 395. Special Topics. 1-18 Credits.**NFS 396. Special Topics. 1-18 Credits.**