

Nutrition & Food Systems

College of Agriculture, Food & Environment

Graduate education leading to a MS in Nutrition and Food Systems and replacing the MS in Hospitality and Dietetics Administration. The 17 hour graduate-level core emphasizes contemporary nutrition topics, such as research methods and health behavior theories, community programming and intervention development, food systems, chronic disease diagnosis and process related to lifestyle behaviors, statistics, and a nutrition and food systems seminar. The Master of Science program prepares students for careers in community, education, government, industry, non-profit, health care or private practice settings. A student may choose the Plan A - Thesis or Plan B - Project.

Plan A - Thesis requires the 17-hour core, 7 hours of electives to explore areas of personal interest, 6 additional hours of research credit and a written thesis and oral defense.

Plan B - Project requires the 17-hour core, 13 hours of electives, 6 additional hours of special problems, 6 additional hours of research credit and a project presentation and exam.

Core Courses

DHN 600	Research Methodology in Nutrition and Food Systems	(3)
DHN 603	Advanced Community Program Development	(3)
DHN 605	Food Systems and Society	(3)
DHN 608	Chronic Disease Management and Process	(3)
DHN 774	Seminar in Nutrition and Food Systems	(3)
STA 671	Regression and Correlation	(2)

A 500-level statistics course is a pre-requisite to the graduate program and may be taken during the existing graduate program.

Elective Courses

DHN 607	Food Related Behaviors	(3)
DHN 784	Special Problems in Financial Management	(3)
DHN 690	Advanced Work in Dietetics	(3)
DHN 620	Nutrition and Aging	(3)
DHN 630	Advanced Community Nutrition	(3)
DHN 640	Human Nutrition: Assessment	(3)
DHN 690	Advanced Work in Dietetics	(3)

Currently, students may choose electives outside the department with the permission from the instructor.

Course Descriptions

DHN 510 ADVANCED NUTRITION. (3)

Application of biochemistry, physiology and nutrition to the understanding of the utilization and function of nutrients in the body as related to the structure, function and metabolic needs of cells/organ systems.

Prereq: DHN 311 or BCH 401G or equivalent; PGY 206; Dietetics and Human Nutrition Majors or admission to DHN/NS graduate program.

DHN 512 MEDICAL NUTRITION THERAPY I. (4)

This course explores changes in nutrient metabolism related to biochemical and physiological alterations in disease conditions and application of the Nutrition Care Process. Content includes case study evaluations, medical nutrition therapies for disease conditions, and current research in the field. Prereq: DHN 311 and 312; plus, past or concurrent DHN 510. Enrollment is restricted to dietetics majors only.

DHN 514 DIETETICS: COUNSELING AND COMMUNICATION THEORIES AND APPLICATIONS. (3)

Counseling and communication theories are combined to study specific applications which include disease prevention, disease management and refinement of communication skills to enhance effectiveness as a practicing RD. Students will enhance their capacity to motivate others to practice healthy food behaviors. Active learners will develop a conceptual framework for future professional practice in dietetics as ethical counselors and facilitators of behavior change. Three credit hours. Prereq: DHN 403, DHN 510, DHN 512; must be taken concurrently with DHN 517. Enrollment is restricted to Dietetics majors.

DHN 515 MEDICAL NUTRITION THERAPY. (5)

This capstone course explores changes in nutrient metabolism related to biochemical, physiological, and pathophysiological alterations in disease conditions, application of the Nutritional Care Process and Model, and development of medical nutrition therapy intervention. Content includes case study evaluations, nutritional therapies for disease conditions, including enteral and total parenteral nutrition, and current research in the field. Prereq: DHN 311, 312, 403 and 510 and concurrent with DHN 514. Enrollment is limited to dietetics majors.

DHN 516 MATERNAL AND CHILD NUTRITION. (3)

Food selection for optimal nutrition during pregnancy and lactation and for infant and child development through preadolescence. Cultural, social, and psychological aspects of food selection and dietary patterns, as they relate to mental and physical development. Prereq: DHN 312 or consent of instructor.

DHN 517 MEDICAL NUTRITION THERAPY II.

This course continues study of medical nutrition therapy topics, including trauma and enteral and parenteral nutrition. Content includes more advanced case study evaluations, medical nutrition therapies, and current research in the field. Prereq: DHN 512 and concurrent with DHN 514 and enrollment is limited to dietetics majors.

DHN 518 EVALUATION OF DIETETIC ISSUES AND LEADERSHIP. (2)

Course provides opportunities for the development of competencies, attitudes and values expected of the entry level professional. Lectures, presentation of individual case studies and research projects are conducted. Opportunities are provided for transfer of theory to practice, interpretation of research, discussion of professional literature and application of leadership and communication skills in addressing issues of professional dietetic practice. This web enhanced didactic course is taught via distance learning coupled with on campus sessions. Prereq: Admission to the Coordinated Program or Dietetic Internship.

DHN 520 MEDICAL NUTRITION THERAPY I: SUPERVISED PRACTICE. (5)

Supervised practice in health care facilities. Course focuses on patient assessment, diet planning, care plan implementation, and nutritional evaluation. Fulltime medical nutrition therapy experience at an assigned facility with the opportunity to gain entry level experience while seeing a variety of patients with varied disease states. Prereq: Admission to UK DHN Supervised Practice Program (SPP).

DHN 522 FOOD SERVICE SYSTEMS MANAGEMENT I: SUPERVISED PRACTICE. (5)

Supervised practice in foodservice systems management in a variety of food service operations. Experience

involves participation in management functions including procurement, production, financial and human resources management, marketing, and training. Prereq: Admission to UK DHN Supervised Practice Program (SPP).

DHN 524 FOOD SERVICE SYSTEMS MANAGEMENT II: SUPERVISED PRACTICE. (3)

In-depth application of foodservice systems management in a variety of food systems operations. Provides variety of experience in operations, financial, and managerial aspects of food services. Prereq: Admission to UK DHN Supervised Practice Program (SPP).

DHN 526 MEDICAL NUTRITION THERAPY II: SUPERVISED PRACTICE. (3)

This course provides an in-depth clinical application of the principles of dietetics. The course will focus on the team concept of patient care and provide advanced dietetics practice with the opportunity to test and evaluate results. Prereq: Admission to UK DHN Supervised Practice Program (SPP).

DHN 528 COMMUNITY NUTRITION I: SUPERVISED PRACTICE. (1)

This course provides an introductory supervised practice in community nutrition. Experiences include public and private agencies/ organizations that provide food and nutrition services, public policy and program development, and nutrition education for various socioeconomic groups. Full-time community nutrition experience as a member of the community health delivery team at assigned community and health related agency. The student will have opportunities to manage nutrition care for population groups across the lifespan; develop community based food and nutrition programs; and develop health promotion/disease prevention intervention projects. Prereq: Admission to UK DHN Supervised Practice Program (SPP).

DHN 530 COMMUNITY NUTRITION II: SUPERVISED PRACTICE. (2)

This course provides an introductory supervised practice in community nutrition. Experiences include public and private agencies/ organizations that provide food and nutrition services, public policy and program development, and nutrition education for various socioeconomic groups. Full-time community nutrition experience as a member of the community health delivery team at assigned community and health related agency. The student will have opportunities to manage nutrition care for population groups across the lifespan; develop community based food and nutrition programs; and develop health promotion/disease prevention intervention projects. Prereq: Admission to UK DHN Supervised Practice Program (SPP).

DHN 591 SPECIAL PROBLEMS IN DIETETICS AND HUMAN NUTRITION. (1-3)

Intensive work on an independent project related to dietetics and human nutrition. Senior or graduate standing. May be repeated for a maximum of six credits. Prereq: Consent of instructor.

DHN 600 RESEARCH METHODS IN NUTRITION AND FOOD SYSTEMS.

Students will study accepted research methodologies and scientific approaches in human nutrition and food systems. Emphasis is placed on understanding the research methods, study design, data collection, and evaluation of various nutrition related studies. Discussions include development of research aims and hypothesis, internal review board, collecting of primary and secondary data, measurement approaches, study designs, and key considerations in developing a thesis for publication. Prereq: Admission to graduate program and selection of graduate faculty mentor with approved research topic.

DHN 603 ADVANCED COMMUNITY PROGRAM DEVELOPMENT. (3)

The course focuses on concepts and theories of program development, use of planned goals and objectives such as Healthy Communities goals and objectives, use of data from national monitoring, survey and surveillance programs, and community assessment to guide decision making for program development.

Program marketing, staffing formulas, and grant writing and grant management, cost analysis and cost effectiveness reporting, and formative and summative evaluation of community programs complete the study. Prereq: Admission to graduate program.

DHN 605 FOOD SYSTEMS AND SOCIETY. (3)

Food Systems and Society tracks food from farm to table, including growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal. Policy and culture determine who eats what and who benefits and loses in any given food system. As a result food systems vary considerably across the world with each evolving to affect overall health. The course will assess sustainability of food systems and explore the ethical, economical, socio-ecological, and environmental factors that affect local, regional, national, and global food system development. Content includes case study evaluations and current research in the field. Prereq: Graduate standing.

DHN 607 FOOD RELATED BEHAVIORS. (3)

This team-taught course will provide background in topics and methods in food related behaviors to students in Nutritional Sciences and other interested students. The course will follow a problem-based learning approach, and will consist of 3 out of 4 modules in any given year. The four modules will be Social and Cultural Perspectives on Food, Psychological Perspectives on Food and Food Behaviors, Challenges to Community Food Security, and International Issues in Nutrition.

DHN 608 CHRONIC DISEASE MANAGEMENT AND PROCESS. (3)

This course focuses on the etiology and pathophysiology of nutrition-related chronic diseases and conditions including obesity, hypertension, dyslipidemia, heart disease, diabetes, and cancer. Emphasis is placed on the biochemical and physiological mechanisms involved by which nutrients impact the prevention, nutrition care process-diagnosis, assessment, implementation of care, monitoring and evaluation, and progression of chronic diseases and conditions. Prereq: Graduate standing and minimum 3 credit hours of upper level advanced nutrition or DHN 510.

DHN 610 MARKETING IN HOSPITALITY AND DIETETICS. (3)

This course overviews the discipline of marketing as it relates to the hospitality and dietetics professions. Special emphasis will be placed on the analysis of the marketing environment, marketing strategies and the diversity of marketing practices used by the hospitality industry and dietetics profession. This course will provide opportunities for students to develop appropriate marketing approaches in today's increasingly competitive and complex global marketplace. Prereq: MKT 300 or HMT 320 or equivalent course.

DHN 620 NUTRITION AND AGING. (2)

Emphasis on current research in nutrition and aging, nutrition needs of the elderly and nutrition-related diseases associated with aging. Prereq: DHN 510 and 511 or equivalent. (Same as NS 620.)

DHN 640 HUMAN NUTRITION: ASSESSMENT.(3)

Assessment of dietary, anthropometric and biochemical parameters of nutritional status in health and disease. Lecture, two hours; laboratory, three hours per week. Prereq: DHN 510, DHN 511 or equivalent. (Same as NS 640.)

DHN 648 MANAGEMENT OF HOSPITALITY AND DIETETICS ORGANIZATIONS. (3)

This course will engage students with the theories and their application in the area of leadership and management of people, resources, finances, information and internal and external customers as they relate to dietetics, food service and hospitality professions. Prereq: Admission to graduate program, DHN 346 or equivalent course.

DHN 690 ADVANCED WORK IN DIETETICS.

Evaluation of administrative practices in dietetics. This course will examine topics related to managing dietetics services including medical nutrition therapy protocols, dietetics outcomes research, parenteral and enteral support, clinical pathways, JCAHO requirements, state and institutional policy controls, reimbursement for dietetics services, in-patient and out-patient quality management, and hospital outreach programs. Prereq: Admission to graduate program. Lecture only course.

DHN 704 CURRENT TOPICS IN NUTRITIONAL SCIENCES. (1)

This course is designed to develop the student's independent thinking and critical analysis related to various nutritional sciences issues. These skills will be developed through reading assignments and group discussion related to current topics in nutrition. Prereq: Consent of instructor. (Same as CNU/NS 704.)

DHN 748 MASTER'S THESIS RESEARCH. (0)

Half-time to full-time work on thesis. May be repeated to a maximum of six semesters. Prereq: All course work toward the degree must be completed. (Same as NS 748.)

DHN 768 RESIDENCE CREDIT FOR THE MASTER'S DEGREE. (1-6)

May be repeated to a maximum of 12 hours. (Same as NS 768.)

DHN 770 SEMINAR IN HOSPITALITY AND DIETETICS ADMINISTRATION. (1)

Investigation of recent research in Hospitality and Dietetics Administration. May be repeated to a maximum of three credits.

DHN 772 CURRENT TOPICS IN HOSPITALITY AND DIETETICS ADMINISTRATION. (2)

Faculty from different disciplines will provide in-depth coverage of selected topics in Hospitality and Dietetics Administration.

DHN 774 SEMINAR IN NUTRITION AND FOOD SYSTEMS. (3)

This advanced participatory seminar focuses on the latest in nutrition and food systems research. Students will be expected to apply their knowledge of effective scientific communication, responsible conduct of research, and methods and technologies in nutrition and food systems through weekly readings, presentations, and class discussions. Prereq: Graduate standing and upper level graduate statistics.

DHN 782 SPECIAL PROBLEMS. (1-6)

Independent advanced work on a special problem in nutritional sciences. Prereq: Consent of graduate advisor. (Same as CNU/NS 782.)

DHN 784 SPECIAL PROBLEMS IN FINANCIAL MANAGEMENT. (3)

A current events approach to the financial and accounting decision-making process in dietetics and hospitality administration. The course will prepare advanced students in dietetics and hospitality administration to analyze and make sound financial decisions in settings relevant to the dietetics profession and the hospitality industry. Prereq: Admission to graduate program, ACC 201, ECO 201 and either FIN 300 or (DHN 340, DHN 342, and DHN 346).

DHN 790 RESEARCH IN NUTRITIONAL SCIENCES. (0-6)

Research work involving original investigation. May be repeated to a maximum of 18 credits. Prereq: Consent of graduate advisor. (Same as CNU/NS 790.)