### NFS Nutrition and Food Science

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>NFS 101</td>
<td>HUMAN NUTRITION AND WELLNESS.</td>
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<td>Food composition, digestion, absorption and metabolism as related to selection of nutrients essential for human life, growth, reproduction, lactation, wellness and physical activity. Not open to NFS majors except hospitality management students.</td>
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<td>NFS 212</td>
<td>INTRODUCTORY NUTRITION.</td>
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<td>An elementary study of the principles of nutrition and the application of these principles to providing adequate nutrition to humans. The chemical and physiological approach to nutrition is emphasized. Prereq: BIO 152; CHE 105 or 107. May be taken concurrently.</td>
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<td>NFS 241</td>
<td>FOOD SERVICE SANITATION.</td>
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<td>This course covers the principles of food microbiology, important food borne diseases, standards that are enforced by regulatory agencies, and applied measures for the prevention of food borne diseases and other microbiological problems. It leads to certification from the National Restaurant Association.</td>
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<td>NFS 301</td>
<td>DIETETICS PRACTICE.</td>
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<td>This course provides a study of dietetic practice including professional ethics, standards of practice, scope of practice, educational pathways, credential attainment and maintenance, competencies required for entry level practice, responsibilities as a professional. Experiences allow exploration of dietetics practice in medical nutrition therapy, food service management and delivery of nutrition services. Prereq: NFS 212 and completion of dietetics premajor requirements with a cumulative GPA of 2.4</td>
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<td>NFS 302</td>
<td>PRINCIPLES OF FOOD PREPARATION.</td>
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<td>The physical and chemical principles involved in the preparation of foods and the application of these principles to control for quality outcomes. Laboratory experiences link theory to practice to ensure that the standards of safety and overall quality factors are applied to maximize nutrient retention while maintaining the acceptability and nutritional qualities of foods produced for individuals and groups. Lecture, one hour; laboratory, four hours. Prereq: NFS 241; limited to NFS and Family and Consumer Science (FSC) department majors and with permission of instructor.</td>
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<tr>
<td>NFS 304</td>
<td>EXPERIMENTAL FOODS.</td>
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<td>Chemical and physical properties of food and the changes resulting from processing and preparation. Experimental study of variations in ingredients and preparation methods on food quality. Design, execute and report an independent research project. Lecture, one hour; laboratory discussion, one hour; laboratory, three hours per week. Prereq: NFS 204 and CHE 236.</td>
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<td>*NFS 311</td>
<td>NUTRITIONAL BIOCHEMISTRY.</td>
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<td>An introductory study of the biochemical basis of nutrition-the physiochemical properties of nutrients and other essential biochemicals and their role in physiological and metabolic processes. Prereq: CHE 236; PGY 206 must be taken concurrently or prior to NFS 311.</td>
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<td>NFS 312</td>
<td>NUTRITION AND WELLNESS IN THE LIFE CYCLE.</td>
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<td>A study of the physiological changes occurring in the life cycle with associated nutrient needs. The course focuses on nutrient needs in in-utero to geriatrics, health promotion, agency and worksite accommodations for community health, prevention education, personal care program development and community interventions. Prereq: NFS 212.</td>
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<td>NFS 315</td>
<td>NUTRITION ISSUES IN PHYSICAL ACTIVITY.</td>
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<td>This course explores the special nutritional needs of a person engaged in regular physical activity. Emphasis will be placed on selecting a diet to achieve optimal performance and overall wellness. Athletic performance enhancing supplements will be examined to determine the efficacy and safety of such products. Prereq: NFS 212 and restricted to Dietetics or Human Nutrition majors.</td>
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<td>NFS 340</td>
<td>INSTITUTIONAL PURCHASING.</td>
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<td>Fundamental principles and purchasing techniques for the selection of food and nonfood items in a food service system. Prereq: ECO 201 or 202.</td>
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<td>NFS 342</td>
<td>QUANTITY FOOD PRODUCTION.</td>
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<td>An introduction to the production and service of food in quantity, to include the application of production techniques and controls, menu planning and service. Lecture, two hours; laboratory, 4.5 hours per week. Prereq: NFS 204 or HMT 208, and NFS 241.</td>
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NFS 346 HUMAN RESOURCES MANAGEMENT FOR THE FOOD AND HOSPITALITY INDUSTRIES. (3)
Exposes the student to all aspects of human resources management in the hospitality and health care industry context. Topics covered include planning, selection, placement, training, disciplining employees, labor relations and compensation. Prereq: Hospitality and Tourism major or Dietetics major.

NFS 403 COMMUNITY NUTRITION AND WELLNESS. (3)
Study of nutrition education programs on a community level. Experience is provided for presenting nutrition in health clinics, health camps, schools, state institutions, family resource centers, and corporate wellness programs. Attention is paid to special populations, including pregnant women, children, adults, the elderly, and persons with disabilities. Prereq: NFS 312.

NFS 408G SEMINAR IN FOOD AND NUTRITION. (1)
Investigation of recent research in food and nutrition. May be repeated to a maximum of three credits. Nutritional sciences graduate students may not enroll for graduate credit. Prereq: NFS 510 or consent of instructor.

#NFS 474 RESEARCH IN NUTRITION: THEORY. (3)
A required course which allows the student to explore research opportunities in the health field, identify potential funding sources, review institutional review board requirements, and develop a grant proposal based on their own interests in nutrition. Prereq: Human Nutrition majors only. Senior standing. NFS 311 (may be taken concurrently with consent of instructor).

#NFS 475 RESEARCH IN NUTRITION: APPLICATION. (3)
A required course which allows the student to design a research study, write a grant, prepare a comprehensive literature review, design a survey, conduct statistical analyses on collected data, and prepare a professional article and poster to present at University and regional events. Prereq: Human Nutrition majors only. Grade of C or better in NFS 474. This is a writing-intensive (W) course approved to fulfill the upper tier of the graduation writing requirement (GWR). To receive W credit for this course, you must have successfully completed the first-year writing requirement (ENG 104 or its equivalent) and have completed at least 30 hours of course work.

NFS 480 DIETETICS PRE-PROFESSIONAL PRACTICE. (1-6)
Pre-professional experiences are designed to allow students to apply knowledge and skills in assessing, planning, implementing, and evaluating nutrition care in various health delivery systems. Student experience will include opportunities to link theory and practice while developing the skills and attitudes essential to practice in the dietetics profession. Placement of experiential settings must have the approval of the appropriate Director of Dietetics in Nutrition and Food Science. A minimum of 60 supervised practice hours will constitute one semester credit hour with prior approval. May be repeated to a maximum of six credits. Prereq: Consent of instructor and senior status in the Dietetics Didactic Program.

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

NFS 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: NFS 312, 403, 510; must be taken concurrently with NFS 515. Enrollment is restricted to Dietetics majors.

NFS 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: NFS 311, 312, 403 and 510 and concurrent with NFS 514. Enrollment is limited to dietetics majors.
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NFS 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: NFS 312 or consent of instructor.

*NFS 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.

NFS 591 SPECIAL PROBLEMS IN FOODS AND NUTRITION. (1-3) Intensive work on a specific phase of the field. Senior or graduate standing. May be repeated to a maximum of six credits. Prereq: Consent of instructor.

NFS 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.

NFS 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. (Same as BSC 607.)

NFS 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.

NFS 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: NFS 510 and 511 or equivalent. (Same as NS 620.)

NFS 630 ADVANCED COMMUNITY NUTRITION. (3) Study of nutrition surveys and of bases for judging community nutrition. Emphasis is placed upon economic, geographic, social and educational causes of malnutrition. Experience is given in development of nutrition programs. May be repeated to a maximum of six credits. Prereq: NFS 503. (Same as NS 630.)

NFS 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: NFS 510, NFS 511 or equivalent. (Same as NS 640.)

NFS 646 ADVANCED INFORMATION TECHNOLOGY IN THE HOSPITALITY INDUSTRY. (3) This course will engage students in the latest technology used by the hospitality industry and the dietetics profession for advancement of human, material and financial resources. Strategies and applications using technology to gain competitive advantage will be investigated. Students should be able to examine the problems of technology in the hospitality and dietetics industries and to provide solutions. Students will have the opportunity to do the class completely on-line or a combination of traditional classroom and on-line teaching. Prereq: Admission to the graduate program.
NFS 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, NFS 346 or equivalent course.

NFS 690 ADVANCED WORK IN DIETETICS. (3)
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.

NFS 694 STRATEGIC PLANNING IN HOSPITALITY, LODGING AND TOURISM. (3)
This course is designed to shape students’ understanding of strategic planning as it relates to hospitality, lodging, and tourism. The concepts utilized to accomplish this objective represent several discipline areas such as: organizational theory, strategic management, and the function of management. Prereq: Admission to graduate program.

NFS 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.)

NFS 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.)

NFS 768 RESIDENCE CREDIT FOR THE MASTER’S DEGREE. (1-6)
May be repeated to a maximum of 12 hours. (Same as NS 768.)

NFS 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.

NFS 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.

NFS 781 ADVANCED TRENDS ANALYSIS IN HOSPITALITY AND TOURISM. (3)
The student will investigate the major trends occurring in the hospitality, lodging, and tourism industry and develop analytical skills required to interpret them. Throughout the course, the student should be able to identify trends; their timing; the causal effects they have on organizations; the actual probability of their occurrence; and impact they will have on the organization. Prereq: Admission to graduate program.

NFS 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.)

NFS 784 SPECIAL PROBLEMS IN INSTITUTION 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 or HMT 350 and FIN 300 or equivalent courses.

NFS 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.)
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NFS 800 NUTRITION IN THE LIFE CYCLE: PRACTICUM. (1)
Course content will provide an introductory supervised practice for Coordinated Program dietetic students. Experiences include nutrition services provided at various stages in the life cycle, including pregnancy, infancy, preschool, elementary and high school, and geriatric. Laboratory, three hours per week. Prereq: Admission to Coordinated Program/AP4.

NFS 808 COMMUNITY NUTRITION II: SUPERVISED PRACTICE. (2)
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. Prereq: Admission to UK NFS Supervised Practice Program (SPP); concurrent enrollment in NFS 800.

NFS 810 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. Prereq: Admission to UK NFS Supervised Practice Program (SPP); concurrent enrollment in NFS 518 and NFS 812.

NFS 812 FOOD SERVICE SYSTEMS MANAGEMENT: SUPERVISED PRACTICE. (5)
Supervised practice in food service management in a variety of food service operations. Experience may include participation in management functions including procurement, production, financial and human resources management, marketing, and training. Prereq: Admission to UK NFS Supervised Practice Program (SPP); concurrent enrollment in NFS 810 and NFS 812.

NFS 814 FOOD SERVICE SYSTEMS MANAGEMENT II: SUPERVISED PRACTICE. (3)
In-depth application of food service management in a variety of food service operations. Provides variety of experience in operations, financial, and managerial aspects of food services. Experience based on performance requirements established by the Commission on Accreditation for Dietetics Education for the entry-level generalist dietitian. Prereq: Admission to UK NFS Supervised Practice Program (SPP); concurrent enrollment in NFS 518 and NFS 816.

NFS 816 MEDICAL NUTRITION THERAPY II: SUPERVISED PRACTICE. (3)
In-depth clinical application of the principles of dietetics in a hospital setting. Focuses on the team concept of patient care. Provides a variety of dietetic practice experiences with opportunity to test and evaluate results. Experiences based on performance requirements established by the Commission on Accreditation for Dietetics Education for the entry-level generalist dietitian. Prereq: Admission to UK NFS Supervised Practice Program (SPP); concurrent enrollment in NFS 518 and NFS 814.