

Nutrition and Dietetics (N&D)

Courses

N&D 100. Introduction to Nutrition and Dietetics. 1 Credit.

The philosophy, history, future trends, and career options in nutrition and dietetics will be discussed. S/U grading. S.

N&D 199. Special Topics in Nutrition and Dietetics. 1-4 Credits.

Special topics and/or in depth independent study in selected content areas relative to nutrition and dietetics. Repeatable to 6.00 credits. F,S.

N&D 220. Foodservice Safety and Sanitation. 1 Credit.

Students learn about characteristics of microorganisms, food safety and sanitation practices, and federal regulations for foodservice operations. S.

N&D 240. Fundamentals of Nutrition. 3 Credits.

This introductory course focuses on basic elements of nutrition science. Emphasis is placed on nutrients, their functions and food sources, and discussion about how food behavior translates into nutritional health. The course also includes current topics such as fad diets, phytochemicals, and sports nutrition. Students learn to apply the principles of nutrition to their own food intake to improve their nutritional health. F,S,SS.

N&D 240L. Fundamentals of Nutrition Laboratory. 1 Credit.

Application of nutrition science to explore common food and nutrient misconceptions and current topics in nutritional health through hands-on, problem-solving activities. Students will use nutrient software to create reports and evaluate dietary intake. Prerequisite: MATH 98 or any higher-level mathematics course. Prerequisite or Corequisite: N&D 240. F,S,SS.

N&D 250. Current Trends in Nutrition. 3 Credits.

The course will examine contemporary food and nutrition matters with consideration of the factors influencing food selection and preparation as a means to improve nutritional status. The general goal is to enhance student awareness in regards to consumer food choices, with emphasis on knowledge and skills to apply healthy nutrition choices to consumers. Topics covered in the course include current food trends; basic culinary concepts; food demonstrations; dietary standards; food regulation; socio-economic and social circumstances influencing food selection, and food purchasing meal planning for individuals and families. Prerequisite or Corequisite: N&D 240. F.

N&D 260. Principles of Foods and Food Science. 3 Credits.

Introduction to food selection and preparation principles, sensory evaluation of food, role of ingredients, and food technology. Emphasizes application of scientific principles in relationship to food composition, physical properties, and chemical reactions during food preparation. Prerequisite: A college level chemistry course. S.

N&D 310. Nutrition Assessment. 3 Credits.

This course will use the Nutrition Care Process to examine methods for evaluating nutritional status of individuals and groups. Assessment techniques will be explored in the context of nutrition screening. Students will learn routine assessment measures such as client history, diet history, anthropometric and biochemical measures, and nutrient deficiencies. Prerequisite: N&D 240. F.

N&D 325. Nutrition Through the Life Cycle. 3 Credits.

Optimal growth and development throughout the lifespan requires proper nutrition that begins prior to conception. This course examines nutritional needs of Individuals prior to conception, during pregnancy and lactation, and throughout childhood, adolescence, and all of adulthood. The course will study the nutrient needs for each phase of the life cycle. Students will learn about the influence of nutrition on growth and development, as well as the physiological and developmental basis for food choice and dietary recommendations. Prerequisite: N&D 240. F.

N&D 335. World Food Patterns. 3 Credits.

Examination of the food patterns of selected world population groups considering the effect of social, cultural, and economic practices on nutritional values. F.

N&D 344. Nutrition Education and Counseling. 3 Credits.

Introduces students to counseling and learning theories for application with individuals and groups in clinical or community settings. Students will develop basic skills necessary to design and implement nutrition education programs and will practice application of principles learned in nutrition counseling. Prerequisite: N&D 240. F.

N&D 345. Community Nutrition. 3 Credits.

This course allows the student to develop the knowledge and skills necessary to plan programs and promote nutritional well-being to the public. Through readings, lectures and class discussions, students work in teams to select a community to assess, research it relative to interrelated health, social and economic concerns, and identify nutrition priorities that need to be addressed in that community. A graduated series of assignments culminates in a written program proposal and oral presentation to address the needs of the community. Students hone speaking and writing skills, and learn how to assess the work of others, to give helpful feedback, and to work effectively to complete group and individuals assignments. Prerequisite: N&D 240. S.

N&D 348. Sports Nutrition. 3 Credits.

Sports Nutrition is an overview of the specialized nutritional needs of recreational and competitive athletes. It presents the scientific basis for the role of food and nutrients during athletic training, performance, and recovery. Prerequisite: N&D 240. S.

N&D 350. Medical Nutrition Therapy I. 3 Credits.

An evidence-based study and application of the nutrition care process. This includes nutritional assessment techniques, pathophysiology in disease, and medical nutrition therapy for common medical conditions. Prerequisite: N&D 441. Corequisite: N&D 450. F.

N&D 380. Culinary Operations and Management. 3 Credits.

Introduces students to the many facets of managing culinary businesses such as entrepreneurial ventures like bakeries, coffee shops, and high-volume dining facilities. Students will explore key elements of quality and quantity food service merging theory with practical application. The curriculum empowers students for food service industry challenges and opportunities. S.

N&D 441. Nutritional Biochemistry. 4 Credits.

A comprehensive investigation of the nutritional needs of humans with emphasis on nutritional biochemistry and current issues. Prerequisite: A grade of C or better in N&D 240, CHEM 116 or CHEM 340, BMD 220 and BMD 221 or PPT 301. S.

N&D 450. Medical Nutrition Therapy II. 3 Credits.

An advanced level of evidence-based study and application of the nutrition care process. This includes pathophysiology in disease and medical nutrition therapy for medical conditions and comorbidities. Prerequisite: N&D 441. Corequisite: N&D 350. F.

N&D 480. Interprofessional Health Care. 1 Credit.

Students will gain knowledge of competency-based interprofessional team behaviors and clinical judgment through collaboration, creating an environment that promotes quality healthcare outcomes, diversity, and health equity. Prerequisite: Senior standing in Dietetics. S/U grading. F.

N&D 488. Foundations of Dietetic Practice. 3 Credits.

This course introduces the student to responsibilities associated with dietetic professional practice. Professional issues related to dietetic practice includes the Code of Ethics, legal credentialing (licensure laws), Standards of Professional Performance and future trends in the profession. The goal is to provide an opportunity for students to learn and continue to use professional skills and resources characteristic of nutrition and dietetics professionals in preparation for life-long learning. Prerequisite: Enrollment in the Coordinated Program in Dietetics; senior status. S.

N&D 494. Research in Nutrition and Dietetics. 1-4 Credits.

This course will provide an introduction to the research process, responsible conduct in research, and explore major types of study design in nutrition. Students will examine the literature to evaluate evidence about nutrition problems and interventions. Prerequisite or Corequisite: PSYC 241 or SOC 326 or ECON 210 or MATH 321. Repeatable to 4.00 credits. F.

N&D 497. Supervised Practice in Human Nutrition. 1-6 Credits.

Development of professional skills and competencies in human nutrition through supervised practice with learning experiences requiring knowledge and theory be applied to simulated and real-life situations. Prerequisite: Enrollment in the Human Nutrition program; department consent required. Prerequisite or Corequisite: N&D 344 and N&D 345. Repeatable to 6.00 credits. On demand.

N&D 498. Supervised Practice in Dietetics. 1-12 Credits.

Development of professional skills and competencies through planned learning experiences in which knowledge and theory are applied to simulated and real-life situations in nutrition and dietetics. Prerequisite: Instructor consent required. Repeatable to 31.00 credits. F,S.

N&D 541. Biochemical and Physiological Basis of Nutrition: Macronutrients. 3 Credits.

Integration of the molecular, cellular, and physiologic aspects of macronutrient and energy metabolism in humans. Dietary energy, carbohydrates, fiber, lipids, proteins, nutritional interactions and metabolic consequences with emphasis on recent advances in macronutrient nutrition are explored. Prerequisite: Undergraduate or graduate biochemistry and physiology. F, even years.

N&D 542. Biochemical and Physiological Basis of Nutrition: Micronutrients. 3 Credits.

Integration of the molecular, cellular, and physiologic aspects of vitamin and mineral metabolism in humans. Functions, biological availability, hormonal regulation, requirements, metabolic consequences of deficiencies or excesses, and interrelations with other nutrients with emphasis on current topics related to vitamins, minerals and phytochemicals. Prerequisite: Undergraduate or graduate biochemistry and physiology. S, odd years.

N&D 543. Advanced Topics in Lifecycle Nutrition. 3 Credits.

The course focuses on current and evolving research relating to the physiological changes and nutritional needs throughout the lifecycle. The course will explore nutrition-related conditions impacting a particular stage of the lifecycle, with an emphasis on nutrition strategies to prevent and manage these conditions. On demand.

N&D 544. Obesity and Eating Disorders. 3 Credits.

The course examines the obesity epidemic, eating disorders, and prevention and treatment approaches at multiple levels: individual, social, environmental, and policy. Obesity, anorexia nervosa, bulimia nervosa, binge eating, and disordered eating will be discussed and evidence-based interventions explored with emphasis on role of the nutritionist as part of an inter-professional care team. Prerequisite: Admission to the program. On demand.

N&D 545. Nutrition in Disease Prevention and Wellness. 3 Credits.

An exploration of prevention and wellness models specifically designed to decrease the mortality and morbidity of chronic disease in the United States population. The course focuses on the involvement of optimal nutrition and health behaviors in prevention of disease and promotion of wellbeing that encompasses a whole person perspective. Prerequisite: Admission to the program. SS.

N&D 548. Sports Nutrition. 3 Credits.

Sports Nutrition is an overview of the specialized nutritional needs of recreational and competitive athletes. It presents the scientific basis for the role of food and nutrients during athletic training, performance, and recovery. Prerequisite: Admission to the graduate program and department permission. S.

N&D 550. Nutrition Education and Program Planning. 3 Credits.

Theoretical, research and applied aspects of adult nutrition education. Curriculum design models, instructional tools, program planning and evaluation of education interventions will be discussed in the context of chronic disease prevention. Effective teaching strategies and procedural models for designing effective nutrition education programs targeting the general public will be presented. Prerequisite: Permission of Instructor. On demand.

N&D 553. Nutritional Health Advocacy and Policy. 3 Credits.

An analysis of U.S. public policy processes in relation to food and nutrition, with emphasis on the role of the nutrition professional in influencing the public policy process and advocating for food policies. 3 graduate credit hours. Prerequisite: Admission to the program. On demand.

N&D 554. Nutrigenomics. 3 Credits.

This course explores to the interactions between nutritional factors, genomics, and health. The course also explores the potential roles of the nutrition professional in developing personalized dietary prescriptions to optimize health, reduce disease risk, or improve management of chronic disease. Prerequisite: Undergraduate courses in biochemistry or advanced nutrition and human physiology. S.

N&D 560. Nutrition and Health Coaching. 3 Credits.

This course develops and strengthens advanced nutrition coaching skills and nutrition counseling interventions using the evidence-based motivational interviewing style. The focus will be on attending to client-centered orientation and building therapeutic relationships through engaged communication skills. Core competencies explored with an emphasis on enhancing practical skill development through video demonstrations, real play, case studies, creative reflection, practice sessions with instructor feedback, and facilitated group discussions. Prerequisite: Admission into the program. F.

N&D 561. Clinical Nutrition Care I. 3 Credits.

This course establishes the important relationship between human disease and nutrition. Students will learn how to apply the nutrition care process consisting of nutrition assessment, interpretation, and intervention to personal health by utilizing clinical labs, anthropometric data and body composition, dietary assessment tools, and lifestyle tracking. It is designed to provide an evidence-based understanding of the relationship of food nutrients in the treatment of disease. Students will learn how to interpret nutrition assessment and manage the nutritional treatment of the following conditions: cardiovascular disease, pulmonary disease, pancreatic disorders, and hepatobiliary disease. Prerequisite: Admission to the program and Human Physiology. On demand.

N&D 562. Clinical Nutrition Care II. 3 Credits.

This course establishes the important relationship between human disease and nutrition. Students will learn how to apply the nutrition care process consisting of science to pathophysiology of nutrition assessment, interpretation, and intervention to personal health. Students will learn how to interpret nutrition assessment and manage the nutritional treatment of the following conditions: diabetes, blood disorders, kidney disease, cancer, infectious disease, neurological conditions, and bone health. Prerequisite: Admission to the program, N&D 561, and a course in Human Physiology. On demand.

N&D 563. Entrepreneurship in Nutrition and Dietetics. 3 Credits.

This course examines entrepreneurial options in nutrition and dietetics and focuses on developing business qualities and skills that are impactful in nutrition careers. Prerequisite: Admission to the program. On demand.

N&D 564. Integrative and Functional Nutrition. 3 Credits.

The integrative and functional nutrition course will provide students with the framework and foundations of following an integrative and functional nutrition (IFN) approach. Students will learn about common IFN assessment including chemical labs, hormonal regulation, and the gut microbiome. This course will cover concepts in inflammation, metabolic dysfunction, endocrine disorders, autoimmune conditions, nutrition for mental and cognitive health, detoxification pathways, and more. Prerequisite: Admission to the program, a course in Human Physiology, or instructor permission. On demand.

N&D 590. Directed Studies in Nutrition. 1-4 Credits.

Designed to meet the needs of an individual student or a small group of graduate students. Course content will be based on the interests and needs of the student(s) in consultation with the faculty member's area of specialization. Prerequisite: Consent of the instructor. Repeatable to 4.00 credits.

N&D 591. Seminar in Nutrition. 1 Credit.

Discussion of current research and evidence-based practice in nutrition. Practice of oral presentation of scientific data in a professional setting. On demand.

N&D 594. Research Methods in Nutrition. 3 Credits.

The course examines the scientific foundation of nutrition research and critiques nutrition research. Students develop a research proposal. Prerequisite: Graduate statistics and admission into the program. S, even years.

N&D 596. Practicum. 1-4 Credits.

A block of supervised practice experiences related to nutrition and/or health and wellness coaching. Prerequisite: Enrolled in the graduate certificate in Health and Wellness Coaching or the MS in Nutrition program; department approval required. Repeatable to 4.00 credits. F,S,SS.

N&D 598. Dietetics Practicum. 2-4 Credits.

The graduate practicum provides an opportunity for you to advance your skills and experience working with professionals and clients in an assigned area of dietetics. You will be required to utilize critical thinking, clinical inquiry, informatics, and literature to demonstrate problem solving skills in practice.

The expected outcomes of the practicum include the development and refinement of competencies required of an entry-level dietitian. The practicum is a culmination of the knowledge, skills and abilities you have developed in your student career in the dietetic program. It is a time of gaining experience, building confidence, and testing your abilities as a future dietitian. Minimum 90 contact hours completed onsite at assigned facility/agency. Prerequisite: Enrollment in the Coordinated Program in Dietetics and School of Graduate Studies; consent of program director. Repeatable to 4.00 credits. S.

N&D 995. Scholarly Project. 1-3 Credits.

The scholarly project demonstrates critical analysis and application of knowledge and experiences gained throughout the MS in Nutrition program. The project allows students to demonstrate scholarly skills in an integrated and applied manner and may be collaborative. The scholarly project must be approved by the faculty adviser. On demand.

N&D 996. Continuing Enrollment. 1-8 Credits.

Continuing Enrollment. Prerequisite or Corequisite: Graduate Program Enrollment. Repeatable to 9.00 credits. On demand.

N&D 997. Independent Study. 1-3 Credits.

This course will require an in-depth exploration into a nutrition related topic and is designed to meet the needs of an individual student. Course content will be based on the interest and needs of the student(s) in consultation with the faculty member's area of specialization. Prerequisite: Consent of Instructor. On demand.

N&D 998. Thesis. 1-9 Credits.

A scholarly research project produced under the mentorship of the student's advisor. Credit is given upon successful meeting of thesis requirements for the master's degree. Prerequisite: Consent of the instructor. Repeatable to 4.00 credits. On demand.