

2022-2023 NUTN COURSE DESCRIPTIONS

The following table shows the planned course offerings for the 2022-2023 academic year. Courses are subject to change. **BOLD** indicates courses for the Dietetic Internship; STARRED courses are electives. NUTN 503 (Thesis credits) or NUTN 506 (Capstone credits) can be taken any term in which thesis or capstone work is conducted.

Summer 2022		Fall 2022	Winter 2023	Spring 2023
A Block	B Block	NUTN 504	NUTN 504	NUTN 504
NUTN 517	NUTN 517	NUTN 505	NUTN 507	NUTN 512
NUTN 521	NUTN 521	NUTN 510	NUTN 511	NUTN 515
UNI 502*	UNI 502*	NUTN 513	NUTN 514	NUTN 527
		NUTN 522	NUTN 534*	NUTN 530*
		NUTN 535*	NUTN 540*	NUTN 537*
			IPE 523*	

NUTN 502 – INDEPENDENT STUDY

Credits variable, all terms

Instructor: Varies

Topic to be determined by student's/intern's course of study

NUTN 504 – SUPERVISED PRACTICE ROTATIONS

Credits: 7-8 credits per term, fall/winter/spring terms

Instructor: Diane Stadler, PhD, RD, LD; Joanna Cummings, MS, RD-AP, CNSC

Supervised Practice provides graduate students/interns with experience in community nutrition, rural environments, food service management, clinical nutrition, and advanced practice settings. Graduate students/interns practice and apply principles and skills in dietetics and nutrition to real situations under the guidance of professionals in the field. Student choice rotations take place in spring term. Evaluations by preceptors follow competencies defined by the Accreditation Council for Education in Nutrition and Dietetics. Supervised Practice occurs during summer and fall terms for public health and community nutrition, and food service management; winter and spring terms focus on clinical rotations and clinical staff experience. Graduate students/interns are required to complete a minimum of 1,200 hours of supervised practice over the course of the program.

NUTN 505 – READING AND CONFERENCE

Credits: 0.5 credit fall term, 0.25 credits winter/spring terms (1 credit total)

Instructor: Sandy van Calcar, PhD, RD, LD

A professional book club series is sponsored each year for graduate students/interns of the GPHN, faculty, preceptors and members of the community. Three nutrition-related books are read and discussed. Books selected for discussion provide a balanced depiction of a nutrition-policy issue, a nutrition-ethics issue, and/or a nutrition-history or current nutrition trend. Graduate students/interns enrolled in this course work in small groups to host

one of the book club discussions by preparing a list of discussion questions, designing an informative flyer to announce the book and the session, marketing the discussions sessions to interested parties, inviting guest speakers and introducing the topic.

NUTN 507 – SEMINAR

1 credit, winter term

Instructor: Diane Stadler, PhD, RD, LD

Each seminar series is centered on a nutrition-related theme and provides graduate students/interns an opportunity to use traditional methods to present an evidenced-based review of a related topic. Graduate students/interns write an abstract, develop learning objectives, and give an oral presentation of their topic using PowerPoint or another visual media platform. In addition, each graduate student/intern hosts one of the presentations and provides peer editing of each abstract, peer critique of each presentation, and actively participates in each discussion.

NUTN 510 – PUBLIC HEALTH NUTRITION

3 credits, fall term

Instructor: Joanna Cummings, MS, RD-AP, CNSC

This course provides an overview of public health nutrition, including a discussion of the social determinants of health, hunger and food insecurity, health literacy, cross cultural awareness, Native American populations and food sovereignty, “Health at Every Size”, Trauma-Informed Health Care, Motivational Interviewing, and more. Content includes nutrition public policy and nutrition assistance programs aimed at improving public health. The course also explores best practices in nutrition education and counseling. Graduate students/interns work in small teams to prepare an annotated bibliography and oral presentation on food and nutrition needs, concerns, and resources for a particular phase of the lifespan.

NUTN 511 – PATHOPHYSIOLOGY AND MEDICAL NUTRITION THERAPY

3 credits, winter term

Instructor: Julie McGuire, MS, RDN, LD

This course provides an overview of the pathophysiology of common chronic diseases and disorders, and the application of medical nutrition therapy. Topics may include nutrition physical exam, diabetes, cardiovascular disorders, disorders of the upper and lower GI, and neonatal and pediatric nutrition therapy. In this series of classes, a number of speakers will share their areas of expertise by serving as guest lecturers. The course will be composed of formal lecture, small group activities, and facilitated discussions.

NUTN 512 – ADVANCED PATHOPHYSIOLOGY AND MEDICAL NUTRITION THERAPY

3 credits, spring term

Instructor: Julie McGuire, MS, RDN, LD

This course builds upon the nutrition fundamentals covered in NUTN 511 while focusing on more complex conditions such as metabolic disorders, trauma, burns, and oncology.

NUTN 513 – FOOD SERVICE AND CLINICAL MANAGEMENT

2 credits, fall term

Instructor: Bert Connell, PhD, RD, LD, FAND

This course is designed to provide graduate students/interns with strategic application of principles of Food Service and Clinical Management. It will be primarily focused on the areas of finance (with the creation of a budget), human resources (through critical incident and role play), sustainability (through guest lectures and discussion), communication strategies (through email and other media), and needs assessment (through critical incident and role play). As a term project, graduate students/interns will complete a feasibility study for a product, program, or service.

NUTN 514 – NUTRITION RESEARCH AND SCIENTIFIC COMMUNICATION

3 credits, winter term

Instructors: Melanie Gillingham, PhD, RD, LD

The Nutrition Research course is a three credit hour course that provides an introduction to nutrition-based research including discussions of different types of research designs and their strengths and limitations, developing a nutrition-related research question, conducting a critical review of the literature related to the research question, developing a proposal to answer the research question, carrying out the proposed research, and disseminating the research results through poster and oral presentations. Graduate students/interns work in teams to design, conduct, and summarize the results of a research project centered on NHANES cross-sectional data.

NUTN 515 – CASE STUDIES IN ADVANCED MEDICAL NUTRITION THERAPY

2 credits, spring term

Instructor: Jessie Pavlinac, MS, RD, CSR, LD

Graduate students/interns research and present a case study that demonstrates the nutrition care process for a chosen disease with nutrition implications. Graduate students/interns select a patient during supervised practice and develop a case study presentation using evidence-based guidelines, incorporating pathophysiology, nutrition assessment, diagnosis, intervention, monitoring, and evaluation.

NUTN 516 A/B – NUTRITION PHYSICAL EXAMINATION & LAB

3 credits (2 credits for NUTN 516A, 1 credit for NUTN 516B), spring term

Instructor: Julie McGuire, MS, RDN, LD

The nutrition-focused physical exam (NFPE) is presented as an integral part of the Nutrition Care Process and Model. Findings of the NFPE are considered in the context of other nutrition assessment information, including

biochemical data, food/nutrition-related history, anthropometric measurements, and client history. Cases seen during weekly round sessions at the OHSU Hospital provide the clinical context for classroom discussions.

NUTN 517 – LABORATORY METHODS IN NUTRITION

3 credits, summer term

Instructor: Melanie Gillingham, PhD, RD, LD

This course provides a conceptual framework and hands on lab experience to explore the basic nutritional assessment techniques used in dietetics/nutrition practice. Assessment techniques for measuring diet, blood glucose, insulin, plasma lipids, mineral and vitamin status are reviewed and practiced in the laboratory setting. Graduate students/interns evaluate the effect of changes in diet on blood parameters such as glucose, insulin and lipids. Additional techniques to assess body composition and energy expenditure are included in the laboratory procedures. At the end of this course, graduate students/interns have a working knowledge of the basic nutrition assessment principles and laboratory procedures used to assess nutrition status of patients or research subjects.

NUTN 521 – ENERGY METABOLISM

3 credits, summer term

Instructor: Sandy van Calcar, PhD, RD, LD

This course reviews biochemical processes and nutrients involved in energy production. The digestion, absorption, transport, storage and metabolism of carbohydrates and lipids are covered in depth. Micronutrients essential to these systems including many B vitamins, and minerals are covered as they relate to energy production. At the end of the quarter, perturbations in energy balance during various states of health and disease are discussed. These topics include energy balance during exercise, in obesity or during critical illness.

NUTN 522 – ANTIOXIDANT, BONE, AND PROTEIN METABOLISM

3 credits, fall term

Instructor: Sandy van Calcar, PhD, RD, LD

NUTN 522 is organized into three main sections, which include protein structure, function and metabolism, nutrient effects on bone and antioxidant roles of various nutrients. Specific nutrients of study include protein, the fat soluble vitamins, vitamin B6 and biotin, as well as key macro- and micro-minerals, including calcium, magnesium, zinc, selenium, copper, boron, manganese and molybdenum.

NUTN 527/627 – NUTRITIONAL EPIDEMIOLOGY

2 credits, spring term of odd years

Instructor: TBD

Nutritional Epidemiology is designed to introduce basic concepts and methods in epidemiology and nutritional epidemiology. This course focuses on considerations related to the design, analysis, and interpretation of population-based nutrition studies. Topics will include methods for assessing dietary intake, adjustment for energy

intake, use of biomarkers in nutrition-related studies, methodological challenges in nutritional epidemiology research, and the application of nutritional epidemiology research to health policy.

NUTN 529A/B – NUTRITIONAL PHYSIOLOGY

6 credits (3 credits fall term, 3 credits winter term)

Instructor: Maggie Jerome, PhD, RD, LD

This course provides in-depth knowledge of essential physiologic concepts with a focus on nutrition. Physiologic processes related to the central and peripheral (including autonomic) nervous systems; cardiovascular, respiratory, renal, digestive, endocrine and reproductive systems; hematopoiesis, innate and adaptive immunity, microcirculation, neural control of skeletal, cardiac and smooth muscle, and acid-base balance are discussed at biochemical, cellular, organ, system, and organism levels. Exemplar pathologies will be utilized throughout the course to demonstrate disruption of normal physiology in disease. Emphasis is on integration of concepts as a basis for understanding interrelationships among complex physiologic and pathophysiologic processes, throughout the lifespan. This course prepares students for more detailed exploration of pathophysiology in future clinical nutrition courses and experiences.

NUTN 530 – MATERNAL, INFANT, AND CHILD NUTRITION

3 credits, spring term of odd years

Instructor: Sandy van Calcar, PhD, RD, LD

Maternal, Infant and Child Nutrition will cover nutritional needs and concerns for pregnant women, the developing fetus, infants and children through adolescence. The course will include several guest lectures from clinicians and researchers in this field. Topics will include: pregnancy physiology, nutrition needs during pregnancy, fetal growth and metabolism and nutrition-related pregnancy complications; nutrition for the first year including lactation, breast milk vs. infant formula composition, formula selection, growth assessment, infant feeding recommendations and maternal/infant feeding relationship; growth and nutrition needs for toddlers and preschool including nutrition-related problems during these years; growth and nutrition needs for older children and adolescents including bone health, fad diets, sports nutrition and eating disorders; and medical nutrition therapy for pediatrics including inborn errors of metabolism, seizure control, renal disease, eating disorders, diabetes, cystic fibrosis, other nutrition related disorders.

NUTN 531 – SPORTS NUTRITION

2 credits, fall term of odd years, online

Instructor: Carol DeFrancesco, MALS, RDN, LD

This course will explore the metabolism of nutrients and nutritional needs for optimal human performance; specific recommendations for training and competition, and dietary guidelines for active individuals. Focus will include current research findings concerning energy metabolism, fluid and electrolyte balance, vitamin-mineral supplementation, use of ergogenic aids, and exercise in extreme environments.

NUTN 532 – NUTRITION FOR THE OLDER ADULT

2 credits, spring term of even years

Instructor: Sandy van Calcar, PhD, RD, LD

Nutrition for the Older Adult will address the aging process and its impact on nutritional needs of the elderly. The course will include several guest lectures from clinicians and researchers in this field. Topics include the physiology of the aging process, with emphasis on how physical and mental changes impact nutrition needs of the elderly population, assessing nutrition status of the elderly and developing medical nutrition therapy plans for this group, food insecurity in the elderly population and available nutrition programs and resources, prevention and treatment of osteoporosis and other skeletal health concerns, role of physical activity in the aging process and exercise programs for the elderly, nutrition and aging research including calorie restriction and microbiome studies, and end-of-Life care, with emphasis on providing and withdrawing nutrition support.

NUTN 534/634 – MOTIVATIONAL INTERVIEWING FOR HEALTH CARE PROFESSIONALS

2 credits, winter term, online

Instructor: Carol DeFrancesco, MALS, RDN, LD

In this two-credit course students will learn the theoretical and empirical tenets of Motivational Interviewing and practice the clinical skills necessary to use this approach in health care settings. Motivational interviewing is a collaborative conversation, goal-oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion. At the completion of the course, students will be able to demonstrate the ability to use motivational interviewing strategies to promote health behavior change in a variety of health care settings.

NUTN 535– ONCOLOGY NUTRITION

2 credits, fall term of even years

Instructor: Julie McGuire, MS, RDN, LD

This two-credit elective will explore the relationship between nutrition and cancer prevention, treatment and survivorship. Discussions will focus on current research in oncology nutrition, and providence guidance for clinical practice.

NUTN 537 – SPORTS NUTRITION PRACTICUM

1 credit, spring term

Instructor: Carol DeFrancesco, MALS, RDN, LD

This course is designed to facilitate the development of clinical skills in providing nutrition care to collegiate athletes. The course will primarily serve as a practicum in which the student will provide nutrition counseling for athletes for two to three hours per week, and allow the opportunity for students to continue to develop documentation skills of services provided. (Prerequisite (or test out) NUTN 534: Motivational Interviewing)

NUTN 538 – GLOBAL NUTRITION

2 credits, winter term of even years, online

Instructor: Joanna Cummings, MS, RD_AP, CNSC

This course introduces the student to nutrition in a globalized world. The purpose of this course is to familiarize the student with 1) Existing and emerging issues in global nutrition that influences health, survival, and development capacity of people in developing societies, 2) approaches to improving nutritional well-being and knowledge in diverse populations. The course focuses on distribution and determinants of nutrition which has direct impacts on both over and under nutrition. The subsequent modules will cover Nutrition & Social Determinants, Micronutrient Deficiencies, Nutrition in Communicable and Non-Communicable Disease (NCD), Nutrition Interventions, Policy, Research Methods and Tools, Basic Techniques of Anthropometric Assessments, Ethics of Global Development and International Work. An introductory course in human nutrition is recommended for this course. Supplemental readings and podcasts will be provided. This course is offered 100% asynchronously online and consists of a mix of didactic lectures, guest speakers, podcasts and completion of a Country Nutrition Situation Report.

NUTN 539 – OBESITY FROM CELL TO SOCIETY

2 credits, spring term of even years

Instructor: Melanie Gillingham, PhD, RD, LD

This elective course is centered on the understanding the current evidence for treatment and prevention of obesity. This course aims to examine current treatments and public policies used to address the obesity crisis and stimulate debate about effectiveness of current options and thought about new approaches to deal with this critical health issues. The class will be based on a reverse classroom model where lectures will be viewed as videos prior to class, and classroom time will be focused on discussion and case studies. This series adopts a multi-disciplinary approach and includes a variety of different perspectives about the issue of obesity.

NUTN 540 – SUSTAINABLE AND EQUALITABLE FOOD SYSTEMS

2 credits, winter term of odd years, online

Instructor: Sean Gillon, PhD

Surveys the interdisciplinary field of food systems, providing an overview of the historical development of food systems, focusing on factors that determine opportunities and outcomes in terms of health, equity, sustainability, and access. Explores contemporary issues and approaches in food systems policy and practice, considering criteria, principles, and strategies for the development of sustainable and equitable food systems. Key issues explored include food policy, food insecurity, urban food environments, alternative food initiatives, and perspectives on food systems change. Students in the course consider and contextualize nutritionally-focused interventions and outcomes in terms of food systems' social dimensions.

UNI 502 – CONVERSATIONS IN GLOBAL HEALTH

1 credit, summer term, online

Instructor: GPHN Faculty - TBD

This is a one credit online UNI course that will explore many different global health priorities, current efforts to address these concerns, medical trip preparation, refugee health, disaster relief and more. Students have the opportunity to hear speakers with extensive global health experience and participate in conversations pertaining to global health to enhance understanding of: 1) a wide range of contemporary, population-based, global health issues and current events facing our world, and 2) consider strategies that seek to improve the human condition. A variety of social, political, historic, economic, ethical, cultural, and environmental factors that influence disease, equitable access to health care, and well-being, whether in a global or local context are discussed.

IPE 523 – CLIMATE CHANGE AND HUMAN HEALTH

2 credits, winter term, online

Instructor: Diane Stadler, PhD, RD, LD and other OHSU Faculty

Climate change is likely to be the largest threat to human health and well-being in the 21st century and indications are that people everywhere are already suffering from health problems that can be directly linked to changes in the environment, in food and water, and in society. This course for health professionals introduces students to the science of climate change and its health implications across a broad range of concerns including but not limited to: heat waves, air pollution, natural disasters, and displacement. Students will explore the issues with a health care lens to understand what populations are most at risk, how to discuss these issues with patients, and what personal and clinical practice choices can improve health outcomes. Solutions to the climate crisis will be examined in the context of the many health co-benefits that arise from behaviors that limit greenhouse gas emissions and improve environmental health.
