2019-2020 NUTN COURSE DESCRIPTIONS

The following table shows the planned course offerings for the 2019-2020 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) may be taken any term in which thesis or capstone work is conducted.

Summer 2019		Fall 2019	Winter 2020	Spring 2020
A Block	B Block	NUTN 500	NUTN 500	NUTN 500
NUTN 517	NUTN 504 NUTN 513A	NUTN 504	NUTN 504	NUTN 504
NUTN 521		NUTN 505	NUTN 507	NUTN 512
NUTN 538*	NUTN 521	NUTN 510	NUTN 511	NUTN 514A
140114 550	140114 321	NUTN 513B	NUTN 514B	NUTN 515
		NUTN 522	NUTN 528*	NUTN 516A/B
		NUTN 528*	NUTN 532*	NUTN 528*
		NUTN 537*	NUTN 534*	NUTN 531*
			NUTN 537*	NUTN 533*
			NUTN 540*	NUTN 537*

NUTN 500 - COMMUNITY OUTREACH PROJECTS

2 credits

Instructor: Carol DeFrancesco, MALS, RD, LD

Topic/format: Our students work with vulnerable populations, translating science to service.

NUTN 502 - INDEPENDENT STUDY

Credits variable, all terms

Instructor: Varies

Topic to be determined by student's course of study

NUTN 504 - SUPERVISED PRACTICE ROTATIONS

Credits: 4, summer term; 5-6 credits per term, fall/winter/spring terms

Instructor: Diane Stadler, PhD, RD, LD

Supervised Practice provides students with experience in community nutrition, food service management, clinical nutrition, and advanced practice settings. Students 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. Students are required to complete a minimum of 1,200 hours of supervised practice over the course of the program.

NUTN 505 - READING AND CONFERENCE

1 credit

Instructor: Sandy van Calcar, PhD, RD, LD

A professional book club series is sponsored each year for students 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. Students 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: TBD

Each seminar series is centered on a nutrition-related theme and provides students an opportunity to use traditional methods to present an evidenced-based review of a related topic. Students write an abstract, develop learning objectives, and give an oral presentation of their topic using PowerPoint or another visual media platform. In addition, each student 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: Lexie Jackson, MS, RD, CDE

NUTN 510 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, 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. Students 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

NUTN 511 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

NUTN 512 builds upon the nutrition fundamentals covered in NUTN 511 while focusing on more complex conditions such as metabolic disorders, trauma, burns, oncology, and organ transplantation.

NUTN 513 A/B - FOOD SERVICE AND CLINICAL MANAGEMENT

2 credits, summer/fall terms

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

This course is designed to provide students 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, students will complete a feasibility study for a product, program, or service.

NUTN 514 A/B - NUTRITION RESEARCH AND SCIENTIFIC COMMUNICATION

3 credits, winter/spring terms

Instructors: Diane Stadler, 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. Students 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

Students research and present a case study that demonstrates the nutrition care process for a chosen disease with nutrition implications. Students 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, 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 (NCPM). 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. Students 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, students 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: Joyanna Hansen, 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: Joyanna Hansen, PhD, RD, LD

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 528 - I-CAN NUTRITION (PORTLAND)

1 credit, fall/winter/spring

Instructor: Julie McGuire, MS, RDN, LD

In this one-credit course students will work with an interprofessional team in providing services through Interprofessional Care Access Network (I-CAN). Through I-CAN students will broadly study the health care needs of disadvantaged and underserved populations in partner neighborhoods by assessing social determinants of health and health care demands in individual clients/patients. At the same time, the program seeks to establish a model for interprofessional education designed to prepare students for the evolving health care delivery system of the near future. This course will be specifically aimed at understanding and providing nutrition care to disadvantaged and underserved populations while learning about the social determinants of health.

NUTN 530 - MATERNAL, INFANT, AND CHILD NUTRITION

3 credits, winter 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, spring term (2020) then fall of odd years

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. Discussions 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, winter 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 533 - NUTRITIONAL GENOMICS

2 credits, spring term of even years

Instructor: Joyanna Hansen, PhD, RD, LD

Nutritional Genomics is an exciting and fast-moving field that studies how nutrients and genes interact to affect nutrition status and disease risk, with the ultimate goal of advancing personalized nutrition care. This 2-credit hour course will provide a foundational understanding of nutritional genomics, focusing on nutrigenetics (the effect of genetic variation on nutrient uptake and metabolism) and nutritional genomics (the effect of diet on gene expression). Epigenetics, emerging 'omics' technologies, legal/ethical implications of genetic testing, and the integration of nutritional genomics into clinical practice and public health policy will also be discussed.

NUTN 534/634 - MOTIVATIONAL INTERVIEWING FOR HEALTH CARE PROFESSIONALS

2 credits, winter term

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.

NUTN 535/635 - ONCOLOGY NUTRITION

2 credits, fall 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 536 - NUTRITION EDUCATION AND BEHAVIOR CHANGE

2 credits, TBD

Instructor: TBD

This course is designed to provide students with an understanding of theories of education and behavior change and apply these theories to nutrition education and eating behaviors across the lifespan. The course will focus on nutrition education strategies, theories of behavior change, and the use of education and behavior change strategies applied to nutrition and dietetics. The course will also explore sources of nutrition misinformation, and effective communication of evidence-based nutrition information across the lifespan. The course will be composed of readings, formal lectures, and in-class discussions.

NUTN 537 - SPORTS NUTRITION PRACTICUM

1 credit, fall/winter/spring

Instructor: Lexie Jackson, MS, RDN, LD, CDE

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.

NUTN 538 - GLOBAL NUTRITION

2 credits, summer A

Instructor: Joanna Cummings, MS, RD, LD, 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 and Preparing for International Work. An introductory course in human nutrition is required for this course. Supplemental readings will be provided. This course if offered online and consists of a mix of didactic lectures, guest speakers, student projects and videos.

NUTN 540 - SUSTAINABLE AND EQUALITABLE FOOD SYSTEMS

2 credits, terms vary, online course

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.