

HNFE Course Offerings

All are three credits unless indicated otherwise.

Note: Not all courses are offered every year; please check the [Graduate Catalog](#) and the [Timetable of Classes](#) in [Hokie Spa](#) for more information about course details and times.

Course Title/ Number	Course Description	Offered
HNFE 5125G Advanced Medical Nutrition Therapy I	Study of nutritional diagnostic, therapeutic and counseling services provided by a registered dietitian. Emphasis on the relationship between principles of nutritional care and the medical treatment of individuals with selected diseases or clinical problems.	Fall
HNFE 5126G Advanced Medical Nutrition Therapy II	Study of nutritional diagnostic, therapeutic and counseling services provided by a registered dietitian. Integration of knowledge of pathophysiology, biochemical, and clinical parameters, medical treatment and nutrition therapy for patients with selected clinical problems/disease states.	Spring
HNFE 5144 Molecular Aspects of Nutrition & Disease	The role of specific nutrients in human and animal health at a physiologic and molecular level. Emphasis is placed on the influence of nutrients on gene expression especially with regard to pathophysiology of diseases. Physiological and molecular aspects of nutrition and immune function will also be discussed.	Spring
HNFE 5146 Molecular Aspects of Diet & Cancer	The role of specific nutrients in human and animal health at a physiologic and molecular level. Emphasis is placed on the influence of nutrients on gene expression especially with regard to pathophysiology of diseases. Physiological and molecular aspects of nutrition and immune function will also be discussed.	Spring
HNFE 5154 Research Methods in Nutrition & Physical Activity	Research evaluation and design for clinical and behavioral research with an emphasis on diet and physical activity assessment and intervention. Methods applicable to studies designed to test interventions, programs, and practices that target the end result of dietary and physical activity behavior change are emphasized. Research ethics.	Fall
HNFE 5174G Advanced Nutrition & Physical Performance	Nutritional requirements for the well-being and optimal performance of athletes. Methods of assessment and modification of diet, performance, and body composition in athletes. Evaluation of dietary ergogenic aids and supplements for performance and body composition.	Fall
HNFE 4644G Advanced Health Counseling	Roles, responsibilities, and limitations of the professional health educator in health counseling, guidance and referral, health needs assessment, dynamics of health counseling interaction, and selected counseling techniques such as crisis intervention and value clarification.	Summer/ Fall

Course Title/ Number	Course Description	Offered
HNFE 5324 Public Health Nutrition Policies and Programs	Public health, health promotion, food and nutrition policy and population-based nutrition principles in the United States (U.S.) and globally. Factors that contribute to nutrition-related health disparities and chronic diseases. Community and population-based nutrition assessment for vulnerable populations. Food policy and program development, implementation, monitoring and evaluation to promote healthy, resilient and sustainable food environments.	Spring
HNFE 5114G Advanced Food Nutrition Toxicology	Principles of food and nutritional toxicology with primary emphasis on food components and food toxins including absorption, metabolism and excretion. An overview of types of adverse food reactions including food allergy, food sensitivity, and food intolerance. An overview of U.S. and international laws and regulation of safety assessment of foods including food additives, dietary supplements, and residues of contaminants, pesticides, and antibiotics. Analysis of food and nutritional toxicity cases in the context of the food system, regulatory policies, and public communication.	Fall
HNFE 5454 Nutrition & Disease Prevention Through the Lifecycle	Role of diet in health promotion and disease prevention at all stages of the life cycle. Etiology of major nutrition-related health problems. Population-level dietary nutrient requirements and dietary guidelines. Patterns in the US. Diet-related health promotion and disease prevention strategies.	Summer
HNFE 5684 Program Development in Health Education (PHS 5214)	Theory, trends, and design of community health education programs implemented in communities, health agencies, hospitals, and industry.	Fall/Spring
HNFE 5694 Public Health Administration (PHS 5044)	This course will focus on relevant and timely public health administration concepts. The major topics covered include: health policy, health care planning, health care economics, health law, and managerial functions as they relate to health care and public health settings.	Fall/Spring
HNFE 5804 Exercise Physiology	Molecular and cellular mechanisms underlying physiological adaptations to acute and chronic exercise training. Physiological basis for current physical activity guidelines. Influences of physical activity on promotion of health and prevention and treatment of chronic diseases.	Spring

Course Title/ Number	Course Description	Offered
HNFE 5214 Physical Activity and Health	Practical applications of interventions for health promotion, disease prevention, and treatment in diverse adult populations. Implications of sedentary behavior. Physiological adaptations to exercise and physical activity, and fitness training principles. Exercise is Medicine initiative principles and health behavior change theories. Health assessment, exercise testing, and prescription. Historical evaluation and application of guidelines for healthy and diseased populations.	Spring
HNFE 5974 Independent Study (credits vary)	Student participation in a planned experience under supervision of a university staff member in an appropriate work center. (Maximum 12C). Consent required.	Fall/Spring
HNFE 6064 Advanced Topics in HNFE (course title and offering varies)	Critically evaluate and discuss contemporary and/or ongoing controversial issues in human nutrition, foods and exercise. May be repeated with different content for a maximum of 12 credit hours.	Fall/Spring

STATISTICS COURSE OPTIONS (NOT EXCLUSIVE LIST)

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- STAT 5605 Biometry
- STAT 5606 Biometry
- STAT 5615 Statistics in Research
- STAT 5616 Statistics in Research
- STAT 5674 Methods in Biostatistics
- EDRE 6504 Qualitative Methods in Educational Research
- EDRE 6605 Quantitative Research Methods in Education I
- EDRE 6606 Quantitative Research Methods in Education II
- AAEC 5946 Econometric Theory Research Methods
- HD 6514 Advanced Research Methods and HD 6524 Lab for Advanced Research Methods
- PHS 5025/PHS 5026 Epidemiology & Quan. Methods in Public Health (3 credits each, must take both)
- PSYC 6014 Multivariate Statistics

OTHER COURSES

- AAEC 5814G Advanced Food & Health Economics
- ALCE 5024 Data Management and Skills
- ALCE 5224 Team Science Cooperation and Interdisciplinary Work
- ALCE 5984 Food Security & Resilient Communities: Food Sys Theory/Praxis
- ALCE 6234 Theory & Practice of Community-based Participatory Research
- ALS 5115 Nutrition
- ALS 5116 Nutrition
- BCHM 5124 Life Sciences Biochemistry
- BCHM 5204 Molecular Biology of Eukaryotic Gene Expression
- BCHM 5344 Molecular Biology Life Sciences

- BIOL 4704 Immunology
- BIOL 4984 Cancer Biology
- BIOL 5734 Advanced Inflammation Biology
- BIOL 5884 Molecular Biology of the Cell
- BMVS 5284 Cell Pathology
- EDCI 5784 Health Literacy
- EDHL 5734 Health Behavior and Health Education
- GRAD 5104 Preparing Future Professoriate
- GRAD 5114 Pedagogical Practices in Contemporary Contexts
- GRAD 5124 Library Research Skills (1 cr)
- GRAD 5134 Topics in Interdisciplinary Research
- GRAD 5144 Communicating Science (2 cr)
- GRAD 5304 Career Development for the Future Professional
- GRAD 5414 Water for Health Seminar (1 cr)
- PAPA 6224 Public Policy Design
- PHS 5004 Fundamentals of Public Health
- PHS 5034 Health Behavior and Health Education
- PHS 5204 Principles of Community Health Education
- PHS 5214 Program Development in Health Education
- PHS/HD 5254 Social Epidemiology and Health Inequalities
- PSYC 5374 Health Psychology
- SOC 6984 Sociology of Health
- TBMH 5024 Fundamentals of Cancer