# DEPARTMENT OF NUTRITION (GRAD)

The Gillings School's Department of Nutrition is a global leader in research and training. The department is the only nutrition department in the United States situated in both a school of public health and a school of medicine. Members engage in innovative work that capitalizes on both these schools' approaches to health, and thus the department has an unusual breadth of scientific and policy approaches. The department's faculty expertise spans from cell to society and moves from discovery to delivery. The faculty and students work throughout North Carolina and reach populations in China, India, Malawi, Spain, and the Philippines, to name a few.

The Department of Nutrition's mission is to improve and protect the public's health through teaching, research, and practices that foster optimal nutrition. Our vision is to achieve optimal nutrition for all people around the globe.

# **Master of Public Health (M.P.H.)**

The redesigned UNC Gillings School of Global Public Health's master of public health (M.P.H.) program is for people who are passionate about solving urgent local and global public health problems. With a legacy of outstanding education, cutting edge research and globally-recognized leadership, the UNC Gillings School is creating the next generation of public health leaders through our integrated training program and 21st century curriculum. The Department of Nutrition hosts the Nutrition and Nutrition and Dietetics concentrations.

# **Master of Science (M.S.)**

The master of science in nutrition (M.S.) is for students who wish to increase their knowledge of nutrition science and to acquire skills in laboratory and population-based nutrition research. This degree prepares students for careers in research and industry, as well as those considering the pursuit of a doctoral degree or eventually attending medical or another professional school. For current B.S.P.H. nutrition students, the Department of Nutrition also offers an accelerated B.S.P.H.-M.S. program for which students apply during their senior year and complete their M.S. within one year of graduation from the B.S.P.H. program.

# **Doctor of Philosophy (Ph.D.)**

The doctor of philosophy (Ph.D.) in the Department of Nutrition develops students' research and teaching skills through coursework, research, practice opportunities and preliminary doctoral examinations. Together, these experiences prepare graduates for careers in scientific research or teaching at universities, in federal or state agencies, and in industry or private research institutions. Students may minor in other fields, such as epidemiology. Doctoral program opportunities are available at the UNC—Chapel Hill campus and the Nutrition Research Institute (NRI).

# **Distinguished Professors**

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# **NUTR**

# **Advanced Undergraduate and Graduate-level Courses**

# NUTR 400. Introduction to Nutritional Biochemistry. 3 Credits.

Function of the human body focusing on chemical properties, function, and metabolism of nutrients. Biochemistry of nutrients with a limited focus on medical aspects of nutrient metabolism. For advanced undergraduates and graduate students needing to enhance background prior to NUTR 600.

# **Rules & Requirements**

**Requisites:** Prerequisites, BIOL 101, CHEM 101 and 102, and NUTR 240; permission of the instructor for students lacking the prerequisites. **Grading Status:** Letter grade.

# NUTR 405. Fundamentals of Food and Nutrition Policy in Public

Health. 3 Credits.

This course focuses on food and nutrition policy on a federal, state, and local level. Topics covered include policy formation, interest/consumer advocacy groups, key legislation, how research informs policy, equity and diversity, global food policy issues, sustainability and health, advocacy, and current public health nutrition policy hot topics and examples.

## **Rules & Requirements**

Grading Status: Letter grade.

## NUTR 470. Foundations of Nutrition Interventions. 3 Credits.

This course is designed to introduce students to clinical trials in nutrition, including experimental designs, nutrition intervention methods, and skills necessary to critically analyze, describe, and evaluate feeding and behavioral nutrition interventions. The course covers concepts, skills and methods related to nutrition interventions, with an emphasis on theory-based interventions at the individual, community, or environmental levels to improve health and nutrition outcomes.

#### **Rules & Requirements**

Grading Status: Letter grade.

# NUTR 600. Human Metabolism: Macronutrients. 3 Credits.

Cell biochemistry and physiology emphasizing integration of proteins, carbohydrates, and lipids in whole-body metabolism; regulation of energy expenditure, food intake, metabolic adaptations, and gene expression; and macronutrient-related diseases (atherosclerosis, obesity).

#### **Rules & Requirements**

**Requisites:** Prerequisite, NUTR 400; permission of the instructor for students lacking the prerequisite.

Grading Status: Letter grade.

# NUTR 611. Food And Your Life Stages. 3 Credits.

This course covers nutrition during the life cycle. Units include women during preconception, pregnancy, and lactation; infancy; childhood; adolescence; and older adults (65+). Nutrient and energy needs, assessment of nutritional status, and cultural and socioeconomic barriers are discussed for each phase.

# **Rules & Requirements**

Requisites: Prerequisite, NUTR 240. Grading Status: Letter grade. Same as: MHCH 611.

## NUTR 620. HUMAN METABOLISM: MICRONUTRIENTS. 3 Credits.

Cell biochemistry and physiology emphasizing metabolism of vitamins and minerals including antioxidant protection, immune function, nutrient control of gene expression, and disease states induced by deficiencies (e.g., iron-deficient anemia).

#### **Rules & Requirements**

**Requisites:** Prerequisites, NUTR 400 and 600; permission of the instructor for students lacking the prerequisites.

Grading Status: Letter grade.

## NUTR 630. Nutrition Communication and Culture. 3 Credits.

Course teaches the future nutrition professional the art and science of communicating with individuals, groups, and the public. Students will enhance cultural awareness and frame nutrition messages for mass media including social media.

#### **Rules & Requirements**

**Requisites:** Prerequisite, NUTR 240; permission of the instructor for students lacking the prerequisite.

**Grading Status:** Letter grade.

#### NUTR 646. Mouse Models of Human Disease. 1 Credits.

This course will focus on the laboratory mouse as a model organism to learn fundamental genetic concepts and understand how state-of-the-art experimental approaches are being used to elucidate gene function and the genetic architecture of biological traits.

#### **Rules & Requirements**

Grading Status: Letter grade.

Same as: GNET 646.

# NUTR 660. Food Service Systems Management. 2 Credits.

Permission of the instructor for nonmajors. Basic concepts of institutional food service systems management applied to small and medium-sized health care facilities in the community.

# **Rules & Requirements**

**Requisites:** Co-requisite, NUTR 660L. **Grading Status:** Letter grade.

# NUTR 660L. Food Service Systems Management Experience. 1 Credits.

This is a food service management practicum that applies the basic concepts of institutional food service systems. Two laboratory hours per week.

# **Rules & Requirements**

Requisites: Co-requisite, NUTR 660. Grading Status: Letter grade.

# NUTR 691H. Honors Research in Nutrition. 3 Credits.

This is an honors course for research for the first semester of senior year, to be followed by NUTR 692H in the second semester. NUTR 691H/692H is a two-course sequence. Enrollment is only for students approved to conduct a senior honors thesis project.

# **Rules & Requirements**

Making Connections Gen Ed: EE- Mentored Research.

**Requisites:** Prerequisite, NUTR 295. **Grading Status:** Letter grade.

## NUTR 692H. Honors Research in Nutrition. 3 Credits.

Permission of the instructor. Directed readings or laboratory study of a selected topic. Requires a written proposal to be submitted to and approved by the B.S.P.H. Committee and faculty research director. A written report is required. May be taken more than once for credit. Six laboratory hours per week.

#### **Rules & Requirements**

Making Connections Gen Ed: EE- Mentored Research.

Grading Status: Letter grade.

## NUTR 695. Nutrition Research. 1-9 Credits.

Permission of the instructor. Individual arrangements with faculty for bachelor and master students to participate in ongoing research.

#### **Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics; 12 total credits. 8 total completions.

Grading Status: Letter grade.

# NUTR 696. Readings in Nutrition. 1-9 Credits.

Permission of the instructor. Reading and tutorial guidance in special areas of nutrition.

## **Rules & Requirements**

**Repeat Rules:** May be repeated for credit; may be repeated in the same term for different topics; 12 total credits. 8 total completions.

Grading Status: Letter grade.

# **Graduate-level Courses**

# NUTR 701. Nutrition Practicum Preparation. 2 Credits.

This course provides support for the practicum process and trains students on how to ethically, meaningfully, and professionally engage and prepare for practicum placements. Students will learn how to work within their organization and their stakeholders through building skills in leadership and interprofessional practice. Additionally, students will sharpen their clinical skills in preparation for their hospital-based experience and include mandatory on-boarding requirements.

#### **Rules & Requirements**

Requisites: Prerequisite, SPHG 711, SPHG 712, SPHG 713.

Grading Status: Letter grade.

#### NUTR 705. Human Nutrition. 3 Credits.

Fundamental scientific premises of human nutrition. This course covers the basic concepts of macro and micronutrients, food sources, and the evidence-based requirements for a healthy diet. This course integrates nutritional needs of populations, with an emphasis on nutrition-related diseases, including over and undernutrition.

#### **Rules & Requirements**

Grading Status: Letter grade.

# NUTR 711. Nutrition Across the Lifecycle. 3 Credits.

This course covers nutrition during the life cycle. Units include women during preconception, pregnancy, and lactation; infancy; childhood; adolescence; and older adults (65+). Nutrient and energy needs, assessment of nutritional status, and cultural and socioeconomic barriers are discussed for each phase.

# **Rules & Requirements**

Requisites: Prerequisite, NUTR 705 or equivalent.

Grading Status: Letter grade.

# NUTR 712. Nutrition Communication, Counseling and Culture. 3 Credits.

This course teaches the future nutrition professional the art and science of communicating with individuals, groups, and the public. Students will enhance cultural awareness, practice counseling individuals and facilitating groups, and frame nutrition messages for mass media including social media.

#### **Rules & Requirements**

Requisites: Prerequisite, NUTR 705 or equivalent.

Grading Status: Letter grade.

# NUTR 714. Nutritional Biochemistry, Metabolism and Health. 3 Credits. Introduction to biochemistry and functions of macro- and micro-nutrients with a limited focus on medical aspects of nutrient deficiencies and metabolism. Focus on chemical structures, chemical properties, metabolism, and functions of macro- and micro-nutrients.

#### **Rules & Requirements**

**Requisites:** Prerequisites, BIOL 252 and 252L, BIOL 422 and 422L, NUTR 240, CHEM 261 and CHEM 430, or permission from the instructor. **Grading Status:** Letter grade.

# NUTR 715. Medical Nutrition Therapy: Chronic Disease Management. 4 Credits.

A lecture and skills course where students practice skills used in nutrition therapy and the Nutrition Care Process (such as calculating caloric intake and modifying intake, calculating diabetic diets, calculating sodium content of intakes, etc.) under the supervision of a Registered Dietitian.

## **Rules & Requirements**

Requisites: Prerequisites, NUTR 711 and 712.

Grading Status: Letter grade.

# NUTR 722. Nutrition Thesis Seminar. 1 Credits.

The changing landscape of nutritional science research has increased the demand of early-career investigators to be more transdisciplinary, perform highly rigorous research, and be prepared for less-traditional research positions. With a framework of performing reproducible research, this course introduces students to the concepts and skills to perform and understand rigorous nutrition research. The course also covers aspects of research ethics, effective use of UNC research resources, work-life balance and research innovation. Restricted to first year MS students and senior BSPH Honors students.

#### **Rules & Requirements**

Grading Status: Letter grade.

# NUTR 723. Community Nutrition. 3 Credits.

This course provides graduate students with competencies to assess factors that influence the nutritional status of the population; identify community resources to promote and support nutrition and health; conduct community assets and needs assessments; and design, implement, and evaluate public health nutrition programs.

# **Rules & Requirements**

**Requisites:** Prerequisite, NUTR 701. **Grading Status:** Letter grade.

## NUTR 745. International Nutrition. 3 Credits.

Provides a broad overview of international nutrition research issues, programs, and policies. Topics will include micronutrient deficiencies, child feeding and growth, determinants of under- and over-nutrition, chronic disease and nutrition, food fortification and supplementation, and nutrition intervention programs and policy.

#### **Rules & Requirements**

Grading Status: Letter grade.

# NUTR 746. Taxes, Bans & Burgers: Directed Readings in Global Food Policy. 1 Credits.

Course will explore the social, historical, and political context of how individuals make decisions about what to eat; how this context shapes food policy; and how these policies in turn shape individual behavior, by employing a comparative framework over three countries (China, Mexico, and the U.S.).

#### **Rules & Requirements**

Grading Status: Letter grade.

#### NUTR 749. mHealth for Behavior Change. 2 Credits.

This special topics seminar examines the impact and potential of mobile health interventions and apps for health behavior change. The overall course objective is to understand state of the science and future potential to leverage mobile phones and wearable technologies in innovative and powerful behavior change interventions to improve health. The course considers adaptation of eHealth interventions for mobile delivery, unique opportunities with mHealth, data collection via mobile devices and sensors, and using the data.

## **Rules & Requirements**

Grading Status: Letter grade.

Same as: HBEH 749.

# NUTR 760. Food Science. 2 Credits.

Introduction to foods, chemical and physical properties, nutritional composition, food safety, production, and regulation.

# **Rules & Requirements**

**Requisites:** Corequisite, NUTR 760L. **Grading Status:** Letter grade.

# NUTR 760L. Food Science Laboratory. 1 Credits.

Basic culinary techniques. Classes illustrate biochemical processes and food properties covered in lecture. Introduction to new foods and food ideas. Critical evaluation of recipes. Laboratory fee required. Three laboratory hours per week.

## **Rules & Requirements**

**Requisites:** Corequisite, NUTR 760. **Grading Status:** Letter grade.

# NUTR 761L. Food Science Laboratory. 1 Credits.

Basic culinary techniques. Classes illustrate biochemical processes and food properties covered in lecture. Introduction to new foods and food ideas. Critical evaluation of recipes. Laboratory fee required. Three laboratory hours per week.

# **Rules & Requirements**

**Requisites:** Corequisite, NUTR 760. **Grading Status:** Letter grade.

## NUTR 765. Nutritional Epidemiology for Master's Students. 3 Credits.

This course introduces basic methods of dietary assessment, reviews various topics in nutrition epidemiology, and teaches the skills needed for critical evaluation of the nutritional epidemiologic literature.

## **Rules & Requirements**

Requisites: Prerequisite, SPHG 711, SPHG 712, SPHG 713, SPHG 721,

SPHG 722 (MPH Core Courses). **Grading Status:** Letter grade.

## NUTR 770. Clinical Trials in Nutrition. 3 Credits.

This course is designed to introduce students to nutrition interventions and help students develop knowledge and skills necessary to critically analyze, describe, and evaluate behavioral nutrition interventions. The course covers concepts, skills and methods related to nutrition interventions, with an emphasis on theory-based interventions at the individual, community, or environmental levels to improve health and nutrition outcomes.

#### **Rules & Requirements**

Grading Status: Letter grade.

# NUTR 785. Graduate Teaching Experience. 1 Credits.

Permission of the instructor. Individual arrangements with faculty for a graduate student to serve as a teaching assistant for a nutrition course.

# **Rules & Requirements**

Repeat Rules: May be repeated for credit.

Grading Status: Letter grade.

#### NUTR 805. Nutrition Policy. 3 Credits.

This course focuses on nutrition policy on a federal, state, and local level. Topics covered include policy formation, interest/consumer advocacy groups, key legislation, how research informs policy, equity and diversity, global food policy issues, sustainability and health, advocacy, and current public health nutrition policy examples. Permission of the instructor for undergraduates.

## **Rules & Requirements**

Grading Status: Letter grade.

# NUTR 808. Global Cardiometabolic Disease Seminar. 1 Credits.

This core seminar addresses biology, genetics, epidemiology, intervention and policy strategies relevant for addressing global cardiometabolic disease, as well as, professional development and responsible conduct of research in global settings.

# **Rules & Requirements**

Repeat Rules: May be repeated for credit. 4 total credits. 4 total

completions.

Grading Status: Letter grade.

# NUTR 810. Physical Activity Epidemiology and Public Health. 3 Credits.

This course provides an overview of major issues in physical activity measurements, population distribution, correlates, impacts (physically and economically), and public health recommendations. Interventions, including relevant theories, will be reviewed. Three lecture hours per week.

# **Rules & Requirements**

**Requisites:** Prerequisite, EPID 600. **Grading Status:** Letter grade.

Same as: EPID 810.

#### NUTR 812. Introduction to Obesity: Cell to Society. 3 Credits.

Provides a broad survey of obesity research including measurement issues, biological, social and economic etiologies, health and economic consequences, and prevention and treatment of obesity.

#### **Rules & Requirements**

Grading Status: Letter grade.

# NUTR 813. Nutritional Epidemiology. 3 Credits.

This course introduces basic methods of dietary assessment, reviews various topics in nutrition epidemiology, and teaches the skills needed for critical evaluation of the nutritional epidemiologic literature.

## **Rules & Requirements**

Requisites: Prerequisites, BIOS 600, and EPID 600 or 710.

Grading Status: Letter grade.

#### NUTR 814. Obesity Epidemiology. 3 Credits.

Examines epidemiology research on the causes, consequences, and prevention of obesity. Emphasis on methodological issues pertinent to obesity research.

#### **Rules & Requirements**

Requisites: Prerequisites, BIOS 545, EPID 715, 716 and NUTR 812 or

NUTR 813.

Grading Status: Letter grade.

Same as: EPID 814.

# NUTR 818. Analytical Methods in Nutritional Epidemiology. 3 Credits.

Skills and techniques to study how dietary exposures, physical activity, and anthropometric status relate to disease outcomes. Focus is hands-on data analysis using STATA, and interpretation of results from statistical analysis.

# **Rules & Requirements**

Requisites: Prerequisites, BIOS 545, EPID 600 or 710, and NUTR 813.

**Grading Status:** Letter grade.

Same as: EPID 818.

# NUTR 845. Nutritional Metabolism. 3 Credits.

A problem-based approach to examine current topics in biochemistry relevant to nutrition and metabolism. Students interpret data and design experiments related to recent advances in nutritional biochemistry.

# **Rules & Requirements**

**Requisites:** Prerequisite, NUTR 600. **Grading Status:** Letter grade.

# NUTR 865. Advanced Nutritional Biochemistry: Nutrigenetics and Nutrigenomics. 2 Credits.

Permission of the instructor. Course focuses on nutrigenetics and nutrigenomics with an emphasis on the genetic and dietary interactions predisposing one to increased risk of disease.

# **Rules & Requirements**

**Grading Status:** Letter grade.

Same as: GNET 865.

# NUTR 867. Advanced Nutritional Biochemistry: Vitamins and Disease. 2 Credits.

Focuses on the molecular processes involving B and D-group vitamins, mechanisms of pathologies caused by their deficiency, as well as the latest studies on nutritional requirements, population consumption levels, and use of the vitamins for treatment and prevention of human disease.

#### **Rules & Requirements**

**Requisites:** Prerequisites, NUTR 600 and 620; permission of the instructor for students lacking the prerequisites.

Grading Status: Letter grade.

# NUTR 868. Advanced Nutritional Biochemistry: Nutrition and Cancer. 2 Credits.

The course will cover the biology of cancer as well as the metabolic and physiological functions of nutritional factors and how they impact the cancer process. The course will focus on aspects of current research that are relevant to links between nutritional factors, with emphasis on mechanism-based cancer prevention approaches.

#### **Rules & Requirements**

Requisites: Prerequisite, NUTR 600 or equivalent.

Grading Status: Letter grade.

## NUTR 880. Elements of Being a Scientist. 3 Credits.

Permission of the instructor. For doctoral students prepared with Ph.D. aims/focus. Focuses on key elements that contribute to a successful career as a scientific researcher. These include scientific presentations, NIH proposal grant writing, evaluating published manuscripts, sources of funding, peer review, use of animals and humans in research, and scientific ethics.

#### **Rules & Requirements**

Grading Status: Letter grade.

# NUTR 885. Doctoral Seminar. 2 Credits.

The changing landscape of nutritional science research has increased the demand of early-career investigators to be more transdisciplinary, perform highly rigorous research, and be prepared for less-traditional research positions. With a framework of performing reproducible research, this course introduces students to the concepts and skills to perform and understand rigorous nutrition research. The course also covers aspects of research ethics, effective use of UNC research resources, work-life balance and research innovation.

#### **Rules & Requirements**

Repeat Rules: May be repeated for credit. 4 total credits. 2 total

completions.

Grading Status: Letter grade.

# NUTR 910. Nutrition Research. 1-9 Credits.

Individual arrangements with faculty for doctoral students to participate in ongoing research.

## **Rules & Requirements**

**Grading Status:** Letter grade.

# NUTR 920. Research Rotations for Nutritional Biochemistry Doctoral Students. 1-3 Credits.

Two laboratory or research group rotations supervised by nutritional biochemistry faculty. Provides a breadth of research experience for students prior to selecting dissertation adviser. Up to six laboratory hours per week.

# **Rules & Requirements**

Grading Status: Letter grade.

NUTR 992. Master's (Non-Thesis). 3 Credits.

**Rules & Requirements** 

Repeat Rules: May be repeated for credit.

NUTR 993. Master's Research and Thesis. 3 Credits.

**Rules & Requirements** 

Repeat Rules: May be repeated for credit.

NUTR 994. Doctoral Research and Dissertation. 3 Credits.

**Rules & Requirements** 

Repeat Rules: May be repeated for credit.

# Master of Public Health (M.P.H.) - Nutrition and Dietetics Concentration

The unique Nutrition and Dietetics concentration (https://sph.unc.edu/resource-pages/master-of-public-health-2/mph-rd-program/) integrates the scientific study of nutrition and dietetics with a foundation in public health practice and research. Meant for aspiring clinical and public health dietitians who are motivated to help people live healthier lives through better nutrition. The program offers students customized internship placement services to help fulfill the requirements to sit for the Commission on Dietetic Registration exam.

# **Degree Requirements**

Requirements for the M.P.H. degree in the Nutrition and Dietetics\* concentration

Code	Title I	lours
M.P.H. Integrated		
SPHG 711	Data Analysis for Public Health Fall 1	2
SPHG 712	Methods and Measures for Public Health Practice Fall 1	2
SPHG 713	Systems Approaches to Understanding Public Health Issues Fall 1	2
SPHG 701	Leading from the Inside-Out Fall 1	2
SPHG 721	Public Health Solutions: Systems, Policy and Advocacy Spring 1	2
SPHG 722	Developing, Implementing, and Evaluating Public Health Solutions (MPH Comprehensive Exam administered in class) <sup>Spring 1</sup>	4
M.P.H. Practicum		
SPHG 703	MPH Pre-Practicum Assignments Spring 1	0.5
SPHG 705	MPH Practicum (200 minimum hours) Summer 1	0
SPHG 707	MPH Post-Practicum Assignments Fall 2	0.5
M.P.H. Concentrat	tion	
NUTR 711	Nutrition Across the Lifecycle Fall 1	3
NUTR 712	Nutrition Communication, Counseling and Culture Fall 1	3
NUTR 714	Nutritional Biochemistry, Metabolism and Health Spring 1	3
NUTR 715	Medical Nutrition Therapy: Chronic Disease Management Spring 1	4
NUTR 723	Community Nutrition Fall 2	3
NUTR 805	Nutrition Policy Fall 2	3
NUTR 760 & 760L	Food Science and Food Science Laboratory Spring 2	3
NUTR 765	Nutritional Epidemiology for Master's Students Spring 2	3

# M.P.H. Culminating Experience

Food Service Placement Summer 1 Clinical Nutrition Placement Summer 1 Public Health Placement Summer 2 Advanced Placement Summer 2		
Clinical Nutrition Placement Summer 1 Public Health Placement Summer 2		
Clinical Nutrition Placement Summer 1		
Supervised Experiential Learning		
SPHG 992 Master's (Non-Thesis) Summer 2	3	

# **Competencies**

C1.1.

Students will develop the following Nutrition and

**Dietetics\* competencies**, building on the foundational public health knowledge they attain in the Gillings M.P.H. Integrated Core courses. After successful demonstration of these ACEND<sup>1</sup> competencies, students will be eligible to sit for the Registered Dietician credentialing exam.

Applies an understanding of

OI.I.	environmental, molecular factors (e.g. genes, proteins, metabolites) and food in the development and management of disease.
C1.2.	Applies an understanding of anatomy, physiology, and biochemistry.
C1.3.	Applies knowledge of microbiology and food safety.
C1.4.	Integrates knowledge of chemistry and food science as it pertains to food and nutrition product development and when making modifications to food.
C1.5.	Applies knowledge of pathophysiology and nutritional biochemistry to physiology, health, and disease.
C1.6.	Applies knowledge of social, psychological, and environmental aspects of eating and food.
C1.7.	Integrates the principles of cultural competence within own practice and when directing services.
C1.8.	Applies knowledge of pharmacology to recommend, prescribe and administer medical nutrition therapy.
C1.9.	Applies an understanding of the impact of complementary and integrative nutrition on drugs, disease, health, and wellness.
C1.10.	Applies knowledge of math and statistics.
C1.11.	Applies knowledge of medical terminology when communicating with individuals, groups, and other health professionals.
C1.12.	Demonstrates knowledge of and is able to manage food preparation techniques.

C1.13.	Demonstrates computer skills and uses nutrition informatics in the decision making process.
C1.14.	Integrates knowledge of nutrition and physical activity in the provision of nutrition care across the life cycle.
C1.15.	Applies knowledge of nutritional health promotion and disease prevention for individuals, groups, and populations.
C1.16.	Gains a foundational knowledge on public and global health issues and nutritional needs.
C2.1.	Applies a framework to assess, develop, implement, and evaluate products, programs, and services.
C2.2.	Selects, develops, and/or implements nutritional screening tools for individuals, groups, or populations.
C2.3.	Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings.
C2.4.	Implements or coordinates nutritional interventions for individuals, groups or populations.
C2.5.	Prescribes, recommends and administers nutrition-related pharmacotherapy.
C3.1.	Directs the production and distribution of quantity and quality food products.
C3.2.	Oversees the purchasing, receipt and storage of products used in food production and services.
C3.3.	Applies principles of food safety and sanitation to the storage, production and service of food.
C3.4.	Applies and demonstrates an understanding of agricultural practices and processes.
C4.1.	Utilizes program planning steps to develop, implement, monitor and evaluate community and population programs.
C4.2.	Engages in legislative and regulatory activities that address community, population and global nutrition health and nutrition policy.
C5.1.	Demonstrates leadership skills to guide practice.
C5.2.	Applies principles of organization management.
C5.3.	Applies project management principles to achieve project goals and objectives.

C5.4.	Leads quality and performance improvement activities to measure, evaluate and improve a program services, products and initiatives.
C5.5.	Develops and leads implementation of risk management strategies and programs.
C6.1.	Incorporates critical thinking skills in practice.
C6.2.	Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research.
C6.3.	Applies current research and evidence-informed practice to services.
C7.1.	Assumes professional responsibilities to provide safe, ethical and effective nutrition services.
C7.2.	Uses effective communication, collaboration and advocacy skills.

<sup>\*</sup> ACEND (https://www.eatrightpro.org/acend/), 2017 Accreditation Standards for Graduate Degree Programs in Nutrition and Dietetics (FG) Future Education Model. (https://www.eatrightpro.org/-/media/eatrightpro-files/acend/futureeducationmodel/femgraduatefinal.pdf? la=en&hash=89123715A3E0E426F0A0CA960299FFEA06714FE5)

# Master of Public Health (M.P.H.) - Nutrition Concentration

The Nutrition concentration (https://sph.unc.edu/resource-pages/master-of-public-health-2/nutrition-concentration/) focuses on nutrition science as well as on behavior change, communication, and the effects of dietary culture on the individual and within communities. Students gain the skills to assess scientific evidence for nutritional guidelines, effectively communicate nutritional information to the public, evaluate how social, cultural, and environmental factors affect nutrition-related health outcomes, and practice in compliance with federal regulations and state statutes.

# **Degree Requirements**

Requirements for the M.P.H. degree in the Nutrition concentration

Code	Title	Hours
M.P.H. Integrated	Core	
SPHG 711	Data Analysis for Public Health <sup>Fall 1</sup>	2
SPHG 712	Methods and Measures for Public Health Practic	ce 2
SPHG 713	Systems Approaches to Understanding Public Health Issues Fall 1	2
SPHG 701	Leading from the Inside-Out Spring 1	2
SPHG 721	Public Health Solutions: Systems, Policy and Advocacy Spring 1	2
SPHG 722	Developing, Implementing, and Evaluating Public Health Solutions (MPH Comprehensive Exam administered in class) <sup>Spring 1</sup>	c 4
M.P.H. Practicum		

SPHG 703	MPH Pre-Practicum Assignments Spring 1	0.5
SPHG 705	MPH Practicum (200 minimum hours) Summer 1	0
SPHG 707	MPH Post-Practicum Assignments Fall 2	0.5
M.P.H. Concentra		
NUTR 705	Human Nutrition <sup>Fall 1</sup>	3
NUTR 711	Nutrition Across the Lifecycle Fall 2	3
NUTR 723	Community Nutrition Fall 2	3
NUTR 805	Nutrition Policy Fall 2	3
NUTR 765	Nutritional Epidemiology for Master's Students Spring 2	3
M.P.H. Electives		
Elective (Graduat UNC)	e-level courses, 400+ level at Gillings, 500+ level at	3
Elective (Graduat UNC)	e-level courses, 400+ level at Gillings, 500+ level at	3
Elective (Graduat UNC)	e-level courses, 400+ level at Gillings, 500+ level at	3
M.P.H. Culminating Experience		
SPHG 992	Master's (Non-Thesis) (Nutrition MPH Culminating Experience) $^{\rm Spring\ 2}$	3

Spring 1

#### **Competencies**

**Total Hours** 

Students will develop the following **Nutrition competencies**, building on the foundational public health knowledge they attain in the Gillings M.P.H. Integrated Core courses.

NUTR01.	Assess the scientific evidence for nutritional guidelines/recommendations.
NUTR02.	Assess dietary intake and nutrition status of individuals and populations.
NUTR03.	Evaluate how social, cultural, environmental, and community factors have an impact upon dietary intake and nutrition-related outcomes in individuals, families, and communities.
NUTR04.	Independently plan, develop, and evaluate nutrition-related health promotion/disease prevention services, products, programs, or interventions (including policy analysis), using appropriate evidence or data.
NUTR05.	Demonstrate proficiency in writing evidence-based nutrition-related professional and consumer communications, using a variety of communication platforms.
NUTR06.	Practice in compliance with current federal regulations and state statutes and rules related to public health nutrition programs.

# **Admissions**

Please visit Applying to the Gillings School (https://sph.unc.edu/students/how-to-apply/) first for details and information. Application to the residential M.P.H. is a two-step process. Please apply separately to (1) SOPHAS and (2) UNC-Chapel Hill (via the Graduate School application). Visit https://gradschool.sites.unc.edu/master-of-public-health/ for more details. If you are interested in the online M.P.H., please visit the MPH@UNC (https://onlinemph.unc.edu/) website and fill out an inquiry form.

# **Milestones**

The following list of milestones (non-course degree requirements) must be completed; view this list of standard milestone definitions (https://catalog.unc.edu/graduate/degree-programs/#milestonestext) for more information.

#### **Practicum**

42

Prior to beginning a practicum, students must: 1) have final grades in SPHG 711, SPHG 712, SPHG 713, SPHG 701, SPHG 721, SPHG 722 and SPHG 703 and 2) receive approval from the practicum team to begin their practicum hours.

#### To satisfy degree requirements, a Gillings M.P.H. practicum must:

- Be an applied public health practice (https://sph.unc.edu/nciph/ community-engaged-learning/) experience that addresses a health issue from a community or population (not individual) perspective.
- Take place in a professional public health setting such as a health department, nonprofit organization, hospital or for-profit firm. To be appropriate for a practicum, University-affiliated settings must be primarily focused on community engagement, typically with external partners. University health promotion or wellness centers may also be appropriate. Faculty-supervised lab settings are not appropriate for the practicum.
- · Allow for the application of graduate-level public health skills.
- Yield at least two student-generated, practical, non-academic work products (e.g., project plans, grant proposals, training manuals or lesson plans, surveys, memos, videos, podcasts, presentations, spreadsheets, websites, photos with accompanying explanatory text, or other digital artifacts of learning), produced for the practicum site's use and benefit, that demonstrate attainment of five CEPH M.P.H. Foundational Competencies (https://sph.unc.edu/wp-content/ uploads/sites/112/2022/10/CEPH-Foundational-Competencies.pdf).
- Be mentored by a supervisor (preceptor) with public health expertise and experience to guide the practicum work. (See "Preceptor Requirements" below.)
- Take place in a location approved for student travel (UNC Travel Policy (https://adminliveunc.sharepoint.com/sites/GillingsMPHPracticum/Shared%20Documents/Website/June%202022%20Practicum%20Website%20Updates/UNC%20Travel%20Policy/)), and the student must complete UNC Gillings International Pre-Departure Travel Requirements (https://sph.unc.edu/global-health/global-travel-toolkit-2/) prior to travel if applicable.
- Comprise a minimum of 200 hours (equivalent to five weeks of fulltime work).

# Comprehensive Exam (Master's Written Exam)

A milestone degree requirement for all graduate students at UNC-Chapel Hill, including M.P.H. students at the Gillings School of Public Health,

is the comprehensive exam. The comprehensive exam will cover the public health foundational knowledge and competencies covered in the M.P.H. Core courses: SPHG 711, 712, 713, 721, 722. Students will have an opportunity to demonstrate synthesis and higher order learning of the 22 core competencies achieved in the M.P.H. Core courses during the exam. The written exam will be administered in SPHG 722 and graded by Gillings faculty. Clear instructions on how to prepare for and complete the comprehensive exam will be provided. Should students not successfully pass the comprehensive exam a remediation plan will be developed. Students cannot retake the comprehensive exam for 90 days after the initial exam and must be registered in at least one credit while taking the comprehensive exam.

# **Culminating Experience (Thesis Substitute)**

M.P.H. students must have permanent grades in all M.P.H. Core or concentration courses before taking the culminating experience (992) course. An Incomplete in any M.P.H. Core or concentration course will prevent a student from beginning the culminating experience (992) course. Each student completes a 3-credit culminating experience and produces a high-quality written product that is completed in the last term of the program of study. The high-quality written product demonstrates a synthesis of two foundational and two concentration-specific competencies appropriate to the student's educational and professional goals. This culminating experience ideally is delivered in a manner that is useful to external stakeholders, such as nonprofit or governmental organizations, and could take the form of a course-based capstone project or master's paper but will be tailored to the concentration a student chooses.

# **Academic Advising and Faculty Mentoring**

We are committed to providing quality academic advising and mentoring for all students. We ensure that M.P.H. students get the guidance they need with several components: 1) an orientation program that provides an overview of the types and sources of M.P.H. advising; 2) cohort advising sessions in year 1 to disseminate information that is relevant to course planning and registration (one-on-one advising is available to students at any point). One-on-one advising in year two as students prepare for graduation; 3) faculty mentoring that provides students with tailored support for their academic, professional, personal development, and practicum support.

M.P.H. students will complete a 14-credit-hour **Integrated Core** taught by an interdisciplinary team of instructors. The 6-credit first semester focuses on understanding public health issues, and the second semester, 8-credit focuses on creating solutions to those issues.

All M.P.H. students complete **COMPASS** (**Core Online Modules to Promote and Accelerate Student Success**). These self-paced online modules are open for students prior to their first academic year. Students can complete any and all parts of COMPASS up to and including the first week of class.

#### **Electives**

Students in the M.P.H. program are required to take 9 credits of elective coursework. Students are expected to use their electives in a thoughtful way to strengthen their public health knowledge/skills and are encouraged to consult with their academic coordinator early prior to the registration period for this purpose. In addition to those courses offered in the Gillings School there are many appropriate electives elsewhere in the University.

For information on policies and procedures, please visit the Gillings School Student Handbook (https://sph.unc.edu/students/gillings-school-student-handbook/) website.

## **Residency Requirements**

**Exit Survey** 

# **Contact Information**

#### **Department of Nutrition**

Visit Program Website (http://www.sph.unc.edu/nutr/)