

Nutrition — M.P.H.

Program Director

Ella Haddad

Description

The Master of Public Health (M.P.H.) degree Nutrition Program provides specialized training in community nutrition within the multidisciplinary public health programs offered by the School of Public Health (SPH). The program is designed to train professionals to assume leadership positions in assessing community nutrition needs; and in planning, directing, and evaluating the nutrition component of health promotion and disease-prevention efforts.

Public health nutritionists work in a variety of settings in government and voluntary agencies, public and private community health centers, ambulatory care clinics, schools, industries, private practice, and specialized community health projects. They function as directors and administrators of nutrition programs, nutrition care providers, advocates, educators, counselors, consultants, and researchers.

Learner outcomes

The curriculum of the M.P.H. degree in nutrition prepares students for careers in public health and community nutrition. It is appropriate for individuals with professional credentials, such as medicine, dentistry, dietetics, or nursing. Students may select the option of completing a research project with publication potential in lieu of a field practicum.

Upon completion of the program, graduates will:

- Integrate their knowledge of biological mechanisms underlying the effect of food and nutrients on health to the solution of public health problems
- Function independently and collaboratively as leader or member of a team to plan, manage and evaluate community-based nutrition promotion activities
- Critically analyze studies and apply findings to nutrition interventions
- Scrutinize public policies and processes related to food and nutrition and explore their impact health outcomes
- Articulate the role of vegetarian dietary practices on human health, the environment and ecology

Educational effectiveness indicators

Program learner outcomes as evidenced by:

- Signature assignments linked to course and non-course requirements
- Field practicum report
- Culminating experience (<http://llucatalog.llu.edu/public-health/masters-degrees/#mphtext>)

Prerequisite

- General Chemistry
- Organic Chemistry
- Microbiology
- Physiology
- Human Nutrition

Individuals who may benefit from the program

- Graduates of bachelor's degree programs in chemistry, biology, social sciences, etc., who seek advanced degrees in nutrition or the health professions.
- Health professionals, such as physicians, nurses, dentists, allied health professionals, and registered dietitians.

Program requirements

Corequisites

NUTR 490	Topics in Foods and Food Preparation	1
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Public health core

PCOR 501	Public Health for Community Resilience	5
PCOR 502	Public Health for a Healthy Lifestyle	5
PCOR 503	Public Health and Health Systems	5

Major

NUTR 504	Nutritional Metabolism	5
NUTR 510	Advanced Public Health Nutrition	3
NUTR 517	Advanced Nutrition I: Carbohydrates and Lipids	4
NUTR 518	Advanced Nutrition II: Proteins, Vitamins, and Minerals	4

NUTR 519	Phytochemicals	2
NUTR 525	Nutrition Policy, Programs, and Services	3
NUTR 527	Assessment of Nutritional Status	3
NUTR 564	Contemporary Issues of Vegetarian Diets	2
NUTR 605	Seminar in Nutrition	1

Cognates/Electives ¹

DTCS 554	Advanced Medical Nutrition Therapy	
HPRO 527	Obesity and Disordered Eating	
NUTR 526	Nutrition Counseling and Education	
NUTR 543	Concepts in Nutritional Epidemiology	
NUTR 578	Exercise Nutrition	
NUTR 585	Topics in Global Nutrition	
STAT 515	Grant- and Contract-Proposal Writing	

Field practicum

Practicum units are in addition to the minimum didactic units required for the degree.

PHCJ 798D	Public Health Practicum (8 units/400 hours)	
or PHCJ 798A	Public Health Practicum	
or PHCJ 798B	Public Health Practicum	
or PHCJ 798C	Public Health Practicum	

Total Units	56
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¹ Choose from defined cognates (<http://llucatalog.llu.edu/public-health/masters-degrees/#admissionstext>), or select from the following electives in consultation with advisor

Culminating experience

In addition to standard culminating experience requirements (<http://llucatalog.llu.edu/public-health/masters-degrees/#mphtext>), students in the Nutrition MPH program will be required to complete a written comprehensive examination.

Normal time to complete the program

2 years (8 academic quarters) based on full-time enrollment; part time permitted

Courses

NUTR 490. Topics in Foods and Food Preparation. 1 Unit.

On-line course provides an introduction to foods and food preparation. Includes relationship of food composition to food preparation, cultural and ethnic food patterns, sensory evaluation of food, and culinary techniques.

NUTR 504. Nutritional Metabolism. 5 Units.

Studies the static and dynamic aspects of the metabolism of carbohydrates, lipids, amino acids, proteins, nucleic acids, enzymes, hormones, vitamins, and minerals in the normal healthy human.

NUTR 509. Public Health Nutrition and Biology. 3 Units.

Introduces the concepts of nutrition and biology as related to public health. Includes life-cycle issues and discussion of major nutrition-related diseases and their prevention. Integrates molecular and biological approaches to public health problems; and addresses the role of nutritional assessment, intervention, and policy to solve public health issues.

NUTR 510. Advanced Public Health Nutrition. 3 Units.

Advances in public health nutrition and the science base for application to the prevention of disease in the community. Includes nutritional guidelines, policies, monitoring systems, efficacious interventions throughout the life cycle, and interactions between genetic and nutritional factors.

NUTR 517. Advanced Nutrition I: Carbohydrates and Lipids. 4 Units.

Advanced study of the nutrition, metabolism, and function of carbohydrates and lipids as related to health and disease.

NUTR 518. Advanced Nutrition II: Proteins, Vitamins, and Minerals. 4 Units.

Advanced study of the nutrition, metabolism, and function of proteins, vitamins, and minerals as related to health and disease.

NUTR 519. Phytochemicals. 2 Units.

Discusses the role of phytochemicals in disease prevention and treatment. Reviews current research in this area.

NUTR 525. Nutrition Policy, Programs, and Services. 3 Units.

Develops professional skills in management of nutrition programs. Includes legislative advocacy and analysis of current nutrition programs at local, state, and federal levels. Laboratory.

NUTR 526. Nutrition Counseling and Education. 2 Units.

Counseling skills, specifically counseling one-on-one and groups, in order to facilitate changes in nutrition status. Teaching/learning styles, development of therapeutic relationships with patients/clients, and development of listening skills. Case-study evaluation, nutrition-counseling guides, and development of group-education lesson plans.

NUTR 527. Assessment of Nutritional Status. 3 Units.

Techniques of individual nutrition assessment: dietary intake and evaluation, use of computer software (1 unit); anthropometric, clinical, and biochemical methodologies (1 unit); principles and practice in nutrition counseling in a supervised community setting (1 unit). Laboratory or practicum included in each unit.

NUTR 528. Symposium: Adventist Philosophy of Nutrition. 1 Unit.

The science of nutrition as related to the Seventh-day Adventist philosophy of health.

NUTR 529. Health Aspects of Vegetarian Eating. 2,3 Units.

Introduces concepts of vegetarian nutrition as related to health and longevity. Addresses nutritional adequacy, as well as the benefits of vegetarian eating related to the prevention of major chronic diseases, such as heart disease, cancer, obesity, diabetes, and osteoporosis. Covers the interplay between the risks and benefits of vegetarian eating. Students taking course for 3 units either prepare a term paper or develop a vegetarian nutrition program.

NUTR 531. Community Nutrition Intervention I. 2 Units.

Provides training and practice identifying/assessing community health issues. Students collaborate with local associations and faculty advisers to analyze a public health issue and evaluate intervention alternatives using an asset-based, problem-solving approach.

NUTR 532. Community Nutrition Intervention II. 1 Unit.

Focuses on implementation and evaluation strategies to address a community health issue that was identified and analyzed in NUTR 531.

NUTR 534. Maternal and Child Nutrition. 3 Units.

Advanced study of the role of nutrition in human growth and development during the prenatal period, lactation, infancy, and childhood.

NUTR 535. Research Applications in Nutrition. 3 Units.

Overview of research methods in nutrition. Provides an understanding of foundational issues of research design from both the quantitative and qualitative perspectives, as well as understanding of the sequence of procedures in proposal development. Laboratory included.

NUTR 537. Nutrition Education Practicum. 1 Unit.

Experiential course that applies medical nutrition therapy in the assessment and counseling of individuals and groups across the life cycle in an outpatient setting. Includes training in counseling, educational materials development, and cultural sensitivity. Includes at least forty hours of dietetic practice. May be repeated for additional credit.

NUTR 538. Principles of Effective Nutrition Education. 3 Units.

Teaching methods appropriate to the nutrition educator. Definition of an effective teacher. Learning environment, lesson design, and use of teaching models. Strategies to improve student motivation and the retention of information. Evaluation of learning outcomes. Laboratory included. Includes thirty hours of dietetic practice.

NUTR 539. Research Methods in Nutrition. 2 Units.

Discusses the steps in the research process as they relate to clinical nutrition investigation. Validity of biological parameters and dietary intake measurements, study design, subject selection, and ethical issues.

NUTR 543. Concepts in Nutritional Epidemiology. 3 Units.

Prepares students to conduct research relating diet to health/disease outcomes. Reviews methodological issues related to dietary assessment for clinical/metabolic and epidemiological research. Topics include variation in diet, measurement error and correction for its effects, advantages and limitations of different diet assessment techniques, design and development of a food frequency instrument, total energy intake in analyses.

NUTR 545. Clinical Nutrition I. 3 Units.

Medical nutrition therapy and care for a variety of clinical disorders with nutritional implications. Laboratory included.

NUTR 546. Clinical Nutrition II. 3 Units.

Continues medical nutrition therapy for a variety of clinical disorders with nutritional implications: renal disease, chronic obstructive pulmonary disease, inborn errors of metabolism, AIDS, pancreatitis, care of the critically ill and/or obese patient. Includes forty-five practicum hours.

NUTR 554. Critical Care Nutrition I. 3 Units.

Current issues related to the nutritional needs of patients with diabetes, heart disease, and renal disease. Drug-nutrient interactions, laboratory values, treatment modalities; and their effect on nutrition in the critical care of these patients. Counseling strategies for each. Laboratory included.

NUTR 555. Critical Care Nutrition II. 3 Units.

Current issues related to the nutritional needs of preterm neonate, transplant, oncology, AIDS, and COPD patients. Enteral/parenteral feeding products and their administration. Counseling strategies for the client and/or caregiver in each instance. Laboratory included.

NUTR 556. Nutritional Applications in Lifestyle Intervention. 1 Unit.

Provides students with practical experience and training in applying nutritional assessment and counseling skills to address lifestyle interventions. Reviews current dietary practice guidelines and pertinent food components relative to their health effects. Includes hands-on training in skills, tools, and strategies for effective nutrition counseling.

NUTR 564. Contemporary Issues of Vegetarian Diets. 2,3 Units.

Introduces contemporary issues and controversies related to vegetarian diets. Presents background information on the history and rationale of vegetarian diets, ecologic and environmental issues, health benefits and risks of the vegetarian lifestyle. A major paper on one of the vegetarian topics required for 3 units.

NUTR 565. Ethnic Food Practices. 2 Units.

Introduces major ethnic and religious food practices in the United States. Cultural background and other data for the purpose of preparing health professionals to serve their clients in a culturally sensitive manner.

NUTR 577. Nutrition Care Management. 3 Units.

Translates institutional mission into goals, objectives, and standards of care. Applies operations analysis, financial management, quantitative decision making, and productivity management techniques to enhance the delivery of nutrition care. Ethical and legal behavior. Staff recruitment, selection, development, and retention. Develops quality assurance indicators. Skills in managing the human and technological resources available to the registered dietitian.

NUTR 578. Exercise Nutrition. 2,3 Units.

Nutritional needs of professional and recreational athletes. The role of macro- and micronutrients as ergogenic aids. Presents overview of current research in the areas of exercise nutrition. Additional unit assignment available for doctoral students with instructor direction.

NUTR 585. Topics in Global Nutrition. 3 Units.

Discussion of current issues of importance in international nutrition.

NUTR 586. Mediterranean Diet: Nutrition, Cuisine, and Culture. 3,4 Units.

An off-campus, experiential course that provides theoretical and practical training in the cuisine, nutrition, and health aspects of Mediterranean-style vegetarian diets. Students explore the impact of vegetarian diets on nutritional status, chronic disease, and longevity. Includes visits to agricultural and culinary food production and food consumption sites. Formal lectures held at a major European university. Includes formal lectures, practicum, and field work. Additional project required for fourth unit.

NUTR 595. Special Topics in Nutrition. 1-4 Units.

Current topics in nutrition. May be repeated for additional credit.

NUTR 597. Special Topics in Clinical Nutrition. 1-3 Units.

Current topics in clinical nutrition. May be repeated for additional credit.

NUTR 605. Seminar in Nutrition. 1 Unit.

Explores current major issues in nutrition. Students choose and research a topic or problem and discuss their findings in class. Written report required. May be repeated for additional credit.

NUTR 608. Doctoral Seminar in Public Health Nutrition. 1-3 Units.

Enhances skills relative to scientific literature review, critical thinking, scientific discussion with peers, presentation using advanced audiovisual aids, writing review paper and abstract as per peer-reviewed journal requirements. Maximal interaction with faculty, peers, and visiting nutritional professionals. Limited to doctoral degree students in nutrition. May be repeated for additional credit.

NUTR 678. Advanced Exercise Nutrition. 3 Units.

Discusses current research in the field of exercise nutrition; nutritional needs of professional and recreational athletes; and the role of macro- and micronutrients as ergogenic aids. Requires a presentation and a term paper on a current research topic in exercise nutrition. Limited to doctoral students. Instructor approval required for master's degree students.

NUTR 685. Preliminary Research Experience. 2 Units.

Experience in various aspects of research under the guidance of a faculty member and by participation in an ongoing project. Must be completed prior to beginning dissertation/research project. Limited to doctoral degree students.

NUTR 692. Research Consultation. 1-4 Units.

Individual advice on project design and on data collection, analysis, and evaluation. Restricted to School of Public Health students and staff.

NUTR 694. Research. 1-12 Units.

Independent research for doctoral degree candidates and qualified master's degree students on problems currently being studied in the department, or in other department(s) with which they collaborate. Research program arranged with faculty member(s) involved. Minimum of 100 hours required for each unit of credit. Written report required.

NUTR 695. Thesis. 2 Units.

Student prepares report of individual, guided experimental-research study in nutrition, under direct faculty supervision. Limited to graduate students whose thesis project has been approved by their research committee.

NUTR 696. Directed Study/Special Project. 1-4 Units.

Individual arrangements for advanced students to study under the guidance of a program faculty member. May include readings, literature reviews, or other special projects. Minimum of thirty hours required for each unit of credit. A maximum of 4 units applicable to any master's degree program.

NUTR 697. Dissertation Proposal. 1-10 Units.

Doctoral student develops a written dissertation proposal and works in collaboration with the dissertation committee chair on mutually agreed-upon objectives that will provide the basis for evaluation. Culminates in a written and oral dissertation proposal defense and advancement to candidacy.

NUTR 698. Dissertation. 1-14 Units.

Student prepares manuscript presenting results of doctoral research study. Limited to doctoral degree students.

NUTR 699. Applied Research. 2 Units.

Assignment to private, government, or international voluntary health agency, hospital, or other school-approved organization where practical application of the materials studied on campus is made, under the guidance of the department faculty and of the organization involved. Research project that includes substantial analysis of data and discussion of results. Written report and oral presentation required.

NUTR 798B. Field Practicum. 6 Units.

Assignment to private, government, or international voluntary health agency, hospital, or other school-approved organization where practical application of the materials studied on campus is made, under the guidance of the department faculty and of the organization involved. May consist of a research project. Meets the dietetic practice hours of the Graduate Coordinated Program in Public Health Nutrition and Dietetics. May be repeated for additional credit.

NUTR 798D. Field Practicum. 12 Units.

Assignment to hospital or other School of Public Health-approved organization where practical application of the materials studied regarding food service and medical nutrition therapy is made under the guidance of department faculty and the organization involved. Intended to meet the dietetic practice hours of the Graduate Coordinated Program in Public Health Nutrition and Dietetics. May be repeated for additional credit.

NUTR 799B. Dietetic Practicum. 6 Units.

Assignment to hospital or other school-approved organization where practical application of the materials studied regarding food service and medical nutrition therapy is made under the guidance of department faculty and the organization involved. Intended to meet the dietetic practice hours of the Graduate Coordinated Program in Public Health Nutrition and Dietetics.

NUTR 799D. Dietetic Practicum. 12 Units.

Assignment to hospital or other school-approved organization where practical application of the materials studied regarding food service and medical nutrition therapy is made under the guidance of department faculty and the organization involved. Intended to meet the dietetic practice hours of the Graduate Coordinated Program in Public Health Nutrition and Dietetics.