# Masters in Mutrition and Food Systems

#### **Core Coursework**

# Food Systems and Society (3)

Tracks food from farm to table, including growing, harvesting, processing, packaging, transporting, marketing, consumption and disposal. The course assesses sustainability of food systems and explores the ethical, economical, socio-ecological and environmental factors that affect local, regional, national and global food system development.

#### Chronic Disease Management and Process (3)

Focuses on the etiology and pathophysiology of nutrition-related chronic diseases and conditions, including obesity, hypertension, dyslipidemia, heart disease, diabetes and cancer. The course emphasizes the biochemical and physiological mechanisms involved by which nutrients impact the prevention, nutrition care process-diagnosis, assessment, implementation of care, monitoring and evaluation, and progression of chronic diseases and conditions.

## Advanced Community Program Development (3)

Focuses on the theory, practice, and evaluation of community programs to improve quality of life. Students will learn how to effectively plan, develop, and evaluate community programs and strategies to promote healthy eating, active living and a sustainable environment.

# Seminar in Mutrition and Food Systems (3)

Covers the latest in nutrition and food systems research. Students will apply their knowledge of effective scientific communication, responsible conduct of research, and methods and technologies in nutrition and food systems.

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#### **Guided Electives**

#### **Thesis Option**

### Research Methods in Nutrition and Food Systems (3)

Covers accepted research methodologies and scientific approaches in human nutrition and food systems. The course emphasizes research methods, study design, data collection and evaluation of various nutrition related studies.

### Regression (Inalysis and Design of Experiments (3)

Course begins with an applied regression module that emphasizes analysis and interpretation of real data, and statistical computing. Second part of course focuses on principles and implementation of experimental design for scientific research purposes. Standard designs presented along with the proper kinds of analysis for each.

#### Non-Thesis Option

#### Global Foods, Diet and Culture (3)

Covers accepted research methodologies and scientific approaches in human nutrition and food systems. The course emphasizes research methods, study design, data collection and evaluation of various nutrition related studies.

#### Regression (Inalysis and Design of Experiments (3)

This course provides a study of global factors influencing food habits, dietary patterns, and health. Students will examine the effects of cultural identity amongst people living across the United States as it relates to food choices, behaviors, and nutritional status. The nutritional value of global foods, strategies towards disease prevention, and interventions through nutrition to improve health outcomes will be discussed.

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### **DHN Free Elective Options**

### Introduction to Culinary Medicine (3)

This course will introduce students to the field of culinary medicine, which involves using both evidence-based nutrition and medicine knowledge and culinary skills to assist healthcare providers and nutrition professionals in supporting patients and their families in achieving and maintaining optimal health and wellness through diet.

#### Food Related Behaviors (3)

This team-taught course will provide background in topics and methods in food related behaviors to students in Nutritional Sciences and other interested students. The course will follow a problem-based learning approach, and will consist of 3 out of 4 modules in any given year. The four modules will be Social and Cultural Perspectives on Food, Psychological Perspectives on Food and Food Behaviors, Challenges to Community Food Security, and International Issues in Nutrition.

# Obesity and Food Insecurity Paradigm (3)

This course will explore the pathophysiology of obesity, including genetic determinants, prenatal and early life influences, and epigenetics. Students will examine the influence of environmental, socio-economic, public policy, dietary, and physical activity factors as they relate to overweight and obesity in the United States. Interventions to treat obesity, including pharmaceutical, surgical, lifestyle, and environmental options, will be discussed.