### Master of Science in Nutrition and Wellness Curriculum

The online Master of Science in Nutrition and Wellness requires 66 credits of graduate-level coursework consisting of 38 credits of foundation courses and 26 credits in the concentration of your choice.

# Foundation courses (38 credits)

MPH 511	Biostatistics 4 credits
MPH 632	Public Health Education 4 credits
NTR 644	Advanced Metabolism: Lipids and Carbohydrates 4 credits
NTR 621	Obesity: Theory and Practice 4 credits
NTR 625	Complementary Nutrition Therapies 4 credits
NTR 629	Health and Wellness Research Planning 4 credits
NTR 633	Advanced Nutrition Topics in Micronutrients: Bone Health 2 credits
NTR 647	Advanced Metabolism: Proteins 2 credits
NTR 693	Data Analyses and Interpretation 4 credits
NTR 695	Applied Research 4 credits
NTR 696	Research Communication 2 credits

# **Health Education Concentration**

Health Education Concentration Courses (26 credits)

NTR 530	Science of Sports Nutrition	4 credits	
MPH 609	Cultural Context of Health Care	4 credits	
MPH 657	Nutrition Communication throu	gh Technology	4 credits

#### **Health Education Elective Courses**

# Choose three of the following

MPH 602 Public Health System 4 credits

MPH 604 Epidemiology 4 credits\*

MPH 605 Environmental Health 4 credits

MPH 607 Community Health Analysis 4 credits\*

NTR 634 Public Health Programs and Skills 4 credits\*

MGMT 552 Leadership 2 credits\*

MGMT 579 Training and Development Overview 2 credits\*

## **Nutrition Entrepreneurship Concentration**

Nutrition Entrepreneurship Concentration Courses (26 credits)

MGMT 552 Leadership 2 credits

MBA 559 Entrepreneurship 4 credits

MBA 622 Creativity & Innovation in Business 4 credits

NTR 657 Nutrition Communication through Technology 4 credits

NTR 658 Venture Planning in Nutrition 4 credits

Nutrition Entrepreneurship Elective Courses

Choose 8 quarter hours from the following

<sup>\*</sup>Recommended for students planning to pursue the CHES Certification

NTR 530	Science of Sports Nutrition 4 credits
MPH 609	Cultural Context of Health 4 credits
MPH 610	Health Policy 4 credits
MPH 632	Public Health Education 4 credits
MPH 662	Management of Health Services Organizations 4 credits
MBA 520	Leadership and Ethics in a Global Environment 4 credits
MBA 666	Consumer Behavior 4 credits
MBA 676	Marketing Strategies in the Digital Age 4 credits
MBA 683	Project Management 4 credits
MBA 686	International Marketing 4 credits
MGMT 530	Organizational Behavior4 credits
MGMT 532	Organizational Development 4 credits
MGMT 558	Service Management 2 credits
MGMT 579	Training and Development Overview 2 credits
MGMT 581	Team Building 2 credits

Master of Public Health Program Course Descriptions MS in Nutrition and Wellness Course Descriptions

## MPH 511 Biostatistics

Apply statistical reasoning and methods in addressing, analyzing and solving problems in public health; health care; and biomedical, clinical and population-based research. Prerequisite: Algebra or equivalent.

### MPH 632 Public Health Education

Study educational techniques that encourage behavior change and learn how to best apply them in various settings.

NTR 644 Advanced Metabolism: Lipids and Carbohydrates

Scientific examination of the nature, role, and metabolism of energy nutrients in human health and disease. Applications made to fed and fasted states, adapted starvation, and hypercatabolic and physically stressed states. Prerequisite: NTR 621.

NTR 621 Obesity: Theory and Practice

Discussion of the etiology, physiological, pathophysiological, and psychological impacts, and multidisciplinary assessment and treatment modalities of obesity for persons throughout the life cycle. Prerequisites: NTR 530 or NTR 670 or RD (consent).

NTR 625 Complementary Nutrition Therapies

Scientific examination and discussion of the efficacy of foods, herbs, nutrients, and phytochemicals in various disease conditions, including mechanisms of action, safety issues, bioavailability, and recommendations. Prerequisite: NTR 614.

NTR 629 Health and Wellness Research Planning

Principles and application of the research process with a focus on community-based research and evaluating outcomes of health educational programs. Prerequisite: Credit or concurrent registration in MPH 511.

NTR 633 Advanced Nutrition Topics in Micronutrients: Bone Health

Scientific examination and discussion of the efficacy of select micronutrients, as they relate to specific health concerns, including the nature, bioavailability, mechanisms of action, safety issues, assessment of status, and recommendations in prevention and therapeutic use. Prerequisite: NTR 614.

NTR 647 Advanced Metabolism: Proteins

Scientific examination and application of the nature, role, digestion, absorption, and metabolism of proteins in human health and disease. Prerequisite: NTR 530 or 621.

NTR 693 Data Analyses and Interpretation

Overview of quantitative and qualitative analyses and reporting. Prerequisites: NTR 629 and MPH 511. Fee: \$130.

NTR 695 Applied Research

Students complete a review of current literature and actively participate in research processes, including planning, project implementation, data collection, data entry, and initial data analyses. Students must take NTR 697 and 698 in the same calendar year with the same Research Supervisor (Course Instructor) to meet M.S. in Nutrition and Wellness program research competency requirements for graduation. Transportation may be required for data collection. Prerequisite: NTR 629. Fee: \$160.

NTR 696 Research Communication

Students will continue the research process through analyses and interpretation of statistical data and outputs, development of appropriate graphics, and oral and written dissemination of the research results and conclusions. Prerequisites: NTR 697 and NTR 694. Fee: \$160.

**Health Education Concentration Courses** 

NTR 530 Science of Sports Nutrition

The course examines the metabolic and physiologic basis for macronutrient and micronutrient recommendations during training, competition/ performance, and recovery. Includes disease applications and case studies. Prerequisites: physiology, biochemistry, and nutrition courses; acceptance into M.S. in Nutrition and Wellness program.

MPH 609 Cultural Context of Health Care

Understand the cultural and sociological contexts in which the health care system developed. Examine the role of socio-economic groups in the history of the U.S. health care system.

NTR 657 Nutrition Communications through Technologies

This course applies new and emerging technologies for collaboration, communication, and dissemination of nutrition services and innovations. Prerequisites: NTR 621 or RD (by consent).

**Health Education Elective Courses** 

MPH 602 Public Health System

Explores the history, basic structures and operations of public health and health care delivery systems based on Essential Public Health Services. Cross listed with NRHL 602 and NRHL 320.

MPH 604 Epidemiology

Students analyze chronic and communicable disease patterns in the U.S. and the world. The course covers epidemiological models, preventive health and medicine, the spread of disease throughout history and the study of epidemiological statistical methods.

MPH 605 Environmental Health

Study the health implications of human relationships to the biosphere. Examine the effect of environmental change on physical, biological and social patterns. Explore alternative solutions for environmental problems.

MPH 607 Community Health Analysis

Analyze factors relating to health needs in communities as a means to finding solutions. Coursework involves research and field work.

MPH 634 Public Health Programs and Skills

Focuses on health education programs and the skills required for the Certified Health Educator Specialist (CHES) examinations. PreRequisites: MPH 601 and MPH 632.

### MGMT 552 Leadership

This course examines alternative models of leadership and their effects on employee and organizational performance. Key topics include leadership skills and strategies for effective performance.

### MGMT 579 Training and Development Overview

Students will learn steps in the training and management development process from needs assessment to training evaluation. Topics will explore the role of training in strategic human resource planning and organizational career management.

**Nutrition Entrepreneurship Concentration Courses** 

### MGMT 552 Leadership

This course examines alternative models of leadership and their effects on employee and organizational performance. Key topics include leadership skills and strategies for effective performance.

#### MBA 559 Entrepreneurship

The course covers new venture management, entrepreneurial personalities, managing creativity and establishing a successful enterprise. The major project is a new business plan.

#### MBA 622 Creativity & Innovation in Business

This course explores individual and group methods to enhance innovation in the organization. Theories of creativity are reviewed, as well as the use of technologies to develop new products and processes.

## NTR 657 Nutrition Communications through Technology

This course applies new and emerging technologies for collaboration, communication, and dissemination of nutrition services and innovations. Prerequisite: NTR 621 or RD (by consent).

#### NTR 658 Venture Planning in Nutrition

This course examines the process of planning a successful launch for a new venture. Students in this class will examine actual business ventures they intend to launch or that they are already operating. Prerequisite: MBA 559; and NTR 621 or RD (by consent).

**Nutrition Entrepreneurship Elective Courses** 

NTR 530 Science of Sports Nutrition\*

The course examines the metabolic and physiologic basis for macronutrient and micronutrient recommendations during training, competition/ performance, and recovery. Includes disease applications and case studies. Prerequisites: physiology, biochemistry, and nutrition courses; acceptance into M.S. in Nutrition and Wellness program.

#### MPH 609 Cultural Context of Health

Understand the cultural and sociological contexts in which the health care system developed. Examine the role of socio-economic groups in the history of the U.S. health care system.

### MPH 610 Health Policy

This course considers current health policies as they relate to larger political and social debates, the determinants of disease, and available resources and information-gathering systems necessary to formulate health policies.

#### MPH 632 Public Health Education

Students will focus on educational techniques that encourage behavior change and their applications in various settings.

MPH 662 Management of Health Services Organizations

This course is an overview of the organizational structures, management styles and challenges in health care organizations. Students will learn key business functions as they apply to the effective management of health care organizations.

### MPH 664 Marketing of Health Care Services

This course examines actions that successful health leaders take in the planning, strategy, research and implementation of marketing plans. Students explore concepts of marketing theory and the execution of marketing tactics as they apply to the health industry.

### MBA 520 Leadership and Ethics in a Global Environment

The course reviews paradigms of leadership in the global environment. Students will learn to apply principles for ethical decision-making in business situations and assess their capacity for leadership and responsibility.

#### MBA 666 Consumer Behavior

Understanding why consumers do the things they do is essential in marketing. In this course, students will explore the many influences that affect individual purchase and consumption behavior. The wideranging approach taken will draw on current theory in psychology, sociology and anthropology.

#### MBA 676 Marketing Strategies in the Digital Age

This class focuses on the marketing efforts that companies of all sizes use to create effective Internet strategies. Students will also investigate what new technologies are dominating the marketplace today, and what we can expect as the Internet and other technologies evolve. The student will become fluent in the language of e-marketing and learn how to effectively design and execute an organization's digital marketing plan.

# MBA 683 Project Management

The class is an examination of the art and science of project management as applied to a variety of business and technology settings. Students will study how to initiate, plan, execute, control and close projects within budget and on schedule. Advanced topics may include critical chains, adaptive and agile project management and portfolio management. A project planning software tool is used, usually MS Project. This course is appropriate for technology and non-technology managers alike.

#### MBA 686 International Marketing

Applies marketing principles and concepts across national borders by examining several key variables of the international environment, such as competition, politics, laws and consumer behavior.

### MGMT 530 Organizational Behavior

Students learn appropriate theory and application of administration and management. The course emphasizes organizational behavior, including motivation, leadership, and organization design.

### MGMT 532 Organizational Development

Students gain mastery in the theory and practice of organizational change and organization development (O.D.), including skills for analysis, planning, implementation, and evaluation of change programs. Topics include the learning process, O.D. interventions, consultant skills, employee participation, monitoring success, reinforcement and ethical issues.

### MGMT 558 Service Management

Students gain an understanding of the management and delivery of effective service. Coursework covers service strategy, development of service systems, human resource strategy and implementation of the service management concept.

#### MGMT 579 Training and Development Overview

Students will learn steps in the training and management development process from needs assessment to training evaluation. Topics will explore the role of training in strategic human resource planning and organizational career management.

#### MGMT 581 Team Building

The focus of this course is on the theoretical basis of team building and its strengths and weaknesses as an organization development intervention.