

# MASTERS PROGRAM NUTRITION (MPN)

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## **MPN 5303 Research Methods II (3)**

Pre-requisite(s): MPN 5401

This course includes a combination of lecture and practical exercises that emphasize the steps and principles of research. Students will participate in all steps of research, working individually as well as in small groups. Steps include the protocol approval process, volunteer recruitment, data collection, data analysis/interpretation, and preparation of written and oral presentations of research findings.

## **MPN 5305 Protocol Development (3)**

Co-requisite(s): MPN 5401

Students will explore topics for protocol development. Hypotheses will be generated and supported by literature reviews.

## **MPN 5307 Nutrition in Stability Operations (3)**

This course is designed to provide students with in-depth knowledge of nutrition issues confronted in complex emergencies and within the developing world. Emphasis will be placed on macronutrient and micronutrient malnutrition, assessment of nutritional needs, nutritional surveillance and food distribution programs.

## **MPN 5311 Leadership and Management Development (3)**

This course is designed to explore a broad range of leadership topics and issues, and to help students develop their executive skills for future roles as managers in clinic and food service operations. Students will have the opportunity to examine their own leadership qualities and develop ways to improve them. Readings will cover both theoretical bases for leadership and practical strategies for effective leadership in the diagnosis, prediction, and analysis of human behavior in organizations.

## **MPN 5401 Research Methods I (4)**

This course is designed to introduce students to the basic and advanced concepts, techniques, and technologies used in the scientific inquiry of applied clinical research.

## **MPN 5404 Advanced Nutrition and Critical Care (4)**

This course provides an in-depth review of the study and application of nutrition principles related to the critically ill patient with an emphasis on trauma and burn. Course includes lab.

## **MPN 5409 Advanced Anatomy & Physiology (4)**

In this course, students will explore anatomy, physiology and pathophysiology of the gastrointestinal, urinary, respiratory, cardiovascular, endocrine and reproductive systems.

## **MPN 5410 Force Health Protection (4)**

Course explores measures to promote, improve, or conserve Soldiers' mental and physical well-being. Students will take a more in-depth and practical approach to evaluating operational Army unit capabilities and physical demands as well as interdisciplinary teamwork to achieve optimal health outcomes.

## **MPN 5411 Effective Scientific Writing (4)**

This course introduces the evidence-based medicine analysis process and provides a structured format for interpretation and application of current research. The course develops and/or builds on skills to find relevant peer-reviewed journal articles for a specific topic; critically evaluate peer reviewed journal articles and determine their appropriateness to the topic being addressed; and write a clear, concise, and coherent literature review.

## **MPN 5503 Nutrition and Performance (5)**

This course provides students with an in-depth knowledge of how nutrition variables can impact both physical and cognitive performance. Topics include exercise physiology, exercise screening, fuel mobilization (carbohydrate, fat, and protein), micronutrients (vitamins and minerals), hydration, body composition, supplements, and energy balance. Course includes lab.

## **MPN 5504 Advanced Energy Metabolism (5)**

Co-requisite(s): MPN 5505

Introduction to various topics in energy disorders, energy metabolism, and biochemistry; apply evidence-based practice in a variety of energy-related disease states and disorders; critically-assess the validity and logic behind weight loss claims and advertisements; explore human weight management; familiarization with gene expression, nutrigenomics, and molecular diagnostics.

## **MPN 5505 Medical Nutrition Therapy (5)**

The course uses lecture, discussions, case studies, and simulations to emphasize the implementation of the nutrition care process (NCP) and the provision of medical nutrition therapy (MNT) to patients with various disease states. The course emphasizes the technical skills needed for nutrition documentation, counseling, and education that includes multiple opportunities to practice interview and counseling.

## **MPN 5V98 Master's Research Project (1-9)**

Student will participate in a group research project (data collection, analysis, and presentation).

## **MPN 5V99 Master's Thesis (1-9)**

Student will complete an individual research protocol (data collection, analysis, and presentation).