MASTERS PROGRAM NUTRITION (MPN)

MPN 5106 Scientific Writing (1)

Co-requisite(s): MPN 5210

This course introduces the evidence-based practice (EBP) analysis process and provides a structured format for students to begin interpreting and applying current research. Students will critically evaluate peer-reviewed journal articles, determine their appropriateness to the topic being addressed, and demonstrate the ability to write clear, concise, and coherent passages for future research project classes.

MPN 5110 Leadership I (1)

MPN 5110 Leadership I educates students on an overview of theoretical frameworks and concepts for the practice of leadership in organizations. Students have the opportunity to examine and discuss these theories and concepts and reflect on how they relate to the Army profession in a variety of environments. The theories and concepts in this course expand upon and complement leadership doctrine in ADP 6-22.

MPN 5120 Leadership II (1)

Pre-requisite(s): MPN 5110

MPN 5120 Leadership II builds on the foundation from Leadership I. It continues to educate students on an overview of theoretical frameworks and concepts for the practice of leadership in organizations. Students have the opportunity to examine and discuss these theories and concepts and reflect on how they relate to the Army profession in a variety of environments.

MPN 5121 Research Project 1 (1)

Co-requisite(s): MPN 5220

Pre-requisite(s): MPN 5106 and MPN 5210

The course continues the evidence-based practice analysis process initiated in Scientific Writing (MPN5106). Students expand their detailed literature review outline into a complete narrative literature review document. Students identify one research topic theme to develop a research abstract and poster presentation that demonstrates their ability to articulate the evidence synthesized in a variety of forums.

MPN 5130 Leadership III (1)

Pre-requisite(s): MPN 5110 and 5120

MPN 5130 Leadership III builds on the concepts introduced in Leadership I and II. It continues to educate students on an overview of theoretical frameworks and concepts for the practice of leadership in organizations with further application. A series of executive skills sessions exposes the students to key skills and tools for success as a Company grade leader and Dietitian.

MPN 5210 Research Methods I (2)

This course is the first in a series of two courses that, in conjunction with Scientific Writing, provide the foundational knowledge and skills required for successful completion and defense of student research projects. Research Methods I introduces students to basic and advanced concepts related to research design and statistics.

MPN 5216 Exercise Physiology (2)

Co-requisite(s): MPN 5231

Pre-requisite(s): MPN 5309 and 5314

Course uses lecture, discussion, and practical exercises to develop an in depth, applied knowledge of factors affecting physical human performance. A range of topics is addressed, including muscle physiology, cardiovascular kinetics in physical activity, exercise energy metabolism, training adaptations, exercise/training recommendations, physiological testing theory and validity, and physiology in extreme environments.

MPN 5217 Medical Nutrition Therapy II (2)

Pre-requisite(s): MPN 5407 and MPN 5314

This clinical nutrition course prepares future registered dietitian nutritionists by providing foundational knowledge of chronic disease states common among the American population. Each diseasespecific block of instruction addresses related anatomy & physiology, pharmacology (prescribed medications, OTC considerations, drug nutrient interactions), MNT recommendations, comorbidities, and lifecycle considerations.

MPN 5220 Research Methods II (2)

Co-requisite(s): MPN 5121

Pre-requisite(s): MPN 5106 and 5210

This course builds on the foundation of basic and advanced concepts related to research design and statistics attained in MPN 5210 Research Methods I. Students continue to gain an understanding of and interpret basic and advanced statistical analysis techniques. Students learn to perform these operations on SPSS statistical software.

MPN 5225 Public Health II with Lab (2)

Pre-requisite(s): Medical Nutrition Therapy I II, Public Health I Public Health II expands on foundational concepts introduced in Public Health I, but now framing in a global perspective. Students are exposed to current and emerging issues in global and public health nutrition. They learn to recognize how health indicators, health disparities, and resource availability/accessibility influence the nutrition status of regions worldwide, with an emphasis on lower-middle income countries.

MPN 5231 Research Project II with Lab (2)

Pre-requisite(s): MPN 5106, 5210, 5220, 5121, 5316

This course continues the research process following Scientific Writing (MPN 5106) and Research Project I (MPN 5121). In small teams, students conduct a mock research study. The course is founded on experiential learning experiences that include developing a research plan and data collection code book, collecting data using a variety of nutrition-relevant tools, and cleaning and analyzing the dataset.

MPN 5235 Organizational Stewardship with Lab (2)

Pre-requisite(s): MPN 5522

Organizational stewardship creates accountable and committed workplaces by imposing personal responsibility, accountability, and ownership on employees and leaders. This course encourages putting organizational goals over self-interest and ensuring that the organization thrives for subsequent leaders and generations. The course explores fiscal and human resources and governance for department success within a resource-constrained organization.

MPN 5240 Experiential Practice I Lab (2)

Pre-requisite(s): Comprehensive Oral and Written Examination for MPN This course provides experiential learning to enrich competencies with a staff experience. There are several core leadership and management competencies that all MPN 5240 Experiential Practice I Lab students will complete during this course. However, students have the option to choose additional competencies that will be mutually agreed upon by faculty, preceptors, and students.

MPN 5241 Research Project III with Lab (2)

Pre-requisite(s): MPN 5106, MPN 5210, MPN 5220, MPN 5121, and MPN 5231

This course continues the research process following Scientific Writing (MPN 5106) and Research Project I (MPN 5107) while reflecting on the research experiences gained during MPN 5231. Students create a research plan to investigate an assigned research topic, and understand the research protocol's importance in completing sound scientific research while protecting human subjects/study participants.

MPN 5245 Military Nutrition Operations with Lab (2)

Pre-requisite(s): Approximately one month prior to attending Joint Field Nutrition Operations Course, all students have will complete the Emergency Preparedness Response Course (EPRC) – Basic Awareness Course through JKO and Chemical Biological Radiological Nuclear Energy (CBRNE) prerequisite online courses

The course incorporates current concepts and doctrine along with experiential practice in the management of a nutrition care section within an Army deployable hospital system. This section is responsible for providing hospital nutrition care services including meal preparation and service for patients and staff, providing patient education, and advising the commander on health and nutrition related issues.

MPN 5251 Research Project IV with Lab (2)

Pre-requisite(s): MPN 5106, 5121, 5210, 5220, 5231, and 5241 Students conduct their research studies, complete a variety of research activities, and demonstrate ability to integrate evidence-informed research principles, critical thinking, and communication skills.

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 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 5309 Advanced Energy Metabolism (3)

Co-requisite(s):

Introduction to various energy disorders, energy metabolism, and bioenergetics; requires application of evidence-based practice in a variety of energy-related disease states and disorders; requires critical assessment of the validity and logic behind weight loss claims and advertisements; explores best practices for adult and pediatric weight management; and includes aspects of gene expression, nutrigenomics, and nutrigenetics.

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 5314 Nutrition Care Process with Lab (3)

Co-requisite(s): MPN 5407

This nutrition course prepares future registered dietitians nutritionists by providing foundational knowledge about the Nutrition Care Process (NCP).

MPN 5315 Public Health I with Lab (3)

Co-requisite(s): MPN 5217

Pre-requisite(s): MPN 5407 and MPN 5314

Course uses lecture, discussion, online resources, and practical exercises to introduce and explore measures to promote, improve, or conserve the military community. Students take an in-depth and practical approach to food policy, behavioral design, and food availability. Topics include programs, initiatives, regulations and policies, and occupational specialties unique to the military, both in garrison and in deployed settings.

MPN 5336 Performance Nutrition with Lab (3)

Pre-requisite(s): MPN 5309, MPN 5314, MPN 5231, and MPN 5216 Exercise Physiology

Course uses lecture, discussion, and practical experiences to develop an in-depth, applied knowledge of factors affecting physical and cognitive human performance. Proactive, active, and reactive components of a comprehensive performance nutrition concept are presented.

MPN 5337 Advanced Medical Nutrition Therapy II with Lab (3)

Pre-requisite(s): MPN 5407, 5314, 5217, and 5527 This clinical nutrition course provides advanced knowledge of nutrition support therapy and evidence-based practice for various critical care populations. Anatomy & physiology, pharmacology (prescribed medications, OTC considerations, and drug nutrient interactions), MNT recommendations, comorbidities, and lifecycle consideration are reviewed for advanced disease states.

MPN 5346 Human Performance Optimization with Lab (3) Pre-requisite(s): MPN 5336

The Human Performance Optimization (HPO) course educates an interprofessional care team of military allied health students (Occupational Therapist [65A], Physical Therapist [65B], and Registered Dietitian [65C]) who collaboratively develop and deliver holistic individual and unit services in a resource-constrained military environment outside of standard clinical care environments.

MPN 5361 Research Project V with Lab (3)

Pre-requisite(s): MPN 5106, 5210, 5220, 5121, 5231, 5241, 5251 and pass oral board examination

This course is the final step in the research process. Students finish data analysis, develop results tables / figures, complete their written manuscripts, and defend their studies to their research committees. This course is founded on experiential learning experiences that include data analysis, creation of tables and figures to display relevant findings, and properly interpreting the results through written and oral communication.

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 5407 Medical Nutrition Therapy I with Lab (4)

Co-requisite(s): MPN 5314

This clinical nutrition course prepares future registered dietitian nutritionists by providing foundational knowledge of nutrition requirements and considerations for various populations.

MPN 5450 Experiential Practice II Lab (4)

Pre-requisite(s): MPN 5240

This course provides experiential learning to enrich competencies with a staff experience. There are several core leadership and management competencies that all students will complete during this course. However, students have the option to choose additional competencies that will be mutually agreed upon by faculty, preceptors, and students.

MPN 5504 Advanced Energy Metabolism (1,5)

Co-requisite(s): MPN 5505

Introduction to various topics in energy disorders, energy metabolism, and biochemistry; apply evidence-based practice in a variety of energyrelated 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 5522 Food Service and Management (5)

Pre-requisite(s): Computrition Orientation

This course focuses on food safety and regulations as well as human resource management, institutional menu development, budgeting, finance, and food service equipment, layout and design. This course explores a broad range of leadership and food service topics and issues, and helps students develop their executive skills for future roles as military officers, leaders, and managers.

MPN 5527 Advanced Medical Nutrition Therapy (MNT) I with Lab (5)

Pre-requisite(s): MPN 5407, MPN 5314, and MPN 5217 This clinical nutrition course prepares future registered dietitian nutritionists by providing advanced knowledge of nutrition support therapy and evidence-based practice for various critical care populations. Each disease-specific block of instruction addresses related anatomy & physiology, pharmacology (prescribed medications, OTC considerations, and drug nutrient interactions), MNT recommendations, comorbidities, and lifecycle considerations.