

## **MND/DI Course Descriptions and Objectives**

### **MND 502: Nutrition Counseling and Education Methods**

**3 Credit Hours**

Prerequisite: BS in dietetics or equivalent

Explore counseling and learning theories for individuals and groups in community and clinical settings. Includes discussion and experience in building rapport, assessment, diagnosis, intervention, monitoring, evaluation, and documentation. Students will also develop skills in assessing readiness for change, health literacy and motivational interviewing, Literature review of specific counseling, health literacy, learning theories and behavior modification. Students will apply these principles in the clinical setting as they assist in the management of health behaviors in a patient-centered approach.

At the completion of the course, the student will:

- Understand components of the communication model for collaborative and effective communication
- Understand the interview process, effective interviewing and the use of effective questions to develop skills in executing a nutrition interview
- Identify/explain the stages of change and the process appropriate for each stage of change
- Understand the concept of health literacy to identify the level of health literacy in patient education
- Understand and develop principles and skills in motivational interviewing
- Explore methods for appropriate goal setting to elicit effective change

### **MND 521 Critical Thinking in Nutrition**

**3 Credit Hours**

Prerequisite: BS in dietetics or equivalent

The course is designed to assist the student in development of a skeptical, open mind and serious analytical thinking to identify, analyze and evaluate evidence and problems. Skillful use of critical reading and writing as a mode of thinking assist the student in development of the ability to present information in an orderly and coherent way. Through the deliberate and disciplined process of critical thinking, the student is able to analyze and evaluate the strength of evidence in the nutrition discipline. The process assists students to gradually increase their expertise in clinical reasoning as reliable professionals ensuring quality client care. The course will utilize the elements of thought and the universal intellectual standards to critically think through the complex problems and issues in nutrition and patient care.

At the completion of the course, the student will:

- Use the elements of reasoning and intellectual standards to think through intellectual, academic, personal, social and political problems
- Begin to utilize critical reading and writing as a mode of thinking
- Develop a deliberate and disciplined process to routinely apply reflective, critical thought in patient care situations.
- Demonstrate intellectual independence that utilizes intellectual standards to self-evaluate

### **MND 524 Concepts in Pharmacology and Pathophysiology      3 Credit Hours**

Prerequisite: BS in dietetics or equivalent

Explores the nature, cause and treatment of disease including the etiology, signs, symptoms, medical terminology, diagnostic evaluation, and pharmacological management. Basic pathogenesis of human disease will be reviewed. Designed for the dietetic student to provide a foundation for clinical practice and future didactic courses.

At the completion of the course, the student will:

- Understand signs, symptoms and diagnostic criteria for common pathologies
- Define basic medical terminology related to pathophysiology
- Understand basic pathogenesis of human disease
- Develop a working knowledge of pharmacological treatment for common pathologies
- Begin to explore impact of pharmacological treatment on nutritional status

### **MND 531 Supervised Practice I      2 Credit Hours**

Prerequisite: BS in dietetics or equivalent

A practicum/supervised practice experience that includes medical nutrition therapy, food service/clinical management and community rotations and further develops the skills to determine nutrition diagnoses & etiologies, macro/micronutrient needs and formulate appropriate medical nutrition therapy plans utilizing the 9 step NCP. The interrelationships of nutrition with biochemical, physiological and anatomical changes associated with acute, chronic, and terminal illness are considered in development of the basic NPE skills. Experiences take place in hospitals, clinics, and other practice settings in which medical nutrition services are provided. These rotations are designed to meet the ACEND competencies for entry-level practice. This course includes a didactic component that serves to reinforce the supervised practice experiences.

At the completion of the course, the student will:

- Have completed the required supervised hours for this course as well as required competencies, evaluations, and study guides

### **MND 535 Nutrition Diagnostics & Assessment 1      3 Credit Hours**

Prerequisite: BS in dietetics or equivalent

Introduction to nutrition diagnosing and assessment using Kight's Nutrition Care Process.

Discussion, case studies, literature review and small group work form the basis for providing the foundation in using diagnostic codes to write diagnostic statements and consider intervention strategies. Nutrition assessment will be studied in the context of the NCP, with focus on the 5 axes of evidence. The states of protein calorie malnutrition, stress, and inflammation will be investigated in the context of specific pathological conditions.

At the completion of the course, the student will:

- Use the NDCs/language to write diagnostic statements
- Establish evidence based standards within each of the 5 axes of evidence
- Consider the evidence based standards in the 5 axes to evaluate/determine nutritional

status, the nutrition problems and their etiologies

- Define and classify PCM
- Use the Global NPE within the NCP
- Consider limitations of tools/measures/standards within the 5 axes of evidence when evaluating nutrition status.

### **MND 541 Nutrition Diagnostics & Assessment 2                      3 Credit Hours**

Prerequisites: MND 535 & MND 531 or DI supervised practice

This course is designed to facilitate the application of Kight's nutrition care process in a variety of more complex client settings. Skill development in use of the 5 axes of evidence to gather relevant client information will be emphasized. Further development of clinical skills in use of the NPE, hand grip dynamometer and diagnostic criteria for PCM will be a focus. The micronutrient NPE will be introduced and incorporated as a clinical assessment tool. The interplay of inflammation, pathology, aging, cachexia, and sarcopenia with nutritional status will be investigated. Discussion, lecture, group work and case studies will serve as the basis for the learning environment.

At the completion of the course, the student will:

- Use the NDCs/language to write diagnostic statements
- Establish evidence based standards within each of the 5 axes of evidence
- Consider the evidence based standards in the 5 axes to evaluate/determine nutritional status, the nutrition problems and their etiologies
- Define and classify PCM
- Use the Global NPE and the micronutrient NPE within the NCP
- Consider limitations of tools/measures/standards within the 5 axes of evidence when evaluating nutrition status

### **MND 551 Nutrition and Health Enhancement                      3 Credit Hours**

Prerequisites: BS in dietetics or equivalent

An in-depth look at the role of nutrition in the enhancement of wellness and management of chronic disease. Normal human physiology and pathophysiology will be reviewed to better understand the relationship between health and disease. Established and contemporary nutrition therapies will be explored and evaluated to create nutrition therapy plans in a variety of patient scenarios.

At the completion of the course, the student will:

- Critically evaluate the literature to understand the nutritional and physiological interrelationships as they apply to wellness and management of chronic disease
- Compare current/emerging research to traditional approaches
- Formulate nutrition interventions that address chronic disease while considering traditional and non-traditional approaches

**MND 556 Supervised Practice II****2 Credit Hours**

Prerequisite: MND 531

A practicum/supervised practice experience that includes medical nutrition therapy, food service/clinical management and community rotations and further develops the skills to determine nutrition diagnoses & etiologies, macro/micronutrient needs and formulate appropriate medical nutrition therapy plans utilizing the 9 step NCP. The interrelationships of nutrition with biochemical, physiological and anatomical changes associated with acute, chronic, and terminal illness are considered in development of the basic NPE skills. Experiences take place in hospitals, clinics, and other practice settings in which medical nutrition services are provided. These rotations are designed to meet the ACEND competencies for entry-level practice. This course includes a didactic component that serves to reinforce the supervised practice experiences.

At the completion of the course, the student will:

- Have completed the required supervised hours for this course as well as required competencies, evaluations, and study guides

**MND 557 Staff Relief****1 Credit Hours**

Prerequisite: MND 556

A 160 clinical hour practicum (4 week staff relief – 40 hours/week).

Culmination of MNT supervised practice experience. Student assumes the role of the clinical RD in providing all clinical nutrition care of patients for a 4 week time period, utilizing the 9 step NCP and incorporating the NK/ND modeling. Experiences take place in hospitals, clinics, and other practice settings in which medical nutrition services are provided.

At the completion of the course, the student will:

- Have completed all course requirements including required supervised hours, competencies, and passing grade on evaluations.

**MND 560: Supervised practice III (II) 2 credit hours**

Prerequisite: MND 557

A practicum/supervised practice experience designed for graduate level students. Opportunities to utilize foundational and advanced nutrition assessment skills, including the nutrition-focused physical exam, Kight's Nutrition Care Process, nutriokinetic and nutriodynamic modeling are provided. Experiences may take place in the hospital, clinics or in the community setting. This course requires availability during a designated weekday(s) and occasional nights and weekends.

At the completion of the course, the student will be able to

- Efficiently and effectively assess the nutritional status of patients utilizing Kight's Nutrition Care Process
- Utilize evidence-based practice to guide clinical decision making
- Expand use of the NDCs/language to write diagnostic statements for nutrition problems
- Outline evidence-based nutritional strategies to address nutrition diagnoses
- Work independently to complete nutrition-related activities

**MND 571: Supervised Practice IV (II)****2 credit hours**

Prerequisite: MND 560

At the completion of the course, the student will be able to

- Efficiently and effectively assess the nutritional status of patients utilizing Kight's Nutrition Care Process
- Utilize evidence-based practice to guide clinical decision making
- Expand use of the NDCs/language to write diagnostic statements for nutrition problems
- Outline evidence-based nutritional strategies to address nutrition diagnoses

**MND 581 Integrative Approaches in Nutrition****3 Credit Hours**

Prerequisite: BS in Dietetics or Equivalent

Literature-based course designed to compare emerging nutrition research with traditional approaches with the goal of advancing practice knowledge and skills. Student-led and instructor supported reading and discussion groups provide the basis for the course structure, building upon knowledge and practice experiences.

At the completion of the course, the student will:

- Critically evaluate the literature to understand the nutritional and physiological interrelationships as they apply to integrative approaches to nutrition
- Compare current/emerging research to traditional approaches
- Formulate nutrition interventions to address contemporary nutrition problems while considering traditional and non-traditional approaches

**MND 600: Research Methods in Nutrition****3 Credit Hours**

Prerequisites: MND 541

Explores foundational research principles relevant to the nutrition professional. Types of research, research design, methods of data collection, critical analysis, bias, significance, and unique problems in nutrition research will be explored. Nutrition literature will be utilized and critically evaluated to reinforce concepts and add utility in clinical practice. The process of developing a research proposal will be discussed.

At the completion of the course, the students will:

- Understand basic research concepts and principles
- Understand the utility & limitations of peer-review nutrition literature
- Critically evaluate peer-review nutrition literature using a systematic process
- Understand steps needed to develop a research proposal

**MND 611 Application of Clinical Reasoning to Diagnose Nutrient Imbalances****3 Credit Hours**

Prerequisites: MND 541

This course is designed to increase competency and proficiency in nutrition diagnosing/ clinical problem-solving skills. The course takes an advanced look at nutrition imbalances, considering short and long latency nutrition disease through Kight's advanced level practice Nine-Step Nutrition Care Process. Clinical reasoning theory and approaches will be investigated, along with interview and history taking techniques. Advanced casework will be used to work through the NCP with emphasis on diagnosing macronutrient and micronutrient imbalances.

At the completion of this course, the student will be able to

- Diagnose nutrition problems with improved competence and proficiency via development of clinical problem-solving skills
- Exhibit improved skills in, and clinical interpretation of, history data and physical findings
- Demonstrate an advanced understanding of Kight's NCP
- Understand clinical reasoning theory and approaches

### **MND 640: Advanced Nutrition Assessment in Chronic Disease I**

Prerequisites: MND 541 or approval of instructor

An in-depth look at nutrition assessment in a variety patient conditions. Advanced examination of the 5 axes of evidence will be used to help formulate diagnostic statements, and targeted individualized goals and interventions. The role of inflammation in the development and progression of malnutrition will be investigated in the context of a variety of chronic conditions.

At the completion of the course, the students will:

- Establish evidence based standards within each of the 5 axes of evidence by expanding understanding of the biology & pathophysiology of the human condition and the relationship to nutritional status
- Consider the evidence based standards in the 5 axes to evaluate/determine nutritional status, nutrition problems and etiologies
- Consider use and limitations of tools/measures/standards within the 5 axes of evidence when evaluating nutrition status
- Expand use of the NDCs/language to write diagnostic statements for nutrition problems
- Outline evidence-based nutritional strategies to address nutrition diagnoses
- Understand the role of inflammation in the development and progression of malnutrition in a variety of chronic conditions.

### **MND 650: Advanced Nutrition Assessment in Chronic Disease II**

Prerequisites: MND 640 or approval of instructor

An in-depth look at nutrition assessment in a variety of additional patient conditions not previously investigated. Advanced examination of the 5 axes of evidence will be used to help formulate diagnostic statements, and targeted individualized goals and interventions. The role of inflammation in the development and progression of malnutrition will be investigated in the context of a variety of chronic conditions.

At the completion of the course, the students will:

- Establish evidence based standards within each of the 5 axes of evidence by expanding understanding of the biology & pathophysiology of the human condition and the relationship to nutritional status
- Consider the evidence based standards in the 5 axes to evaluate/determine nutritional status, nutrition problems and etiologies
- Consider use and limitations of tools/measures/standards within the 5 axes of evidence when evaluating nutrition status

- Expand use of the NDCs/language to write diagnostic statements for nutrition problems
- Outline evidence-based nutritional strategies to address nutrition diagnoses
- Understand the role of inflammation in the development and progression of malnutrition in a variety of chronic conditions.

### **MND 665: Evidence-Based Practice in Nutrition**

Prerequisites: MND 600

Utilizes foundational research principles to assess nutrition research to make clinical decisions.

A variety of topics and case scenarios will be utilized to demonstrate the use of current best evidence to form individualized approaches to patient care. Point of Care resources will be reviewed and utilized to promote quick, evidence-based decisions needed in clinical settings.

At the completion of the course, the students will:

- Understand the differences between evidence-based practice and research
- Utilize evidence-based practice to guide clinical decision making for individual patients in a wide variety of scenarios

Be able to efficiently utilize Point of Care resources to guide decisions