# **NC A180: INTRODUCTION** TO MEDICAL NUTRITION **THERAPY**

Item Curriculum Committee Approval

11/01/2023

Value

Top Code

130660 - Dietetic Technology

Units 3 Total Units

Hours

Course Credit Status

**Basic Skills** 

72 Total Hours (Lecture Hours 45; Lab Hours 27)

Total Outside of Class Hours

Credit: Degree Applicable (D)

Material Fee

Not Basic Skills (N)

Repeatable

**Grading Policy** Standard Letter (S)

#### **Course Description**

The principles of nutrition and dietetics as they relate to medical nutrition therapy (MNT), a nutrition-based treatment for health conditions and diseases. Nutrition assessment and interventions are studied and planned. PREREQUISITE: FN A170 or FN A136 or KIN A283 or HLED A136. Transfer Credit: CSU.

## Course Level Student Learning Outcome(s)

- 1. Research and discuss current information on a disease, as assigned, including treatment/therapies used.
- 2. Develop modified meal plans appropriate to specific diets or disease states.

# **Course Objectives**

- 1. List the components involved in the Nutrition Care Process.
- · 2. Identify basic medical terminology related to specific body conditions or diseases.
- · 3. Identify the nutritional components of a diet necessary to meet daily dietary needs for individuals of various ages and lifestyles.
- · 4. Plan modifications of the normal diet in regard to specific body conditions or diseases, and discuss the need for accuracy in following any diet prescribed by a physician.
- · 5. Define the psychological factors involved in planning, preparing and serving food to the sick
- · 6. Discuss appropriate techniques for educating the patient regarding dietary changes, recognizing the importance of patient rights and patient lifestyles.
- · 7. Describe the various members of the dietetic team and their responsibilities.

#### **Lecture Content**

Introduction to Course Review and Application of Tools for Evaluating Nutritional Intake DRI, MyPlate Dietary Goals and Guidelines Food Exchange System Vegetarian Diets Child Nutrition Program Evaluation Food Guides Review of the Human Body Systems Digestion -

Identification of Enzymes, Organs Involved Absorption - Organs and Mechanism involved Metabolism - Cellular Biochemistry review Excretion - Role of Kidneys, Large and Small Intestines Medical Terminology Overview - Common Medical Abbreviations Prefix - Root - Suffix Overview of Nutritional Assessment Screening Tools - Type - Information Provided Dietary - Anthropometric - Clinical - Biochemical Data Nutrition Care Planning, Implementation, Evaluation Drug-Nutrient Interaction Stress Management Routine Hospital Diets and Protocol (Diet Office Procedures) Conditions/Diseases requiring Dietary Modification Lecture/ Discussions Include: Normal Role of the Organ - Related Medical Terminology Abnormal Conditions/Diseases related to Organ Causes -Symptoms - Prognosis Medical Nutrition Therapy Used and Rationale Application of Dietary Modification to Case Studies/Medical Scenarios Special Dietary Product Evaluation Topics Include: Gastro-Intestinal Diseases Diabetes Mellitis Food Allergies/Intolerances Renal Diseases Malnutrition/Hypermetabolic Conditions/Immune Deficiencies (Cancer, Burns, Aids, Trauma/Surgery) Eating Disorders - Anorexia, Bulemia, Obesity Enteral and Parenteral Feeding Nutrition Supplementation

#### **Lab Content**

Nutritional Assessment Screening Tools - Type - Information Provided Dietary - Anthropometric - Clinical - Biochemical Data Nutrition Care Planning, Implementation, Evaluation Drug-Nutrient Interactions Routine Hospital Diets Medical Nutrition Therapy: Application of Dietary Modification to Case Studies/Medical conditions Special Dietary Product Evaluation Gastro-Intestinal Diseases Diabetes Mellitis Food Allergies/ Intolerances Renal Diseases Malnutrition/Hypermetabolic Conditions Cancer, Burns, Aids, Trauma/Surgery Overweight/Obesity Bariatric surgery Pulmonary disease Enteral and Parenteral Feeding Nutrition Supplementation

# Method(s) of Instruction

- Lecture (02)
- · DE Live Online Lecture (02S)
- · DE Live Online Lab (04S)

#### **Instructional Techniques**

Lecture presentations; discussion; small group problem-solving of medical case studies/scenarios; dietary product and supplement evaluation.

## **Reading Assignments**

Students will spend approximately 2 hours a week reading assigned textbook chapters and faculty provided handouts, including research articles

## **Writing Assignments**

Students will spend approximately 2.75 hours a week completing the writing to demonstrate their ability to modify regular menus to comply with specific dietary regimens for a condition/disease Solve problems and write answers to research questions. Develop nutrition care plans (small group problem-solving) based on case studies.

## **Out-of-class Assignments**

Students will spend approximately 2 hours a week completing case studies; performing data collection and analysis; tracking and evaluating nutritional intake; utilizing nutrition software for menu analysis.

## **Demonstration of Critical Thinking**

Tests on each major disease; comprehensive final exam; assignments on planning diet modification

## **Required Writing, Problem Solving, Skills Demonstration**

Modify regular menus to comply with specific dietary regimens for a condition/disease Solve problems, organize thoughts and write short answers to test questions Compare and evaluate nutrition information on food labels Develop nutrition care plans (small group problem-solving) based on short medical scenario

# **Eligible Disciplines**

Nutritional science/dietetics: Masters degree in nutrition, dietetics, or dietetics and food administration OR bachelors degree in any of the above AND masters degree in chemistry, public health, or family and consumer studies/home economics OR the equivalent. (Note: A bachelors degree in nutrition, dietetics, or dietetics and food administration, and certification as a registered dietician, is an alternative qualification for this discipline.) Masters degree required. Title 5, section 53410.1

#### **Textbooks Resources**

1. Required DeBruyne.L. K., Pinna, K, Whitney, E.N.. Nutrition and Diet Therapy, 10th ed. Cengage, 2019