

DIET-2301: MEDICAL NUTRITION THERAPY I

Cuyahoga Community College

Viewing: DIET-2301 : Medical Nutrition Therapy I

Board of Trustees:

December 2021

Academic Term:

Fall 2022

Subject Code

DIET - Dietetic Technology

Course Number:

2301

Title:

Medical Nutrition Therapy I

Catalog Description:

Basic nutrition knowledge applied to medical nutrition therapy and the nutrition care process. Apply medical nutrition therapy using evidence based practice with practice cases.

Credit Hour(s):

3

Lecture Hour(s):

3

Requisites

Prerequisite and Corequisite

DIET-1200 Basic Nutrition, and DIET-1320 Nutrition Applications, and BIO 2331 Anatomy and Physiology I, and BIO 2341 Anatomy and Physiology II or Program Approval.

Outcomes

Course Outcome(s):

Follow the Nutrition Care Process to provide technical practice for implementation of the nutrition care plan, including nutrition education, interventions for food and/or nutrient delivery; maintaining required medical records, and making appropriate patient referrals and follow-up.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Use current nutrition informatics to develop, store, retrieve and disseminate information and data.
 2. Identify and describe the work of the interprofessional teams and roles of others with whom the nutrition and dietetics technician, registered, collaborates in the delivery of food and nutrition services.
 3. Use current nutrition informatics to develop, store, retrieve and disseminate information and data.
 4. Identify and describe the work of interprofessional teams and roles of others with whom the nutrition and dietetics technician, registered, collaborates in the delivery of food and nutrition services.
 5. KNDT 3.1 Use the Nutrition Care Process for nutrition screening for referral to the registered dietitian nutritionist, collection of assessment data, nutrition interventions, and monitoring strategies appropriate for the technician level of practice.
 6. KNDT 1.2 Use current information technologies to locate and apply evidence based guidelines and protocols.
 7. CNDT 1.1 Access data, references, patient education materials, consumer and other information from credible sources.
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Course Outcome(s):

Implement components of care for individuals/groups across demographic populations through medical nutrition therapy/the Nutrition Care Process.

Objective(s):

1. Perform specific activities of the Nutrition Care Process as assigned by the registered dietitian, nutritionists in accordance with the Scope of Nutrition and Dietetics practice, for individuals, groups, and populations in a variety of settings.
2. Refer situations outside the nutrition and dietetics technician scope of practice or area of competence to a registered dietitian nutritionist or other professional.
3. Show cultural competence in interactions with clients, colleagues and staff.
4. Use applied evidence based practice to demonstrate basic understanding and medical nutrition therapy for the treatment of diabetes mellitus-Type I and II; cardiovascular disease, diseases of the upper gastrointestinal system, obesity, bariatric surgery, enteral and parenteral nutrition support.
5. Use applied practices that include accommodations for various demographic populations, cultural diversity and health states of various population groups, and individuals for the following medical cases: type I and type II diabetes mellitus, cardiovascular disease, diseases of the upper gastrointestinal (GI), obesity & bariatric surgery, and enteral nutrition support.
6. KNDT 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence based practice decisions related to the dietetics technician level of practice.
7. KNDT 1.3 Apply critical thinking skills to the implementation of components of care for individuals/groups across demographic populations through medical nutrition therapy/the nutrition care process.
8. CNDT 1.1 Evaluate information to determine if it is consistent with accepted scientific evidence.

Course Outcome(s):

Apply critical thinking skills to the Nutrition Care Process.

Objective(s):

1. Adhere to current federal regulations and state statutes and rules in application and in accordance with accreditation standards and the Scope of Dietetics practice, standards of professional practice and the code of ethics.
2. Access data, references, patient education materials, consumer and other information from credible sources.
3. Evaluate information to determine if it is consistent with accepted scientific evidence.

Methods of Evaluation:

1. Quizzes
2. Examinations
3. Case Studies
4. Student Assignments
5. Class Participation

Course Content Outline:

1. Review of
 - a. Essential Nutrients
 - b. Energy Yielding Nutrients
 - c. Water and electrolytes
2. Review of Alimentary tract and nutrition
 - a. Anatomy
 - b. Terms
3. Medical term formation/use
4. Medical dictionary use
5. Electronic reference base
 - a. Centers for Medicare and Medicaid services
 - b. Academy of Nutrition and dietetics Evidence Analysis Library (EAL)
 - c. Electronic Health records and Nutrition Informatics
 - d. Academy of Nutrition and Dietetics (AND) online Nutrition Care manual
 - e. Electronic Nutrition Care Process (eNCP) Terminology
6. Nutrition care process Review of AND tutorials
 - a. Medical care and records
 - b. Nutrition care plan
 - c. Nutrition interview

- d. Nutrition screening
- e. Nutrition assessment
 - i. Scope of practice/referral
 - ii. Principles and methods of nutrition screening and Nutrition Focused Physical Assessment
 - iii. Malnutrition
 - iv. Anthropometric measurements
 - i. Methods for assessing immune function
 - ii. Methods for assessing visceral protein mass
 - iii. Methods for assessing skeletal muscle
 - iv. Methods of assessing body fat: skinfold, underwater weighing, bioelectrical impedance, dual energy X-ray, height/weight table
 - v. Body weight and height
 - 1. Percent usual body weight
 - 2. Percent ideal body weight
 - vi. Waist-to-hip ratio
 - vii. Body composition analysis
 - viii. Monitoring strategies
- f. Evidence Based practice and nutrition resources
- g. Introduction to Nutrition Interviewing and Education
- h. Ethics, Jurisprudence and quality of care
 - i. Regular and modified diets
 - j. Nutrition and drug nutrient interactions
- 7. Prevention and management of disease
 - a. Diseases of the upper GI
 - i. Disorders of mouth and esophagus
 - ii. Disorders of stomach
 - iii. At risk population
 - b. Type I and Type II diabetes mellitus
 - i. History
 - ii. Causes/ symptoms
 - iii. At risk population
 - iv. Intervention
 - 1. Insulin
 - 2. Diet and activity
 - 3. Medications
 - v. Complications
 - vi. Nutritional concerns
 - vii. Evidence based nutrition practice
 - 1. Medical nutrition therapy goals
 - 2. Menu planning
 - 3. Education
 - c. Cardiovascular disease
 - i. History
 - ii. Causes/ symptoms
 - iii. At risk populations
 - iv. Intervention
 - 1. Diet and activity
 - 2. Medications
 - v. Complications
 - vi. Nutritional concerns
 - vii. Evidence based nutrition practice
 - 1. Medical nutrition therapy (MNT) goals
 - 2. Menu planning
 - 3. Education
 - d. Introduction to nutrition support
 - i. Enteral nutrition
 - 1. Types of formula
 - 2. Formula selection
 - 3. Supplemental use

- 4. Tube feedings
 - ii. Parenteral Nutrition: Introduction
- e. Weight control/obesity/bariatric surgery
 - i. Causes/ symptoms
 - ii. Intervention
 - iii. At risk populations
 - iv. Complications
 - v. Nutritional concerns
 - vi. Evidence based nutrition practice
 - 1. Medical nutrition therapy goals
 - 2. Menu planning
 - 3. Education
- f. Introduction to functional and alternative medicine relating to nutrition

Resources

Academy of Nutrition and Dietetics. *The Nutrition Care Manual (online)*. Chicago: Academy of Nutrition and Dietetics, 2019.

Nelms, Marcia, Sucher, Kathryn P. *Nutrition Therapy and Pathophysiology*. 4th edition. Cengage Learning, 2020.

Academy of Nutrition and Dietetics. *eNCPT (Electronic Nutrition Care Process Terminology)*. 2018 ed. ncpt.webauthor.com/, 2018.

NEEHR PERFECT EMR-ACCESS CARD(40 WEEKS) REQUIRED |ByNEEHR PERFECT EDITION: 14. *EHR Go*. 14th ed. ISBN: 9780985837990. Archtype Innovations, 2020.

Top of page

Key: 1379