HLTH.1310. Nutrition & Diet Therapy

General Syllabus- Fall 2026

Course Description

This course, designed for nursing students, provides fundamental theoretical knowledge related to the basic principles of nutrition. It places emphasis on the practical application of these principles to diet therapy requirements for maintenance of wellness in all age groups. Although it is not a prerequisite for this course, students will benefit from having taken BIOL 1200 Fundamentals of Biology for Health Technologies prior to taking this course.

Learning Outcomes

Develop students' ability to use and manipulate information responsibly, ethically and legally.

Develop students' ability to act with civility, tolerance, honesty and personal responsibility when providing nutrition care to future medical and surgical clients.

Develop a personal health centered approach to nutrition by applying the knowledge of nutrients and their physiological function to daily life.

Provide knowledge of nutrient requirements throughout the lifecycle from pregnancy to older adulthood.

Develop students' ability to apply the principles of nutrition assessment and medical nutrition therapy.

Develop students' ability to listen actively and communicate effectively about nutrition therapy.

Develop students' ability to comprehend and accurately respond to course materials.

Required Reading

Assigned readings and materials provided through Blackboard
Nutrition for Health & Healthcare, 8th edition. DeBrunye/Pinna: Inclusive Access

Methods of Evaluation

Student performance will be evaluated through a combination of:

- Quizzes & written examinations
- A comprehensive exam
- Discussion Forums
- Practical skills activities
- Diet Project

General Course Overview

I. **Standards for nutrients (DRI, RDA)**

A. Guides for nutrition planning
B. Nutrition Fact Labels
C. Diet analysis assignment

II. **Energy & Metabolism**

A. Energy Intake
B. Gastrointestinal trac
C. Energy Output
D. Standards for healthy weight
E. Diseases associated with being overweight and obesity
F. Short- and long-term therapies to manage overweight and obesity

III. **Carbohydrates**

A. Sugars
B. Starches
C. Fiber

IV. **Lipids**

A. Food fats
B. Triglycerides: Fatty Acids
C. Cholesterol
D. Phospholipids

V. **Proteins**

A. Amino Acids (essential vs nonessential)
B. Protein quality
C. Food sources and recommendations

D. Nitrogen balance
E. Factors influencing requirements
F. Vegetarian diets
G. Protein energy malnutrition
H. Protein excess

VI. **Vitamins**
A. Classifications
B. Fat-soluble vitamins--A, D, E, and K
C. Water-soluble vitamins

VII. **Minerals and Water**
A. Water
1. Functions
2. Fluid balance and recommendations for daily intake
3. Clinical problems relating to dehydration and toxicity
B. Major minerals
C. Trace minerals

VIII. **Nutrition throughout the Lifecycle**
A. Pregnancy & Lactation
B. Infancy and childhood
C. Adolescence
D. Adulthood
E. Food assistance programs

IX. **Medical Nutrition Therapy**
A. Nutrition assessment
1. Medical history and diet history
2. Drug/nutrient interactions
3. Clinical observation
4. Laboratory tests
5. Anthropometric measurements
B. Diabetes
1. Classifications
C. Renal Diseases
1. Classifications and etiology
2. Consequences of the disease process
3. Nutrition therapy
D. Heart and Lung diseases
1. Coronary Heart Disease (CHD)
2. Hypertension
3. Congestive Heart Failure (CHF)
4. Chronic Obstructive Pulmonary Disease (COPD)
E. Gastrointestinal Diseases
1. Problems of the mouth and esophagus
2. Problems of the stomach
3. Problems of the small and large intestine
4. Problems of the liver and gallbladder
5. Metabolic disorders
F. Enteral nutrition
1. Types of tube feedings
2. Formulas and uses
3. Complications
G. Parenteral nutrition
1. Indications for use

2. Venous access
3. Types of formulas

H. Cancer, HIV Infection
1. Disease process
2. Nutrition therapy

I. Nutrition and surgery
1. Pre-op nutrition needs
2. Post-op nutrition needs
3. Diet progressions

General Education Outcomes

Clinical research has implicated nutrition factors in several acute and chronic diseases in the United States. Nutrition therapy plays a role in the prevention and treatment of these diseases. Health care providers, especially nurses, need to know the role of nutrition and nutrition therapy in preventing and treating disease.

Lakeland Community College Learning Outcomes

Learns Actively
Thinks Critically
Communicates Clearly
Uses Information Effectively
Interacts in Diverse Environment

Essential skills for personal and professional growth