FN C170: NUTRITION

Item	Value
Curriculum Committee Approval Date	02/24/2006
Top Code	130620 - Dietetic Services and Management
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)
Local General Education (GE)	• Area 7E Self-Development (CE1)
California State University General Education Breadth (CSU GE-Breadth)	• CSU E1 Lifelong Understanding (E1)

Course Description

This course covers the scientific concepts of nutrition relating to the functioning of nutrients in basic processes of life. Individual needs, food sources of nutrients, current nutrition issues, scientific principles to analyze and evaluate nutritional information, and diet analysis will be emphasized. Transfer Credit: CSU; UC. C-ID: NUTR 110.**C-ID:** NUTR 110.

Course Level Student Learning Outcome(s)

1. Apply valid research principles in the interpretation and application of major nutritional theories.
2. Analyze factors such as lifestyle, weight control, disease, and life-cycle conditions such as pregnancy and aging and their effects on one's nutritional status.
3. Critically analyze and evaluate one's personal diet utilizing a computer database.

Course Objectives

- 1. Present and apply major nutritional theories and principles.
- 2. Utilize a computer database to evaluate a personal diet record.
- 3. Explain how the body handles the major nutrients from the time we eat to the time we digest, absorb, transport, and metabolize nutrients.
- 4. Apply scientific principles to analyze and evaluate nutrition information.

Lecture Content

Introduction to Nutrition My Plate Food Labels Function of Digestive System Metabolism Analyzing and evaluating nutrition information using scientific principles Carbohydrates Simple versus Complex Fiber Soluble Insoluble Lipids Main Types and Common Properties Saturated Fat Monounsaturated Fat Polyunsaturated Fat Trans Fatty Acids Effects on Health and Diseases Cholesterol Cardiovascular Disease Diet Choices to Reduce Health Problems Proteins Form Function / Impact on Health Protein Types Animal versus Plant Vegetarian Diet Energy Production / Regulation Weight Control Energy Regulation Health Effects Fitness Sports Physical Activity / Health Fitness Athletes Nutritional Needs Eating Disorders Vitamins Water Soluble Vitamin B Complex Vitamin C / Antioxidants Fat Soluble Vitamin A, D, E, and K Antioxidant Effects of Vitamin E Water Minerals Water Functions in the Body Major Minerals Requirements Effects on Body Functions Minor Minerals Focus on Recommended Daily Allowances (RDA) Safe and Adequate Intakes Nutrition in Life Cycle Pregnancy Nutrient Needs Exercise Weight Gain Lactation and Infancy Breastfeeding versus Bottle Feeding Infant Growth and Development Childhoo d and Adolescence Growth and Development from Two to Teenage Years Parent and Peers Influence on Nutrition and Lifestyle Adulthood and Aging Genetics Exercise Lifestyle Choices Nutritional Implications of Aging Diet and Health Cancer, Immunology and Aids Cardiovascular Disease Diabetes Consumer Concerns and Food Safety Food Safety Natural Occurring Contaminants Environmental Contaminants Personal Lifestyles and Global Community Applied Nutrition Lifestyle Changes Gained Through Nutrition Education Examine Pathways Leading to Positive Lifestyle Changes

Method(s) of Instruction

- Lecture (02)
- DE Online Lecture (02X)
- Video one-way (ITV, video) (63)

Instructional Techniques

Instructional techniques include lectures, supplemental resources (articles, web resources, videos), discussions, computer diet simulations, and case-study reviews based on real-life situations.

Reading Assignments

Reading and written assignments; research assignments; preparation of content to share with the class and responses to content presented; analysis of case studies and review of expert interviews; responses to guiding questions on course content; dietary analysis and/or self-assessments.

Writing Assignments

Analysis of case studies and personal dietary analysis, presentation and rationale for plans to meet special dietary needs and lifestyle requirements, reviews of expert interviews; examination of and/or responses to content presented by others.

Out-of-class Assignments

Computer assisted dietary analysis, evaluation and application of food labeling information, responses to guiding questions, library research projects, analysis of case studies, application of nutritional principles to special dietary needs, and/or discussions.

Demonstration of Critical Thinking

Quizzes, Case Studies, Food Label Exercise, Discussion Forums, and Individual Diet Analysis

Required Writing, Problem Solving, Skills Demonstration

Analysis of case studies and/or nutritional labels; reviews of expert interviews; responses to guiding questions; presentations and responses to content presented by others; dietary analysis of personal dietary intake.

Eligible Disciplines

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

Textbooks Resources

1. Required Sizer, F.; Whitney, E. Nutrition: Concepts and Controversies, 16th ed. Cengage, 2022 2. Required Callahan, A., Leonard, H., Powell, T.. Nutrition Science and Everyday Applicaiton, ed. LibreText via OpenOregon, 2020

Other Resources

1. Coastline Library