

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

FN 50 - Nutrition and Diet Therapy

4 Unit(s)

Prerequisite(s): NONE

Recommended Prep: Reading Level V; English Level V; Math Level II

Transfer Status: CSU

68 hours Lecture

This course introduces the basic principles of nutrition related to health and disease. The course focuses on the diseases that affect nutritional status and the medical nutrition therapy that is used to manage and treat these conditions.

II. OBJECTIVES

Upon successful completion of this course, the student will be able to:

- A. Describe key nutrients (macronutrients, micronutrients, and water) found in each of the food groups and explain the functions of each nutrient in the body.
- B. Discuss key nutrients required for each stage of the life cycle (pregnancy, infants, children, adolescents, adults, and seniors) and identify food sources for each nutrient.
- C. Identify the organs of the digestive tract and contrast their functions in digestion, absorption, and metabolism of macronutrients and micronutrients.
- D. Describe digestive disorders and explain nutrition interventions used for each disorder.
- E. Describe assessment methods used to determine nutritional status and calculate calorie needs in a post-surgical patient.
- F. Compare the differences between type 1 and type 2 diabetes and compare and contrast the medical nutrition therapies for each.
- G. Explain atherosclerosis and describe risk factors for cardiovascular disease and discuss lifestyle changes that reduce heart disease risks.
- H. Describe the main causes of acute and chronic renal disease and compare and contrast the medical nutrition therapy for each.
- I. Analyze and design menus for healthy people and for those with special nutritional needs due to chronic disease.
- J. Distinguish between reliable and fraudulent nutrition claims in the media.

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

Lecture	
<u>Topics</u>	<u>Hours</u>
1. Introduction / Orientation	1.00
2. Nutrition and Health	2.00
3. Food Guides, Dietary Guidelines	3.00
4. Carbohydrates	3.00
5. Lipids	3.00
6. Protein	4.00
7. Vitamins	4.00
8. Minerals	4.00
9. Water and Electrolytes	2.00
10. Digestion, Absorption and Metabolism	3.00

11. Energy Balance	2.00
12. Food Safety / Additives	1.00
13. Nutrition in Pregnancy & Lactation	2.00
14. Nutrition in Infancy	2.00
15. Nutrition in Childhood and Adolescence	2.00
16. Nutrition for the Aging and Aged	2.00
17. Nutrition Assessment / Counseling	3.00
18. Nutrition Support	2.00
19. Diet for Gastrointestinal Illness	3.00
20. Obesity and Weight Control	2.00
21. Diabetes	4.00
22. Cardiovascular Disease: Restricted Sodium Diet	4.00
23. Renal Diseases	2.00
24. Diets for Liver, Gall Bladder and Pancreatic Disease	2.00
25. Nutrition in Surgery, Infections & Burns	3.00
26. Nutrition, Cancer, and AIDS	3.00
Total Hours	68.00

IV. **METHODS OF INSTRUCTION**

- A. Lecture
- B. Instructor Demonstrations
- C. Guest Speakers
- D. Collaborative Group Work
- E. Class Activities
- F. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- G. Discussion
- H. Reading Assignments
- I. Multimedia Presentations

V. **METHODS OF EVALUATION**

- A. Exams/Tests
- B. Quizzes
- C. Projects
- D. Class participation
- E. Final Examination
- F. Class Discussion

VI. **EXAMPLES OF ASSIGNMENTS**

- A. Reading Assignments
 - 1. Read about cardiovascular disease and be able to design a nutrition care plan which will reduce heart disease risk factors.
 - 2. Read about type 1 and type 2 diabetes and be prepared to discuss the differences in pathophysiology and treatment of each.
- B. Writing Assignments
 - 1. Evaluate nutrition needs of patients described in case studies and write nutrition care plans applying appropriate diet therapy recommendations.
 - 2. Write an evaluation of your diet based on the three-day food record analysis. Identify

nutrient deficiencies and discuss food sources for the missing nutrients. Develop a one-day menu what will meet recommended levels for all nutrients.

C. Out-of-Class Assignments

1. Find an article about herbal supplements. Research and evaluate whether this supplement is safe and effective and be prepared to discuss in class.
2. Interview an elderly person and assess his/her nutritional status and drug nutrient interactions. Evaluate current eating habits and make written recommendations to improve the nutritional content of his/her diet.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

- A. Whitney. Nutrition for Health and Health Care. 4th Edition. Thomson/Wadsworth, 2012.

Materials Other Than Textbooks:

- A. Handouts, supplementary materials and Internet websites
B. My Diet Analysis (a web based program)

Created/Revised by: Maggi Dorsett

Date: 04/30/2012