HLTH 5300: Nutrition

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

Fundamentals of food utilization in the body and diet planning including discussion of the relationship between dietary habits and disease. Also included are discussions of current trends in nutrition, dietary changes for special conditions such as pregnancy, infancy, aging, athletes and teenagers, and cultural differences in dietary practices.

B. COURSE EFFECTIVE DATES: 11/18/1997 - Present
C. OUTLINE OF MAJOR CONTENT AREAS

1. Nutrients
   - Nutritious Diet? How will you know?
   - MyPyramid, Daily Food Guide
   - DRIs, RDAs
   - Nutrient density

2. Carbohydrate terminology
   - Digestion, absorption, Transport, Energy Production
   - Fiber
   - DRI for carbohydrates

3. Introduction to weight management
   - Eating disorders

4. Weight management and energy balance
   - Causes of Obesity
   - Amino Acids and muscle mass
   - Fluid replacement beverages

5. Role of nutrition in disease
   - Heart disease, hypertension, cancer
   - Food safety
   - Food Microbes, Food additives

6. Pregnancy
   - Lactation and breastfeeding
   - Infant feeding

7. Childhood, teen and elderly nutrition
   - Global issues and hunger
   - Environment and food
   - Overpopulation and food supply

8. Diabetes
   - Glycemic foods
   - Diabetes, Lactose intolerance

9. Introduction to lipids

10. Functions of fat
    - Lipid structures
    - Fat intake recommendations

11. Fats in foods
    - Cholesterol, Saturated Fat And disease Hydrogenation and Trans fatty acids
    - Reading labels
    - Protein Structure
    - Digestion and Protein Synthesis

12. Protein Quality, Protein Deficiency Disease
    - Nitrogen balance

13. Introduction to vitamins
    - Fat soluble vitamins

14. Water soluble vitamins
    - Water
    - Diet analysis ¿ how to use diet analysis software

15. Introduction to minerals
    - major minerals
D. LEARNING OUTCOMES (General)
   1. demonstrate a basic knowledge of digestion, metabolism, sources and functions of carbohydrates, fats and proteins.
   2. be able to describe the sources, functions and deficiency diseases associated with several vitamins and minerals.
   3. demonstrate a basic knowledge of nutritional needs for active and sedentary populations including calories and nutrient needs.
   4. demonstrate a basic knowledge of the difference in nutritional needs between normal healthy adults and infants, children, pregnant women, and the elderly.
   5. demonstrate a basic knowledge of other nutritional issues including world hunger, disordered eating, weight control, food safety and diseases related to food safety
   6. demonstrate a basic knowledge of the relationship between diet and common diseases such as heart disease, some cancers and Type II diabetes
   7. demonstrate a basic knowledge of weight management techniques.
   8. demonstrate the ability to assess diets with online software programs.
   9. demonstrate the ability to plan a diet to meet the dietary guidelines.
  10. demonstrate the ability to read, understand and share nutritional information

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted