HLTH 3300: Nutrition

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: *. *
Lab Hours/Week: *. *
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, teenagers, aging, athletes, and cultural differences in dietary practices.

B. COURSE EFFECTIVE DATES: 08/26/1997 - Present
C. OUTLINE OF MAJOR CONTENT AREAS

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

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

3. Diabetes.
   - Glycemic foods
   - Diabetes, Lactose intolerance

4. Introduction to lipids

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

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

7. Protein Quality, Protein Deficiency Disease
   - Nitrogen balance

8. Introduction to vitamins
   - Fat soluble vitamins

9. Water soluble vitamins
   - Water

10. Diet analysis ¿ how to use diet analysis software

11. Introduction to minerals
    - major minerals

12. weight management
    - Eating disorders

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

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

15. Pregnancy
    - Lactation and breastfeeding
    - Infant feeding

16. childhood, teen and elderly nutrition
    - Global issues and hunger
    - Environment and food
    - Overpopulation and food supply
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.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted