HLTH 3300: 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, 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
   - DRIs, 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