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
   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