

NORTHERN ILLINOIS UNIVERSITY
Testing Services
and
School of Health Studies

NUTR 201 – Human Nutrition

COURSE DESCRIPTION: The role of nutrition in human biological systems: the properties of nutrients; interaction with other environmental and genetic factors; quality of the current food supply.

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

1. Describe the functions of the major nutrients in the body including their chemical properties;
2. Identify the major food sources of the nutrients and preserve them during food preparation;
3. Discuss the role of nutrition as it interacts with other environmental and genetic factors to impact the health and well-being of humans;
4. Assess and modify their diet to meet MyPlate recommendations;
5. Analyze the quality of the current American diet considering the impact of personal food choices, food processing, and food distribution;
6. Explain the application of scientific method in the solution of nutrition problems;
7. Describe the frontiers of nutrition research and the limitations on that research;
8. Discuss the role of social responsibility in the science of nutrition;
9. Evaluate popular claims and theories relating to nutrition.

PROFICIENCY EXAM: The exam consists of 163 multiple-choice items. Two hours of testing time are allowed.

The minimum passing score is 119 test items answered correctly. Upon successful completion of the exam, three (3) hours of credit for NUTR 201, Human Nutrition, will be granted.

Note: Students may not earn proficiency credit for a course for which they have received credit; nor may they receive credit for courses which substantially overlap or are prerequisites to any in which they are enrolled or for which they have received credit. Normally, a student may attempt to gain proficiency credit for a particular course only once. *(Academic Regulations) Proficiency Examinations, Northern Illinois University Bulletin.*

REGISTRATION: This exam must be scheduled in advance with Testing Services. www.niu.edu/testing
PH: (815) 753-1203; FAX: (815) 753-3701; E-mail: testing@niu.edu

EXAMINEE MUST BRING VALID STUDENT IDENTIFICATION TO THE EXAMINATION.

RESULTS: Examination results will be available immediately following completion of the exam.

STUDY MATERIALS: The following textbooks would be helpful in studying for this test:

Insel P., Turner RE, Ross D., McMahon K, Bernstein M.
Discovering Nutrition
Jones & Bartlett Publishing Inc. 2018
Fifth Edition
ISBN# 1284064654

Gordon M. Wardlaw
Contemporary Nutrition
Tenth Edition McGraw Hill Companies 2016
ISBN# 9780078021374

Sizer F, Whitney, E.
Nutrition: Concepts and Controversies.
Brooks Cole, 2016
Fourteenth Edition
ISBN# 9781305627994

AREAS TO BE COVERED: I. Influences on our eating behavior-psychosocial, economic, ethnic/cultural, geographic, political, nutritional/medical

II. Nutrition Guidelines

- A. The Dietary Guidelines for Americans
- B. MyPlate
- C. The Recommendations for Nutrient Intake
 - 1. Dietary Reference Intakes (DRIs)
 - 2. Recommended Dietary Allowance (RDA)
 - 3. Adequate Intake
 - 4. Upper Level
- D. The Food Label
 - 1. Nutrition Facts Panel
 - 2. Daily Values
 - 3. Nutrient Content Claims
 - 4. Health Claims
- E. Healthy People 2020

- III. Basic nutrients--for each nutrient need to know classifications, functions, digestive path, deficiency and toxicity symptoms, food sources, diseases/conditions related to each nutrient
 - A. Carbohydrates
 - B. Lipids
 - C. Proteins
 - D. Vitamins
 - 1. Water soluble--ascorbic acid, thiamin, niacin, riboflavin, folic acid, cobalamine, pyridoxine, biotin, pantothenic acid
 - 2. Fat soluble--vitamins A, D, E, and K
 - E. Minerals
 - 1. Macrominerals--calcium, phosphorous, magnesium, sodium, and potassium
 - 2. Microminerals--iron, fluoride, iodine, zinc, selenium, chromium, names of others
 - F. Water
- IV. Digestion and absorption--need to know where the various food stuffs are digested, enzymes/structures involved, how and where absorption occurs for the basic nutrients
- V. Energy metabolism
 - A. Sources/expenditure of calories; importance of each
 - 1. Basal metabolic rate
 - 2. Thermic effect of food
 - 3. Physical activity
 - B. Krebs cycle/electron transport system--which nutrients are involved
 - C. Overnutrition--overweight and obesity
 - D. Undernutrition--starvation, anorexia nervosa, malnutrition (marasmus and Kwashiorkor)
 - E. Sound weight loss plan
- VI. Nutrition - beyond the nutrients
 - A. Fitness
 - B. Anorexia Nervosa and Bulimia Nervosa
 - C. World Hunger
- VII. Nutrition in the life cycle--need to know physiological changes which require nutritional adaptations, special problems or conditions of

nutritional concern, how eating patterns are affected as people develop through life

A. Pregnancy--fetal/maternal aspects

B. Lactation'

C. Infancy

D. Childhood

E. Adolescence

F. Young adult

G. Middle years

H. Elderly

VII. Nutrition and alcohol

VIII. Our food supply

A. Food safety

B. Functional foods

C. Dietary supplements

IX. Food Faddism

A. Popular fads

B. How to identify fraudulent claims