



0704N112

Principles of Nutrition

Instructor: TBA

Office Hours: By appointment.

Contact Hours: 60 (50 minutes each)

Credits: 4

E-mail: TBA

Course Description

This course is designed to study elementary principles of nutrition and their practical application. The objectives include providing an overview of the scientific principles of nutrition, summarize digestion and metabolism of nutrients, discuss the role nutrients play in human anatomy, physiology, and disease prevention, summarize age and life stage specific nutritional requirements, and overview the role nutrition plays in prevention of aging and age-related chronic health conditions.

Textbook Information

You will have the opportunity to read a course pack document available to you free of charge via Moodle as part of preparation for instruction covered in lecture recordings and as independent study outside of instructor's lecturing. The course pack is available to you as a pdf file on Moodle.

Course Objectives

Measurable Course Objectives are outcomes students are expected to achieve by the end of the course.

- Identify the forces that influence an individual's eating pattern.
- Demonstrate knowledge of the dietary goals and guidelines set for Americans by listing these guidelines and specifying ways to implement them into the planning of healthful diets.
- Analyze the nutritional adequacy of daily food intake by calculating the daily intake of specific nutrients and comparing them to an established standard and identifying alternative diet plans.
- Identify food myths, fads, and fallacies and why each is incorrect. Demonstrate understanding of how to read and interpret food labels.
- Explain how DRIs are developed and outline their role in healthful diet planning.
- Describe the process of digestion, absorption and metabolism. This includes identifying parts of the digestive system, describing the mechanical and enzymatic activities involved in digestion, and discussing the hormonal regulation of the digestive processes.
- Demonstrate a comprehension of carbohydrates, lipids, and protein by discussing their structure, classifications, function, and dietary sources. Identify the association between the three energy-yielding nutrients and disease.
- Demonstrate a comprehension of energy balance and weight control. Discuss prudent ways to manage body weight. Outline the association between abnormal body weight and selected co-morbidities.
- Demonstrate a comprehension of selected water-soluble and fat-soluble vitamins by describing their individual and collective functions, requirements, dietary sources, deficiency and toxicity symptoms.
- Demonstrate a comprehension of selected minerals by describing their functions, requirements, dietary sources, deficiency and toxicity symptoms.
- Demonstrate knowledge of nutritional requirements throughout the life cycle by

listing the specific nutrient needs of pregnancy, lactation, infancy, childhood, adolescence, adult life, and in older adults.

Course Outline

Please note that the outline is meant to give an overview of the major concepts in this course. Changes may occur as needed to aid in the student's development.

Module 1: Introduction to nutrition and nutrients

- Course pack reading chapter 1
- Instructor's lectures 1-3
- **Quiz 1**

Module 2: Planning a healthy diet

- Course pack reading chapter 2
- Instructor's lectures 4, 5, 8, 9
- **Quiz 2**

Module 3: Diets that should not be recommended

- Course pack reading chapter 3
- Instructor's lectures 6, 7
- **Quiz 3**
- **Exam 1**

Module 4: Macronutrients

- Course pack reading chapter 4
- Instructor's lectures 10-15, 17-20
- **Quiz 4**

Module 5: Water and alcohol. Weight management. Eating disorders

- Course pack reading chapters 5
- Instructor's lectures 16, 21-23
- **Quiz 5**
- **Exam 2**

Module 6: Vitamins

- Course pack reading chapter 6
- Instructor's lectures 24-32
- **Quiz 6**

Module 7: Minerals

- Course pack reading chapter 7
- Instructor's lectures 38-41
- **Quiz 7**

Module 8 : Dietary supplements. Energy metabolism. Vegetarian diets. Food safety. Nutrition in physical performance

- Course pack reading chapter 8
- Instructor's lectures 33-37
- **Quiz 8**
- **Exam 3**

Module 9: Nutrition in childhood through adolescence

- Course pack reading chapter 9
- Instructor's lectures 42-50
- **Quiz 9**

Module 10: Demographic of aging. Age-related anatomical and physiological changes.

- Course pack reading chapter 10
- Instructor's lectures 51-52
- **Quiz 10**

Module 11: Nutritional considerations for older adults and elderly. Prevention of common health conditions in older adults and elderly. Malnutrition around the world

- Course pack reading chapter 11
- Instructor's lectures 53-60
- **Quiz 11**
- **Diet analysis assignment**
- **Final Exam**

Grading Policy

Grades will be determined based on the following:

➤ **Exams 50% of the final grade**

Four exams will be given throughout the semester. Please note that **each exam is comprehensive**, meaning it will cover **all lectures and assigned readings** from the course pack/textbook **from the beginning of the semester up to the last module included in the exam.**

➤ **Quizzes based on course pack/textbook reading 40%**

Students will have the opportunity to read the course pack and earn credit for each chapter by completing online quizzes. There are 11 chapters in the course pack, and therefore 11 quizzes. Quizzes 1, 2, 3, and 5 are worth 3 percentage points each of the

final grade. Quizzes 4, and 6 through 11 are worth 4 percentage points each toward the final grade.

➤ **Assignment – diet analysis - 10%**

The goal of this assignment is to use the MyPlate visual dietary guidelines to evaluate the adequacy of your own diet. Discuss how closely your diet aligns with the recommendations represented by MyPlate. Then, propose specific changes you could make to better align your diet with these guidelines. Please read specific guidelines how to complete the assignment available on the platform.

Grading Scale

The instructor will use the grading system as applied by JNU:

Definition	Letter Grade	Score
Excellent	A	90~100
Good	B	80~89
Satisfactory	C	70~79
Poor	D	60~69
Failed	E	Below 60

Academic Integrity

As members of the Jinan University academic community, students are expected to be honest in all of their academic coursework and activities. Academic dishonesty, includes (but is not limited to) cheating on assignments or examinations; plagiarizing, i.e., misrepresenting as one's own work any work done by another; submitting the same paper, or a substantially similar paper, to meet the requirements of more than one course without the approval and consent of the instructors concerned; or sabotaging other students' work within these general definitions. Instructors, however, determine what constitutes academic misconduct in the courses they teach. Students

found guilty of academic misconduct in any portion of the academic work face penalties that range from the lowering of their course grade to awarding a grade of E for the entire course.