

# 0704N112

## Principles of Nutrition

**Instructor:** TBA

**Email:** TBA

**Time:** May 13, 2024 - June 14, 2024

**Office Hours:** 2 hours (according to the teaching schedule)

**Contact Hours:** 60 (50 minutes each)

**Credits:** 4

### 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 Schedule**

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

### **Week 1**

- Course introduction
- Introduction to nutrition and nutrients'
- Introduction of dietary assessments
- Nutrition: every day choices
- Dietary guidelines and principles
- Basic principles of nutrition research
- Fed diets. How to recognize prudent health and nutrition information
- How to understand food labels
- Digestion: From Meals to Molecules
- Carbohydrates. Sugars, starches, and fibers
- **Exam 1**

### **Week 2**

- Lipids: Fats, Phospholipids, and Sterols
- Proteins: amino acids, enzymes, hormones, and more
- Health effect of macronutrients
- Energy balance and weight management
- Eating disorders
- **Exam 2**

### **Week 3**

- Energy and nutrient metabolism
- Water- and fat-soluble vitamins
- Vegetarian diets
- Nutrition and athletic performance
- Issues in food safety
- **Exam 3**

### **Week 4**

- Water, macro and trace minerals
- Water and alcohol
- Nutrition in disease prevention and treatment
- Nutrition in the lifecycle. Pregnancy, lactation, infancy and children
- Nutrition in the lifecycle. Adults

### **Week 5**

- Nutrition in the lifecycle. Elderly, oldest old and centenarians
- Malnutrition around the world
- **Final exam**

## **Grading Policy**

Grades will be determined based on the following:

- **Exams 50% of the final grade**

Four exams (3 weekly and one final) will be given throughout the semester. Please note that each exam is comprehensive, meaning that each exam will be based on all lectures and course pack/textbook readings from the beginning of the semester until the time the exam is offered. The same applies to the final exam. All exams are offered via Moodle, including the final exam. You will have one attempt to take the

Moodle-based exams and there will be a time limit to submit them (please check Moodle for details). The table below includes information regarding the content of each exam, time period during which each exam will be offered, and the percentage of the final grade each exam is worth.

<b>Exam #</b>	<b>Content</b>	<b>Date exam becomes available</b>	<b>Date by which exam must be completed</b>	<b>Grade</b>
<b>Exam 1</b>	Lectures from week 1 and course pack reading chapter 1-4	Friday, Week1	Monday, Week2	5%
<b>Exam 2</b>	Lectures from week 1 and 2 and course pack reading chapter 1-8	Friday, Week2	Monday, Week3	10%
<b>Exam 3</b>	Lectures from week 1, 2, and 3 and course pack reading chapter 1-12	Friday, Week3	Monday, Week4	15%
<b>Final exam</b>	All lectures and all chapters from the course pack reading	Friday, Week5	Monday, Week5	20%
<p><b>Please, <u>ALWAYS</u> use the “PrtScn” (print screen) feature on a keyboard of the confirmation page that you submitted the exam. Also, if you have a problem while taking the exam (e.g. internet outage) use the Print Screen option to document the problem. Attach it to an e-mail and send it to me.</b></p>				

- **Quizzes based on course pack/textbook reading 35%**

Students will have the opportunity to read the course pack and earn a credit for each reading assignment by taking Bb-based quizzes. There will be a deadline for taking each quiz (see the table below). Students will not be permitted to take quizzes after the deadline except in cases of prolong illness, hospitalization and other extreme circumstances. Short-term issues, such as having a cold, headache or stomach

problem, do not constitute a valid reason to have the deadline extended. **Each quiz is set up for 3 attempts with the highest grade of the attempts that will be counted toward the grade.**

<b>Quiz</b>	<b>Date the quiz becomes available</b>	<b>Date by which the quiz has to be submitted*</b>	<b>Weighted grade</b>
<b>Quiz 1</b>	Monday, Week1	Sunday, Week1	1%
<b>Quiz 2</b>	Monday, Week1	Sunday, Week1	2%
<b>Quiz 3</b>	Monday, Week1	Sunday, Week1	2%
<b>Quiz 4</b>	Monday, Week1	Sunday, Week1	2%
<b>Quiz 5</b>	Sunday, Week1	Sunday, Week2	2%
<b>Quiz 6</b>	Sunday, Week1	Sunday, Week2	2%
<b>Quiz 7</b>	Sunday, Week1	Sunday, Week2	2%
<b>Quiz 8</b>	Sunday, Week1	Sunday, Week2	2%
<b>Quiz 9</b>	Sunday, Week2	Sunday, Week3	2%
<b>Quiz 10</b>	Sunday, Week2	Sunday, Week3	2%
<b>Quiz 11</b>	Sunday, Week2	Sunday, Week3	2%
<b>Quiz 12</b>	Sunday, Week2	Sunday, Week3	2%
<b>Quiz 13</b>	Sunday, Week3	Sunday, Week4	2%
<b>Quiz 14</b>	Sunday, Week3	Sunday, Week4	2%
<b>Quiz 15</b>	Sunday, Week3	Sunday, Week4	2%
<b>Quiz 16</b>	Sunday, Week3	Sunday, Week4	2%
<b>Quiz 17</b>	Sunday, Week4	Wednesday, Week5	2%

<b>Quiz 18</b>	Sunday, Week4	Wednesday, Week5	2%
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\*the quiz will be available until 11:59am (Beijing Time) of the date listed in the table

- **Assignment – diet analysis - 12%**

Use the MyPlate pictorial dietary recommendation to evaluate your own diet. Discuss the degree your diet is consistent with the dietary guidelines represented by the MyPlate recommendations. Propose changes to your diet in order to improve your diet quality to be more consistent with the MyPlate recommendations.

**Please, ALWAYS use the “PrtScn” (print screen) feature on a keyboard (and/or take a picture with you smart phone) to copy the confirmation of your assignment submission. If, for some reason, I have not received your assignment, you will only be allowed to resubmit the assignment after the deadline when you show a picture of the submission confirmation page.**

- **Live discussions – 3%**

Students will have the opportunity to meet with the instructor and/or teaching assistant for live discussions. Five live discussions are offered, 1-hour each, two of them are mandatory and the other three are optional. This means that students only have to participate in two of the discussions though they can choose to participate in all five. Having said this, it will be beneficial to students if they do join all five discussions as we will be discussing how to study and go over selected exam questions.

## **Makeup Policy**

You will be allowed to make up work for full credit only under extreme circumstances (such as a documented serious health problem or family emergency).

<p><u>No make-up exams will be given unless you have a doctor’s note, family emergency, or another serious reason for missing an exam! In such a case you must take the exam within a week after the scheduled date !</u></p>
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## 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

## Detail Policies

### 1. Grades

The final grades will be based on grades achieved from all exams, quizzes, lecture notes and assignments. There will be no extra credits assignments given. No grade will be dropped.

### 2. Exams

If you do get permission to take an exam at a different time you will be expected to take it within a week from the original date.

### 3. Academic honesty

Any violation of academic integrity will result in automatic failure of the course.

Violation of academic integrity includes among other things lying and cheating (copying information from the internet for an assignment is a form of cheating). You are to take each exam individually. Taking it and discussing it with another student constitutes cheating. Honesty is expected at all times.

### 4. Professionalism

Students are expected to act professionally at all times. This includes referring to the instructor, teaching assistant and other students with respect and courtesy.

### 5. Submission deadlines



Students are expected to submit exams, quizzes, and the assignment before the deadline. Only in rare circumstances submission of an exam, quiz, or assignment may be allowed. Also, student will only get one chance to submit each of the exams and the assignment. However, students will have up to three attempts to take each quiz and the highest grade will count toward the final grade.

### **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.