

# **The Principles of Nutrition**

TBA – Wesleyan College Syllabus Summer 2023, May 29 - June 30

# **Professor Contact Information**

Professor: TBA

Office Hours: by appointment

**Contact Information: TBA** 

Text/ISBN: Reading materials will be provided by the instructor

## **Policies and Procedures**

#### **Course Goals**

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.

## **Prerequisites**

None

#### **Credit Hours**

3

# **Student Learning Outcomes**

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

- 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.

### **Participation and Grading**

Your grade in this course will be determined by your performance in the following categories:

Assignments	Percentage
Assignments	15%
Quizzes	35 %
Exams	50 %
Total	100%

#### **Exams**

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.

#### Quizzes

Students will have the opportunity to read the course pack and earn a credit for each reading assignment by taking Moodle-based quizzes. There will be a deadline for taking each quiz. 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.

## Assignment- diet analysis/healthy eating index

Use the MyPlate pictorial dietary recommendation along with the Healthy Eating Index (HEI) guidelines, evaluate your own diet in terms of diet quality. Discuss the degree your diet is consistent with the dietary guidelines represented by the MyPlate and HEI. Propose changes to your diet in order to improve your diet quality to be more consistent with the MyPlate and HEI guidelines.

#### **Grading Scale:**

The grading scale in the class will be as follows:



A=90-100%

B=80-89%

C=70-79%

D=60-69%

F=59% And Below

You may track your running point total throughout the term via our course site. Please be aware, however, that the course grade you see in the site will reflect only assignments and activities you have already completed and that your professor has graded.

# **Academic Integrity**

Wesleyan's College expects student to show integrity in all of their work. Cheating, plagiarism, unauthorized collaboration, inventing or falsifying information, turning in work for more than one class without authorization, or helping someone else are all violations of the Honor Code and are not tolerated. Any of these forms of cheating will not be tolerated and will be grounds for a grade of zero on the exam or assignment and a grade of F for the course, in addition to any penalties imposed by the Provost.

# **Potential Changes to Course Schedule**

The following week-to-week schedule is a general plan for the course. Deviations may be necessary and will be announced in advance via announcement and/or e-mail. Students should check their course site announcements and emails at least once every twenty-four hours throughout the term to watch for updates regarding this course.

# **Course Schedule**

### 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
Quiz 1-4
Exam 1- June 1 Due

#### 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 Quiz 5-8 Exam 2- June 6 Due

#### Week 3

Energy and nutrient metabolism Water- and fat-soluble vitamins Vegetarian diets Nutrition and athletic performance Issues in food safety Quiz 9-12 Exam 3- June 12 Due

#### 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
Quiz 13-16
Assignment – diet analysis/healthy eating index - June 25 Due

## Week 5

Nutrition in the lifecycle. Elderly, oldest old and centenarians Malnutrition around the world Quiz 17-18
Final exam- June 29 Due

### **Civility in the Academic Community**

Students, faculty, and staff are expected to treat one another with respect in all interactions both during class meetings and on the Moodle course site. Rude, disruptive and/or disrespectful behaviors as determined by a faculty member interfere with other students' rights and with the professor's ability to teach. Therefore, any student exhibiting unacceptable behaviors during a class meeting or Moodle collaborative activity will be asked to leave and will be counted absent for that class period or activity. Failure to cooperate with this process will result in disciplinary action that may include withdrawal from the class or dismissal from the College. Violations will be reported to the Provost.

## **Disabilities Statement**

Wesleyan College is committed to equal education, full participation and access to facilities for all students. Any student who requires reasonable academic accommodations, use of auxiliary aids or facility access for a class must



first register with Disability Resources by contacting Jill Amos, Director of Disability and Advocacy Services, <a href="mailto:jamos@wesleyancollege.edu">jamos@wesleyancollege.edu</a> or (478) 757-5219. If reasonable accommodations are established, students should request Accommodation Letters from Disability Resources then schedule an appointment to meet with the professor to determine how the accommodations will be implemented for each class as early in the semester as possible. Accommodations require advance notice to implement and will not be retroactively administered for the semester. Accommodations that decrease the integrity of a course will not be approved.

# **Privacy in Teaching & Learning Spaces**

In order to promote an environment in which ideas may be freely expressed, the interior offices; in-person and virtual classrooms; and Moodle course sites at Wesleyan are private spaces. The unauthorized creation of photographic images, audio recordings, or video recordings of students or faculty in these spaces is considered to be disruptive behavior which may result in a student's removal from class according to the professor's discretion. The distribution of unauthorized images or recordings, or of class meeting recordings shared by a professor for instructional purposes, without the express written permission of the College is strictly prohibited and is subject to disciplinary action by the Provost of the College.