

**The Hashemite University**  
**Faculty of Applied Medical Sciences**  
**Department of Clinical Nutrition and Dietetics**

<b>Course title:</b>	Fundamentals of Nutrition	<b>Instructor:</b>	Dr. Mahmoud Abughoush
<b>Course number:</b>	0110502210	<b>Office:</b>	Medical complex, 2 <sup>rd</sup> floor
<b>Prerequisite(s):</b>	0110104102	<b>Office hours:</b>	Mon- Thu.: 10.00:00 to 11:00

**Course description:**

This course provides an overview of the principles of nutritional science. Subjects include description and functions of nutrients, digestion, absorption and metabolism.

**Course objectives:**

- To know the six classifications of nutrients, their major food sources, recommended intakes and major functions in the human body
- To understand the role of food in promoting a healthy lifestyle

**Required readings:**

- Understanding Nutrition. Whitney E., Rolfes SR, 12<sup>th</sup> edition. 2011.

*Lecture notes will also be provided by the instructor.*

**Course assessment:**

First Mid Exam	25%	
Second-Mid-Exam	25%	
Attendance and Participation	10%	
<u>Final Exam</u>	<u>40%</u>	
<b>TOTAL</b>		<b>100%</b>

**Teaching tools:**

- Lecture presentations
- Classroom and online activities

**Policy:**

- Students are encouraged to prepare for class, using the scheduled outline: your understanding in class will be greatly enhanced if you are familiar with the information ahead of time.
- Students missing any class time are responsible for obtaining all information, including assignments and schedule changes.
- Student misses more than 15% of total lectures will be deprived from the final exam.
- There will be no make-up exams except in cases of emergency.
- All students should have the same opportunity to learn. There will be times throughout this course you will be encouraged to share personal experiences and opinions and likewise to listen to other students' comments. Friendly, courteous, respectful behavior and positive attitude will be expected from all students each day. There will be no tolerance for any disrespect towards other students, the subject, or the instructor, otherwise, the misbehaved student will be asked to leave the classroom.
- All cellular are to be set to an inaudible tone for the duration of the class.

**Tentative course outline:**

<b>Week</b>	<b>Topic</b>
1	<b>Introduction &amp; Overview of Nutrition</b> <i>Food Choices; The Nutrients; Dietary Reference Intakes; Nutrition Assessment</i>
2-3	<b>The Carbohydrates: Sugars, Starches, &amp; Fibers</b> <i>The Chemist's view of Carbohydrates; The Simple Carbohydrates; The Complex Carbohydrates; Digestion and Absorption of Carbohydrates; Glucose in the Body; Health Effects and Recommended Intakes of Sugars; Health Effects and Recommended Intakes of Starch and Fibers</i>
4-5	<b>The Lipids: Triglycerides, Phospholipids, &amp; Sterols</b> <i>The Chemist's view of Fatty Acids and Triglycerides; The Chemist's view of Phospholipids and Sterols; Digestion and Absorption and Transport of Lipids; Lipids in the Body; Health Effects and Recommended Intakes of Lipids</i>
6-7	<b>Protein: Amino Acids</b> <i>The Chemist's view of Proteins; Digestion and Absorption of proteins; Proteins in the Body; Protein in Foods; Health Effects and Recommended Intakes of Protein</i>
8-9	<b>The Water-Soluble Vitamins: B Vitamins &amp; Vitamin C</b> <i>The Vitamins – An Overview; The B Vitamins – As Individuals; The B Vitamins – In Concert; Vitamin C</i>
10-11	<b>The Fat-Soluble Vitamins: A, D, E, &amp; K</b> <i>Vitamin A and Beta-Carotene; Vitamin D; Vitamin E; Vitamin K</i>
12-13	<b>Water &amp; the Major Minerals</b> <i>Water and the Body Fluids; The Minerals – An Overview; Sodium; Chloride; Potassium; Calcium; Phosphorus; Magnesium; Sulfate</i>
14-15	<b>The Trace Minerals</b> <i>The Trace Minerals – An Overview; Iron; Zinc; Iodine; Selenium; Copper; Manganese; Fluoride; Chromium; Molybdenum; Other Trace Minerals; Contaminant Minerals</i>

**Good Luck!**