



## Syllabus\* : Nutrition through life cycle (140502452)

First/Second Semester 2024 /2025

COURSE INFORMATION	
<b>Course Name:</b> Nutrition through life cycle <b>Semester:</b> <b>Department:</b> Department of Clinical Nutrition and Dietetics <b>Faculty:</b> Applied Medical Sciences	<b>Course Code:</b> 140502452 <b>Section:</b> 1 <b>Core Curriculum:</b>
<b>Day(s) and Time(s):</b> Sunday, Tues.: 8:30-9:30 Thursday: Micro. Teams <b>Classroom:</b>	<b>Credit Hours:</b> 3 <b>Prerequisites:</b> 1905021212 أو 140502211
COURSE DESCRIPTION	
Prenatal growth and development; physiological, psychosocial developments and physical growth, taking place during infancy, toddler, pre-school, school and adolescent periods and their relationship with and nutrition; physiological and physical changes during pregnancy, lactation and old age, and their nutritional implications; main dietary and health concerns.	
DELIVERY METHODS	
The course will be delivered through a combination of active learning strategies. These will include: <ul style="list-style-type: none"> <li>• PowerPoint lectures and active classroom based discussion</li> <li>• Collaborative learning through small groups acting in an interdisciplinary context.</li> <li>• Relevant films and documentaries</li> <li>• Video lectures</li> <li>• E-learning resources: e-reading assignments and practice quizzes through Model and Microsoft Team</li> </ul>	
FACULTY INFORMATION	
<b>Name</b>	<b>Dr. Buthaina Alkhatib</b>
<b>Academic Title:</b>	<b>Assis. Professor</b>
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<b>Telephone Number:</b>	<b>The Hashemite University Ext. 5540</b>

<b>Email Address:</b>	
<b>Office Hours:</b>	<b>Sunday, Tuesday 9:30-10:30</b> <b>Mon, Wed 1:30-2:30</b> <i>Please send an e-mail (bkhatib@hu.edu.jo) to meet at any other time.</i>

## REFERENCES AND LEARNING RESOURCES

### Required Textbook:

Brown, JE. Nutrition through the Life Cycle. 4th. Edition. Thomson Wadsworth, USA. 2011.

### Suggested Additional Resources

1. Williams SR. & Anderson SA. Nutrition and Diet Therapy. Saint Louis: CV. Mosby Co. (Latest edition or reprint).
2. Food and Nutrition Board, Institute of Medicine- National Academy of Sciences. 2001. Dietary Reference Intakes. [www.nap.edu](http://www.nap.edu)
3. Most Recent Human/Clinical Nutrition Textbooks, Articles & Literature.

### Selected Internet Sites:

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| 01. <a href="http://www.nutrition.org">www.nutrition.org</a>         | 02. <a href="http://www.faseb.org/ascn">www.faseb.org/ascn</a> |
| 03. <a href="http://www.bda.uk.com">www.bda.uk.com</a>               | 04. <a href="http://www.dietetics.com">www.dietetics.com</a>   |
| 05. <a href="http://www.who.int">www.who.int</a>                     | 06. <a href="http://www.diabetes.org">www.diabetes.org</a>     |
| 07. <a href="http://www.americanheart.org">www.americanheart.org</a> | 08. <a href="http://www.fao.org/food">www.fao.org/food</a>     |
| 09. <a href="http://www.fda.gov">www.fda.gov</a>                     | 10. <a href="http://www.usda.gov">www.usda.gov</a>             |
| 11. <a href="http://www.dietitians.ca">www.dietitians.ca</a>         | 12. <a href="http://www.webmed.com">www.webmed.com</a>         |

## ACADEMIC SUPPORT

It is The Hashemite University policy to provide educational opportunities that ensure fair, appropriate and reasonable accommodation to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to contact their Instructor to ensure that their individual needs are met. The University through its Special Need section will exert all efforts to accommodate for individual's needs.

### Special Needs Section:

**Tel:**

**Location:**

**Email:**

## STUDENT LEARNING OUTCOMES MATRIX\*

Core Curriculum Learning Outcomes	Program Learning Outcomes	Course Objectives	Course Student Learning Outcomes	Assessment Method	
To provide students with the optimum educational standard in the field of clinical nutrition and general knowledge in food technology	<b>KP1:</b> Demonstrate a depth understanding of the basis of nutritional science and the nutrient composition of food and discover the links between diet and disease and health	1. Explain the concepts of growth, development, and adaptation and their relationship to nutrition. 2. Recognize the importance of preconception care. 3. Understand weight control and its importance during the various stages of the lifecycle.	- Knowledge and Understanding: The student is expected to  - Understand the nutrition implications of the physiological, physical, and psychosocial	<b>QUIZ</b>	
To provide optimal educational and training opportunities for students during their professional preparation for careers in nutrition.	<b>KP2:</b> demonstrate an understanding of food chemistry, technology, preparation, safety and correlates nutrition with food technology and future challenges.	4. Discuss the relationship between maternal and fetal nutrition. 5. Understand the stages of lactation and factors influencing milk secretion and volume.	changes occurring during growth periods.	<b>ASSIGNMENT</b>	
To participate in community services for health promotion and disease prevention programs	<b>KP3:</b> Explain the principles of cellular metabolic processes, the structure and function of the various physiological systems, and the principles of biochemistry	6. Describe important nutrition-related adaptations at birth. 7. Describe the importance of growth monitoring and assessing child growth.	Understand the nutritional needs and manage to feed the developmentally delayed.	<b>QUIZ</b>	
To encourage creativity and innovation in solving problems of emerging cases in the field of clinical nutrition	<b>KP4:</b> Providing students with high levels of educational quality based on training on specific pathological conditions in therapeutic nutrition.	8. Identify readiness for complementary feeding.	Understand the importance of nutritional requirements through all age groups.	<b>ASSIGNMENT</b>	
	<b>SP1:</b> Evaluate critically scientific research from a variety of sources in relation to nutrition and health through working with others, communication, self-management, and problem-solving and reflect on the various components	9. Recognize the main developmental milestones for each growth period.	- Intellectual Analytical and Cognitive Skills: The student is expected to  - Plan recommendations for pregnant, lactating women	<b>QUIZ</b>	
To sustain the concept of collaboration to promote an appropriate diet solution in cases of health and disease	<b>SP2:</b> Communicate effectively with groups and individuals to promote the benefits of a balanced diet throughout the lifespan and demonstrate the ability to use scientific laboratory skills.		- Address the main nutritional needs for all the school-aged  - The main nutritional aspects during adulthood.	<b>WORKSHEET</b>	
	<b>SP3:</b> Assess diet, food and nutrient intake, and the consumption of food constituents in individuals and groups				
	<b>CP1:</b> Demonstrate consistent professional behavior in accordance with the legal and ethical boundaries of the dietetic profession			Discuss the nutritional needs for each growth period and during pregnancy and lactation, and during old age.	<b>HOMEWORK</b>
	<b>CP2:</b> Critically apply knowledge of diet and health to evaluate and communicate and comment on dietary or health information both from scientific sources.				
	<b>CP3:</b> Utilize the methods of data analysis using computer software and apply these methods to analyze data obtained from a wide variety of sources and situations, and apply critical thinking, testing hypotheses, formulating suggestions in diet and health				

## COURSE REGULATIONS

### ***Participation***

Class participation and attendance are important elements of every student's learning experience at The Hashemite University, and the student is expected to attend all classes. A student should not miss more than 15% of the classes during a semester. *Those exceeding this limit of 15% will receive a failing grade regardless of their performance.* It is a student's responsibility to monitor the frequency of their own absences. **Attendance record begins on the first day of class irrespective of the period allotted to drop/add and late registration. It is a student's responsibility to sign in; failure to do so will result in a non-attendance being recorded.**

In exceptional cases, the student, with the instructor's prior permission, could be exempted from attending a class provided that the number of such occasions does not exceed the limit allowed by the University. The instructor will determine the acceptability of an absence for being absent. A student who misses more than 25% of classes and has a valid excuse for being absent will be allowed to withdraw from the course.

### ***Plagiarism***

Plagiarism is considered a serious academic offense and can result in your work losing marks or being failed. HU expects its students to adopt and abide by the highest standards of conduct in their interaction with their professors, peers, and the wider University community. As such, a student is expected not to engage in behaviors that compromise his/her own integrity as well as that of the Hashemite University.

Plagiarism includes the following examples and it applies to all student assignments or submitted work:

- **Use of the work, ideas, images or words of someone else without his/her permission or reference to them.**
- **Use of someone else's wording, name, phrase, sentence, paragraph or essay without using quotation marks.**
- **Misrepresentation of the sources that were used.**

**The instructor has the right to fail the coursework or deduct marks where plagiarism is detected**

### ***Late or Missed Assignments***

In all cases of assessment, students who fails to attend an exam, class project or deliver a presentation on the scheduled date without prior permission, and/or are unable to provide a medical note, will automatically receive a fail grade for this part of the assessment.

- Submitting a term paper on time is a key part of the assessment process. Students who fail to submit their work by the deadline specified will automatically receive a 10% penalty.

Assignments handed in more than 24 hours late will receive a further 10% penalty. Each subsequent 24 hours will result in a further 10% penalty.

- In cases where a student misses an assessment on account of a medical reason or with prior permission; in line with University regulations an incomplete grade for the specific assessment will be awarded and an alternative assessment or extension can be arranged.

### ***Student Complaints Policy***

Students at The Hashemite University have the right to pursue complaints related to faculty, staff, and other students. The nature of the complaints may be either academic or non-academic. For more information about the policy and processes related to this policy, you may refer to the students' handbook.

## **COURSE ASSESSMENT**

### ***Course Calendar and Assessment***

Students will be graded through the following means of assessment and their final grade will be calculated from the forms of assessment as listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

<b>Assessment</b>	<b>Grade Weighting</b>	<b>Deadline Assessment</b>
Exam 1	20%	<b><u>Sunday</u></b> <b><u>10/11/2024</u></b>
Exam 2	20%	<b><u>Thursday</u></b> <b><u>17/12/2024</u></b>
Quizzes	10%	
Homework	10%	
Final Exam	40%	<b>Week 16</b>

### **Description of Exams**

Test questions will predominately come from the material presented in the lectures. Semester exams will be conducted during the regularly scheduled lecture period. The exam will consist of a combination of multiple-choice, short answer, match, true and false, and/or descriptive questions.

**Homework:** Will be given for each chapter, while the chapter is in progress you are supposed to work on them continuously and submit in the next lecture when I finish the chapter.

You are also expected to work on in-chapter examples, self-tests, and a representative number of end-of-chapter problems. The answers to self-tests and end-of-chapter exercises are given at the end of the book.

**Quizzes:** Unannounced quizzes will be given during or/and at the end of each chapter based upon the previous lectures. It will enforce that you come prepared to the class.

No make-up exams, homework or quizzes will be given. Only documented absences will be considered as per HU guidelines.

**Grades are not negotiable and are awarded according to the following criteria\*:**

Letter Grade	Description	Grade Points
A+	Excellent	4.00
A		3.75
A-		3.50
B+	Very Good	3.25
B		3.00
B-		2.75
C+	Good	2.50
C		2.25
C-		2.00
D+	Pass	1.75
D	Pass	1.50
F	Fail	0.00
I	Incomplete	-

### WEEKLY LECTURE SCHEDULE AND CONTENT DISTRIBUTION

*“Lecture hours and weeks are approximate and may change as needed”*

Note: For Chem 101 sections with 2 lecture periods per week (S/T, M/W or T/R), one lecture period covers 1.5 lecture hours (80 minutes). The course content specifies the sections in chapters 1-10 of the textbook that will be included in quizzes, homework and exams.

### Assessment Rubrics

Week	Course Topic	Lectures
Week 1+2	<ol style="list-style-type: none"> <li>1. Introduction and Preconception nutrition</li> <li>2. Pregnancy: <ul style="list-style-type: none"> <li>- Conception, maternal physiological changes</li> <li>- Placental development and function</li> <li>- Fetal growth and development</li> <li>- Nutritional needs,</li> <li>- Maternal malnutrition &amp; outcome of pregnancy dietary recommendations, nutrient supplements and fitness</li> </ul> </li> </ol>	6 hours

	- Dietary concerns and their management	
Week 3+4	3. Lactation - Factors influencing lactation - Nutritional needs, fitness and recommendations - Contraindications to breastfeeding - Breast feeding concerns and their management	6 hours
Week 5+6	4. Infant nutrition, growth and developments - Feeding: the importance and management of breastfeeding, breast milk substitutes and their modification - Introduction of solid foods and dietary concerns - Strategies for child survival	6 hours
<b>First-hour Exam</b>		
Week 7+8	Completion of the rest of infancy period nutrition	6 hours
Week 9+10	5. Toddler and preschool nutrition - Growth and development - Nutritional needs; dietary concerns and their management 6. School aged nutrition - Nutritional needs; dietary concerns and their management	6 hours
Week 11+12	7. Adolescence nutrition - Changes at puberty and indices of maturity - Nutritional needs, dietary concerns. - Nutrition and feeding of the developmentally delayed child.	6 hours
<b>Second-hour Exam</b>		
Week 13	8. Adult hood nutrition - Nutritional needs; dietary concerns and their management	3 hours
Week 14+15	9. Older adult nutrition - Population trends - The aging process - Nutritional needs during aging - Social, psychological and health concerns	6 hours
<b>Final exam</b>		

<b>Classroom Participation: Assessment Criteria</b>					
Criteria	Quality				Score
	Excellent (4 points)	Good (3 points)	Satisfactory (2 points)	Needs Improvement (1 points)	
<b>Degree to which student integrates course readings into classroom</b>	- often cites from readings; - uses readings to support points; - often articulates "fit" of	-occasionally cites from readings; - sometimes uses readings to support points; -occasionally articulates "fit" of readings with topic at hand .	-rarely able to cite from readings; - rarely uses readings to support points; - rarely articulates "fit" of readings with topic at hand	-unable to cite from readings; -cannot use readings to support points; cannot articulates "fit" of readings with topic at hand .	

<b>participation</b>	readings with topic at hand.				
<b>Interaction / participation in classroom discussions</b>	-always a willing participant, responds frequently to questions; - routinely volunteers point of view .	-often a willing participant, - responds occasionally to questions; - occasionally volunteers point of view .	-rarely a willing participant, - rarely able to respond to questions; - rarely volunteers point of view .	-never a willing participant., - never able to respond to questions; - never volunteers point of view .	
<b>Interaction /participation in classroom learning activities</b>	-always a willing participant; -acts appropriately during all role plays; - responds frequently to questions; - routinely volunteers point of view .	-often a willing participant; -acts appropriately during role plays; - responds occasionally to questions; -occasionally volunteers point of view .	-rarely a willing participant. -occasionally acts inappropriately during role plays; - rarely able to respond to direct questions; -rarely volunteers point of view .	-never a willing participant - often acts inappropriately during role plays,; - never able to respond to direct questions; - never volunteers point of view.	
<b>Demonstration of professional attitude and demeanor</b>	-always demonstrates commitment through thorough preparation; - always arrives on time; - often solicits instructors' perspective outside class.	- rarely unprepared; rarely arrives late; - occasionally solicits instructors' perspective outside class .	-often unprepared; occasionally arrives late; - rarely solicits instructors' perspective outside class .	-rarely prepared; - often arrives late; -never solicits instructors' perspective outside class	