The Hashemite University

الجامعـــــة الهاشميـــــة

Deanship of Academic Development and International Outreach

عمادة التطوير الأكاديمي والتواصل الدولي

Syllabus*: Therapeutic Nutrition Applications Throughout Lifecycle

(2105021721)

Second Semester 2022 /2023

COURSE INFORMATION	
Course Name: Therapeutic Nutrition Applications Throughout Lifecycle **Semester:** Second semester **Department:** Department of Clinical Nutrition and Dietetics **Faculty: Applied Medical Sciences**	**Course Code: 2105021721** **Section:** 1 **Core Curriculum**: Elective
Day(s) and Time(s): Wednesday: 12:30-15:30 **Classroom:** **A.M. 311**	**Credit Hours:** 3 (2 Theory/2 practical) **Prerequisites**: 2105021720

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:

- PowerPoint lectures and active classroom-based discussion
- Collaborative learning through small groups acting in an interdisciplinary context.
- Relevant films and documentaries
- Homework, and term paper.
- Video lectures
- Application in different labs in the practical part
- E-learning resources: e-reading assignments and practice quizzes through Model and Microsoft Team

FACULTY INFORMATION

Name	**Buthaina Mahmoud Alkhatib**
Academic Title:	**Assis.Prof.**
Office Location:	**1129-Groud Floor/ Faculty of A.M.S**
Telephone Number:	
Email Address:	
Office Hours:	**Sunday** 9:30- 10:30, 11:30-12:30 **Tuesday** 11:30-12:30 **Wednesday** 10:30-12:00 *Please send an e-mail (**bkhatib@hu.edu.jo**) to meet at any other time.*

REFERENCES AND LEARNING RESOURCES

1- Required Textbook:

Nutrition Through the Life Cycle (5th Edition) J.E. Brown, (2014) Thomson Wadsworth, Belmont, CA. (Main reference)

Suggested Additional Resources:

- Nutrition and Diet for Children Simplified (1st Edition) M.N. Mehta and N.J. Mehta, (2014) Jaypee Brothers Medical Publishers, India.
- Pediatric Nutrition (4th Edition) Samour P Q, King K (2012) Jones & Bartlett Learning, Burlington, MA
- Pediatric Nutrition Handbook, (5th Edition). Kleinman, RE (2004). American Academy of Pediatrics.
- Child Nutrition Physiology. Overton L T & Ewente M R (2008) New York: Nova Biomedical Books

Useful Web Resources: original and review articles from google scholar, PubMed, ….

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: bkhatib@hu.edu.jo

STUDENT LEARNING OUTCOMES MATRIX*

Core Curriculum Learning Outcomes	Program Learning Outcomes	Course Objectives	Course Student Learning Outcomes	Assessment Method
To promote independent creative problem-solving in the context of nutritional issues.	(KP1) Possess advanced and up-to-date information in the fields of therapeutic nutrition, diets, and food safety, according to the latest developments in scientific research.	1. To learn how nutrition impacts the lifecycle, starting at conception. 2. To cover the main issues concerning feeding mothers and young children and evaluate the effectiveness of nutrition interventions. 3. To improve maternal and child nutrition. 4. The course will be presented in a lecture format supplemented by readings in the required textbook and readings assigned in class. 5. To attend each class, review the reading assignments	CLO1:. Demonstrate an understanding of the physiological basis for nutrient requirements during pregnancy, lactation, infancy, and early childhood. CLO2: Clarify the impact of early nutrition in childhood on chronic health issues that may appear in adulthood. CLO3: Assess the dietary needs appropriate to each stage. CLO4: Articulate the relationship between perinatal nutritional status and pregnancy outcomes. CLO5: Give the appropriate nutritional advice regarding the feeding of mothers and children; and CLO6: Recognize the impact of early medical nutrition intervention on the prevention of pregnancy–related health	EXAM ASSIGNMENT
	(KP2) Familiarity with advanced scientific research methodologies and creativity strategies.			
To review the scientific literature on therapeutic nutrition and food safety for practicing scientific writing.	(KP3) Demonstrate advanced knowledge of food safety principles and their application in managing foodborne diseases.			TERM PAPER
	(KP4) The ability to think critically in the field of therapeutic nutrition and food safety			
To prepare and support researchers who work on chronic illness prevention and treatment.	(SP1): Apply evidence-based nutrition and food safety information to resolve issues and apply advanced and integrated knowledge of food safety and nutrition-related health issues.			
To establish reputable nutrition departments in hospitals and other healthcare facilities.	(SP2): Design and implement innovative approaches for product development, quality control, and biological safety in food production			EXAM
	(SP3): Identify appropriate research methodology to evaluate food safety and nutrition-related medical issues.			CASE STUDY
To enhance experts and researchers in therapeutic nutrition and food safety for various academic institutions, research centers, and food plants.	(SP4): Write a professional and polished scientific report on therapeutic nutrition and food safety using appropriate mathematical/statistical techniques to analyze research problems.			
	(CP1): Continuous self-learning, self-assessment, and the ability to deal with and solve problems of a high degree of difficulty.			
	(CP2): Maintain ethical standards and best practices in research, product development, and public health initiatives related to nutrition and food safety.			
To help enhance food producers with experts in the field of product development, quality control, and biological safety.	(CP3): Demonstrate a high level of work ethic reflective of responsibility/commitment towards service to society based on validated study methodology for community-based nutritional status assessment.			EXAM

To disseminate food safety and nutrition-related information through various tools, such as public and private business, marketing, and social media.	(CP4): Lead research and multidisciplinary projects on medical nutritional therapy and food safety, work within a team, evaluate its performance and contribute to professional knowledge. (CP5): Establish and manage reliable nutrition and food safety programs in health facilities, public health organizations, and the food industry.	before class and come prepared for presentations and discussions.	risks. CLO7: Defending myths on a scientific-evidence-based approach.	

COURSE REGULATIONS

Participation

Class participation and attendance are important elements of every student's learning experience at 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 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 integrity as well as that of 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 fail to attend an exam, or 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 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 listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

Assessment	Grade Weighting	Deadline Assessment
Midterm exam	30%	*10th May-2023*
Term paper and presentation	30%	Presentations after midterm Term paper **20 May**
Final Exam	40%	Week 16

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 them 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 on the previous lectures. It will enforce that you come prepared for 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+	Pass	2.50
C	Pass	2.25
C-	Fail	2.00

WEEKLY LECTURE SCHEDULE AND CONTENT DISTRIBUTION

Part 1	**Introduction**	**Week 1**	**3 hours**
Preconception care: knowledge, attitude, and practice			
Part 2	**Nutrition during pregnancy period**	**Week 2 -4**	**9 hours**
2.1. nutritional requirements during pregnancy			
2. 2. Nutrition During Pregnancy: Conditions and Interventions			
Part 3	**Lactation**	**Week 5-6**	**6 hours**
3.1. Nutritional requirements of lactation; 3.2.Nutrition During lactation: Conditions and Interventions			
Part 4	**Infancy period**	**Week 7-8**	**6 hours**
Infant Nutrition: birth to 6 months •Introduction of solid foods; •Nutrition in the toddler/preschool child; •Treatment of moderate and severe malnutrition; •Etiology and pathophysiology of malnutrition.			
Part 4	**Adolescents period**	**Week 8-9**	**6 hours**
Nutrition During Infancy: Conditions and Interventions			
Part 4	**Elderly period**	**Week 9-10**	**6 hours**
Nutrition During Elderly: Conditions and Interventions			
Part 6	**presentations**	**Week 11-15**	**18 hours**

Classroom Participation: Oral Presentation										
Element	**Excellent**		**Satisfactory**			**Needs Improvement**				***score***
	8	**7**	**6**	**5**	**4**	**3**	**2**	**1**	**0**	
Organization	▪ There is a logical sequence of information. ▪ Title slide and closing slide are included appropriately.		▪ There is some logical sequence of information. ▪ Title slide and closing slides are included.			▪ There is little or no logical sequence of information. ▪ Title slide and/ or closing slides are not included.				
Slide Design (text, colors, background, illustrations, size, titles, subtitles)	The presentation is attractive and appealing to viewers.		The presentation is somewhat appealing to viewers.			Little to no attempt has been made to make the presentation appealing to viewers.				
Content	▪ Presentation covers the topic completely and in-depth. ▪ Information is clear, appropriate, and accurate.		▪ Presentation includes some essential information. ▪ Some information is somewhat confusing, incorrect, or flawed.			▪ Presentation includes little essential information. ▪ Information is confusing, inaccurate, or flawed.				
Language	▪ Spelling, grammar, usage, and punctuation are accurate. ▪ Fluent and effective		There are minor problems in spelling, grammar, usage, and/or punctuation.			▪ There are persistent errors in spelling, grammar, usage, and/or punctuation. ▪ Less or not fluent and effective.				
Delivery	▪ Ideas were communicated with enthusiasm, proper voice projection, and clear delivery. ▪ There was sufficient eye contact with the audience. ▪ There was sufficient use of other non-verbal communication skills. ▪ Appropriate delivery pace was used.		▪ There was some difficulty communicating ideas due to voice projection, lack of preparation, incomplete work, and/or insufficient eye contact. ▪ Insufficient use of non-verbal communication skills. ▪ Delivery pace is somewhat appropriate.			▪ There was great difficulty communicating ideas due to poor voice projection, lack of preparation, incomplete work, and/or little or no eye contact. ▪ No use of nonverbal communication skills. ▪ Inappropriate delivery pace was used.				
Interaction with Audience	▪ Answers to questions are coherent and complete. ▪ Answers demonstrate confidence and extensive knowledge.		▪ Most answers to questions are coherent and complete. ▪ Answers somehow demonstrate confidence and extensive knowledge.			▪ Answers to questions are neither coherent nor complete. ▪ Is tentative or unclear in responses.				
Total score	***= (y*5/16)***									

Suggested topics for term papers and presentations:

1. Nutritional problems among toddlers and preschool children.
2. Different Milk formula types, indications, and uses.
3. Geriatric nutrition: health complications related to nutrition, and nutritional requirements.
4. Using herbs and supplementations for weight loss among adults: benefits and contraindications.
5. Social media, and using electronics are associated with body image and self-esteem among adolescents.
6. Nutrition for postmenopausal females and health complications.
7. Ergogenic aids and fertility in males.
8. School cafeteria choices, national nutritional programs, and nutritional problems among school-age children.
9. Diet quality evaluation procedures and tools: strengths and limitations.
10. BMI calculations for children and adolescents: WHO, CDC, and alternative BMI.
11. The changing in dietary guidelines during the last 50 years: advantages and disadvantages for each.
12. Fad diets for weight control: history, pros, and cons.
13. National fortification and enrichment programs.
14. Nutritional requirements of vitamins and minerals between different age groups
15. Therapeutic diets and recommendations for selected problems during infancy, toddlers, and preschool period.
16. Therapeutic diets and recommendations for selected problems during lactation and pregnancy.
17. Eating disorders: signs and symptoms, possible causes, and intervention.

Timetable for presentations:

Student name	Subject	The date
1. **2.**		**19/4/2023**
3. **4.**		**26/4/2023**
5. **6.**		**3/5/2023**
7. **8.**		**10/5/2023**
9. **10.**		**17/5/2023**

- **Presentation:**

  Not more than 25 slides.

  Clear font

  Clear figures

  Presented in the English language.

  White background

- **Term Paper**

  Around 20 A4 pages

  Cover page (Title page)

  Table of contents

  Pages must be numbered.

  Font size 12 Times New Romans for the paragraphs

  Font size 14 for titles

  1.5 line spacing

  Add titles for paragraphs and subtitles: abstract, introduction, results, conclusion, references

  Paragraphs should be Justified.

  References in APA style (alphabetically ordered).