



## Syllabus\*: Advanced Medical Nutrition Therapy (2405021725) First Semester 2024/2025

### COURSE INFORMATION

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| <b>Course Name:</b> Advanced Medical Nutrition Therapy<br><b>Semester:</b> First<br><b>Department:</b> Department of Clinical Nutrition and Dietetics<br><b>Faculty:</b> Applied Medical Sciences | <b>Course Code:</b> 2405021725<br><b>Section:</b> 1<br><b>Core Curriculum:</b> Obligatory Requirements |
| <b>Day(s) and Time(s):</b><br>Section 1: Monday: 9:30-12:30<br><b>Classroom:</b> Building of Medical Schools 311  | <b>Credit Hours:</b> 3<br><b>Prerequisites:</b> -  |

### COURSE DESCRIPTION

The purpose of this course is to provide a theoretical and practical base for diet modification & nutritional therapy in health and in a variety of disease states.

### 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
- Video lectures
- E-learning resources: e-reading assignments and practice quizzes through Model and Microsoft Team

### FACULTY INFORMATION

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| <b>Name</b>              | <b>Alaa Ali Qatatsheh</b>  |
| <b>Academic Title:</b>   | <b>Associate Professor</b>   |
| <b>Office Location:</b>  | Building of Medical Schools / Department of Clinical Nutrition and Dietetics |
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| <b>Email Address:</b>    | <b>a.qatatsheh@hu.edu.jo</b>   |
| <b>Office Hours:</b>     | Mon (12:30-15:30)  |

## REFERENCES AND LEARNING RESOURCES

### Required Textbook:

- Nelms M, Sucher K, Lacey K, Roth S. Nutrition Therapy and Pathophysiology. 2015 or 2019. Thomson & Wadsworth Publishing, Belmont, CA. 4<sup>th</sup> edition.
- Raymond J and Morrow K. Krause and Mahan's Food & The Nutrition Care Process. 2021. Saunders. 15<sup>th</sup> edition.

### Suggested Additional Resources

3. Assigned articles

## 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:** +962 5 3903333

**Location:** Building of Medical Schools

**Email:**

| 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.                    | <p>(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.</p> <p>(KP2) Familiarity with advanced scientific research methodologies and creativity strategies.</p> | Understand the pathophysiology of nutrition-related disease states.   | <p>Gain advanced knowledge on the pathophysiology of nutrition related disease, which implies a critical understanding of theories and principle.</p> <p>Gain advanced knowledge on therapeutic nutrition and NCP, which implies a critical understanding of theories and principle.</p>  | EXAMS             |
| To review scientific literature on therapeutic nutrition and food safety to practice scientific writing. | <p>(KP3) Demonstrate advanced knowledge of food safety principles and their application in managing foodborne diseases.</p> <p>(KP4) The ability to think critically in the field of therapeutic nutrition and food safety</p>  | Interpret information from medical, social and nutritional histories, combined with biochemical and anthropometrical indices during different pathophysiological states to assess nutritional status, develop nutrition care plans, and problem solve | <p>Perform nutrition assessments, demonstrating problem-solving, clinical reasoning and tailored approaches for individuals.</p> <p>Critically evaluate the roles, responsibilities, and priorities of inter-professional team members and employ collaborative practice to create nutrition plans that meet the shared vision of healthcare teams</p> <p>Synthesize information to develop advanced care plans, discharge plans and referrals to other services where appropriate,</p> | EXAMS             |
| 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   | Accurately define, both in writing and orally, how pathophysiology of a   |   |                   |

|   |   |  |   |                                       |
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|   | advanced and integrated knowledge of food safety and nutrition-related health issues.   | selected disease state impacts nutritional status and what nutrition interventions are indicated   | in accordance with jurisdictional legislation, policy or standards  |                                       |
| 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  | Understand the application of nutrition principles to current practice of clinical nutrition in  | Understand the ability to demonstrate the innovation required to solve problems related to NCP.   | EXAMS                                 |
|   | (SP3): Identify appropriate research methodology to evaluate food safety and nutrition-related medical issues.  | all areas of medical nutrition therapy.  | Providing the main steps to plan a successful nutrition innervation.<br><br>Systematically implement, evaluate and adapt nutrition care plans, programs and services in accordance with legislation, policy or standards. | EXAMS                                 |
| 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. | After review of the literature, students will become familiar with MNT guidelines for critical illness and understand the methodology of evidenced-based research. | Critically reflect on complex diet – disease relationships and demonstrate an understanding of this in professional practice.   | Presentation<br><br>Literature Review |
|   | (CP1): Continuous self-learning, self-assessment, and the ability to deal with and solve problems of a high degree of difficulty.   |  | Critically evaluate and explore a variety of tools and technologies to support the nutrition care process.  |                                       |
|   | (CP2): Maintain ethical standards and best practices in research, product development, and public health initiatives related to nutrition and food safety.                              |  | Understand and apply knowledge to how to work with Nutrition Care Process (NCP).  |                                       |

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| <p>To help enhance food producers with experts in the field of product development, quality control, and biological safety.</p>                                   | <p>(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.</p> |  |  |  |
| <p>To disseminate food safety and nutrition-related information through a variety of tools, such as public and private business, marketing, and social media.</p> | <p>(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.</p>               |  |  |  |
|   | <p>(CP5): Establish and manage reliable nutrition and food safety programs in health facilities, public health organizations, and the food industry.</p>  |  |  |  |

## 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 offence 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 behaviours 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>Day and Date</b> |
|--------------------------|------------------------|---------------------|
| <b>Mid-term Exam</b>     | 40%                    | To be announced     |
| <b>Presentation</b>      | 10%                    | To be announced     |
| <b>Literature review</b> | 20%                    | To be announced     |
| <b>Final</b>             | 40%                    | To be announced     |

### **Description of Exams**

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

**Quizzes:** Unannounced quizzes will be given 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\*:**

| <b>Letter Grade</b> | <b>Description</b> | <b>Grade Points</b> |
|---------------------|--------------------|---------------------|
| A+                  | Excellent          | 4.00                |
| A                   |                    | 3.75                |
| A-                  | Very Good          | 3.50                |
| B+                  |                    | 3.25                |
| B                   |                    | 3.00                |
| B-                  | Pass               | 2.75                |
| C+                  |                    | 2.50                |
| C                   |                    | 2.25                |
| C-                  |                    | 2.00                |
|                     | Fail               |                     |

## WEEKLY LECTURE SCHEDULE AND CONTENT DISTRIBUTION

| Week          | Lecture Hours          | Topic   | Chapter       |
|---------------|------------------------|---|---------------|
| 1             | 3                      | Introduction  | Syllabus<br>1 |
| 2 and 3       | 5                      | Medical Nutrition Therapy for Lower Gastrointestinal Tract Inflammatory Bowel Disease (IBD)   | 1             |
| 4 and 5       | 3                      | IBD: epidemiology-etiology-associated health conditions-nutrition therapy- nutrition intervention   | 2             |
| 6 and 7       | 4                      | Medical Nutrition Therapy for Anemia  | 3             |
|               |                        |   |               |
| 8 and 9       | 4                      | Medical Nutrition Therapy for Genetic Metabolic Disorder (Epidemiology-etiology-associated health conditions-nutrition therapy- nutrition intervention) | 4             |
| 9, 10, and 11 | 8                      | The Nutrition Care Process<br>PES Statements  | 6             |
|               |                        |   |               |
| 12 and 13     | 6                      | Nutrition Screening   | 7             |
| 14            | 6                      | Sample Nutrition Diagnostic Terminology   | 8             |
| 15            | 3                      | Review  | -             |
| 16            | <b>University Exam</b> |   |               |

## ASSESSMENT RUBRICS

| <b>Classroom Participation: Assessment Criteria</b>                            |   |   |   |   |       |
|--|---|---|---|---|-------|
| Criteria   | Quality   |   |   |   | Score |
|  | Excellent<br>(4 points)   | Good<br>(3 points)  | Satisfactory<br>(2 points)  | Needs<br>improvement<br>(1 point)   |       |
| <b>Degree to which integrates course readings into classroom participation</b> | <ul style="list-style-type: none"> <li>- often cites from readings;</li> <li>- uses readings to support points;</li> <li>- often articulates "fit" of readings with topic at hand.</li> </ul> | <ul style="list-style-type: none"> <li>-occasionally cites from readings;</li> <li>- sometimes uses readings to support points;</li> <li>-occasionally articulates "fit" of readings with topic at hand.</li> </ul> | <ul style="list-style-type: none"> <li>-rarely able to cite from readings;</li> <li>- rarely uses readings to support points;</li> <li>- rarely articulates "fit" of readings with topic at hand</li> </ul> | <ul style="list-style-type: none"> <li>-unable to cite from readings;</li> <li>-cannot use readings to support points;</li> <li>cannot articulates "fit" of readings with topic at hand.</li> </ul> |       |
| <b>Interaction/participation in classroom discussions</b>                      | <ul style="list-style-type: none"> <li>-always a willing participant, responds frequently to questions;</li> <li>- routinely volunteers' point of view.</li> </ul>                            | <ul style="list-style-type: none"> <li>-often a willing participant,</li> <li>- responds occasionally to questions;</li> <li>- occasionally volunteers' point of view.</li> </ul>                                   | <ul style="list-style-type: none"> <li>-rarely a willing participant,</li> <li>- rarely able to respond to questions;</li> <li>- rarely volunteers point of view.</li> </ul>                                | <ul style="list-style-type: none"> <li>-never a willing participant.,</li> <li>- never able to respond to questions;</li> <li>- never volunteers point of view.</li> </ul>                          |       |
| <b>Interaction/participation in classroom learning activities</b>              | <ul style="list-style-type: none"> <li>-always a willing participant;</li> <li>-acts appropriately during all role plays;</li> </ul>  | <ul style="list-style-type: none"> <li>-often a willing participant;</li> </ul>   | <ul style="list-style-type: none"> <li>-rarely a willing participant.</li> </ul>  | <ul style="list-style-type: none"> <li>-never a willing participant</li> </ul>  |       |

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|   | <ul style="list-style-type: none"> <li>- responds frequently to questions;</li> <li>- routinely volunteers' point of view.</li> </ul>  | <ul style="list-style-type: none"> <li>-acts appropriately during role plays;</li> <li>- responds occasionally to questions;</li> <li>-occasionally volunteers' point of view.</li> </ul> | <ul style="list-style-type: none"> <li>-occasionally acts inappropriately during role plays;</li> <li>- rarely able to respond to direct questions;</li> <li>-rarely volunteers point of view.</li> </ul> | <ul style="list-style-type: none"> <li>- often acts inappropriately during role plays;</li> <li>- never able to respond to direct questions;</li> <li>- never volunteers point of view.</li> </ul> |  |
| <p><b>Demonstration of professional attitude and demeanor</b></p> | <ul style="list-style-type: none"> <li>-always demonstrates commitment through thorough preparation;</li> <li>- always arrives on time;</li> <li>- often solicits instructors' perspective outside class.</li> </ul> | <ul style="list-style-type: none"> <li>- rarely unprepared; rarely arrives late;</li> <li>- occasionally solicits instructors' perspective outside class.</li> </ul>                      | <ul style="list-style-type: none"> <li>-often unprepared; occasionally arrives late;</li> <li>- rarely solicits instructors' perspective outside class.</li> </ul>  | <ul style="list-style-type: none"> <li>-rarely prepared;</li> <li>- often arrives late;</li> <li>-never solicits instructors' perspective outside class</li> </ul>                                 |  |

**Classroom Participation: Oral Presentation**

| Element   | Excellent   |   | Satisfactory  |   |   | Needs Improvement  |   |   |   | s<br>c<br>o<br>r<br>e |
|---|---|---|---|---|---|--|---|---|---|-----------------------|
|   | 8   | 7 | 6   | 5 | 4 | 3  | 2 | 1 | 0 |                       |
| <b>Organiz<br/>ation</b>  | <ul style="list-style-type: none"> <li>There is a logical sequence of information.</li> <li>Title slide and closing slide are included appropriately.</li> </ul>  |   | <ul style="list-style-type: none"> <li>There is some logical sequence of information.</li> <li>Title slide and closing slides are included.</li> </ul>  |   |   | <ul style="list-style-type: none"> <li>There is little or no logical sequence of information.</li> <li>Title slide and/ or closing slides are not included.</li> </ul>   |   |   |   |                       |
| <b>Slide<br/>Design</b><br>(text, colors, background, illustrations, size, titles, subtitles) | Presentation is attractive and appealing to viewers.  |   | Presentation is somewhat appealing to viewers.  |   |   | Little to no attempt has been made to make presentation appealing to viewers.  |   |   |   |                       |
| <b>Content</b>  | <ul style="list-style-type: none"> <li>Presentation covers topic completely and in depth.</li> <li>Information is clear, appropriate, and accurate.</li> </ul>  |   | <ul style="list-style-type: none"> <li>Presentation includes some essential information.</li> <li>Some information is somewhat confusing, incorrect, or flawed.</li> </ul>  |   |   | <ul style="list-style-type: none"> <li>Presentation includes little essential information.</li> <li>Information is confusing, inaccurate, or flawed.</li> </ul>  |   |   |   |                       |
| <b>Languag<br/>e</b>  | <ul style="list-style-type: none"> <li>Spelling, grammar, usage, and punctuation are accurate.</li> <li>Fluent and effective</li> </ul>   |   | There are minor problems in spelling, grammar, usage, and/or punctuation.   |   |   | <ul style="list-style-type: none"> <li>There are persistent errors in spelling, grammar, usage, and/or punctuation.</li> <li>Less or not fluent and effective.</li> </ul>  |   |   |   |                       |
| <b>Delivery</b>   | <ul style="list-style-type: none"> <li>Ideas were communicated with enthusiasm, proper voice projection and clear delivery.</li> <li>There was sufficient eye contact with audience.</li> <li>There were sufficient use of other non-verbal communication skills.</li> <li>Appropriate delivery pace was used.</li> </ul> |   | <ul style="list-style-type: none"> <li>There was some difficulty communicating ideas due to voice projection, lack of preparation, incomplete work, and/or insufficient eye contact.</li> <li>Insufficient use of non-verbal communication skills.</li> <li>Delivery pace is somewhat appropriate.</li> </ul> |   |   | <ul style="list-style-type: none"> <li>There was great difficulty communicating ideas due to poor voice projection, lack of preparation, incomplete work, and/or little or no eye contact.</li> <li>No use of non verbal communication skills.</li> <li>Inappropriate delivery pace was used.</li> </ul> |   |   |   |                       |
| <b>Interaction<br/>with<br/>Audience</b>  | <ul style="list-style-type: none"> <li>Answers to questions are coherent and complete.</li> <li>Answers demonstrate confidence and extensive knowledge.</li> </ul>  |   | <ul style="list-style-type: none"> <li>Most answers to questions are coherent and complete.</li> <li>Answers somehow demonstrate confidence and extensive knowledge.</li> </ul>   |   |   | <ul style="list-style-type: none"> <li>Answers to questions are neither coherent nor complete.</li> <li>Is tentative or unclear in responses.</li> </ul>   |   |   |   |                       |
| <b>Total score</b>  | = (y*5/16)  |   |   |   |   |  |   |   |   |                       |