# Syllabus of Medical Nutrition Therapy (2) / Practical

# First Semester 2026 /2027

| COURSE INFORMATION | |
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| **Course Name: Medical Nutrition Therapy (2) / Practical**<br>**Semester:** First Semester<br>**Department:** Department of Clinical Nutrition and Dietetics<br>**Faculty:** Applied Medical Sciences | **Course Code: 140502448**<br>**Section:** 1<br>**Core Curriculum**: **Obligatory department** |
| **Day(s) and Time(s):** Wednesday: 8:30-11:30<br>Wednesday: 14:30-17:30<br>**Classroom:** Nutritional Clinic- Medical Sciences Building- 3rd floor | **Credit Hours:** 1<br>**Prerequisites**: **Medical Nutrition Therapy 2** (140502447) |

## COURSE DESCRIPTION

Topics that will be studied in this course are specified in how diet can intervene to treat some cases, particularly Metabolic Stress and Trauma, Brain Injury, Cystic Fibrosis, COPD, Rheumatoid Arthritis, Stroke, and different Cancer cases. In addition, Drug-Nutrient Interaction will be discussed in detail, especially for the elderly. In the practical application of advanced medical nutrition therapy, NutriSurvey and ESHA Food Processor are used to build and modify dietary plans, while AI applications can be used to discuss cases and review proposed dietary alternatives.

## DELIVERY METHODS

The course will be delivered through a combination of active learning strategies. These will include:

- Case studies
- PowerPoint lectures and active classroom-based discussion
- Collaborative learning through small groups acting in an interdisciplinary context.
- Encouraging the use of AI applications to enhance the learning experience.
- Using NutriSurvey and ESHA Food Processor to build and modify dietary plans.

## FACULTY INFORMATION

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| **Name** | **Islam Al-Shami** |
| **Academic Title:** | **Instructor** |
| **Office Location:** | **Medical Sciences building- L1; office #:2164** |
| **Telephone Number:** | **+962 (5) 3903333 Ext. 5528** |
| **Email Address:** | **islamk@hu.edu.jo** |
| **Office Hours:** | **Sunday** 12:30-13:30<br>**Tuesday** 12:30-13:30<br>**Wednesday** 11:30-12:30 and 12:30-13:30<br>**Or to be determined by appointment** |

## REFERENCES AND LEARNING RESOURCES

**Required Textbook:**

- Nelms, M.N. and Anderson, S.L., Medical Nutrition Therapy; case studies. 5th Ed., Canada: Thomson/Wadsworth.
- Iowa Dietetic Association. Simplified Diet Manual, 11th Ed., edited by Maher, A.K., Wiley-Blackwell.

**Suggested Additional Resource:**

- Nelms, M., Sucher, K , Lacey, K and Roth, S. (2020) Nutrition Therapy and Pathophysiology 4th Edition. Australia: Wadsworth, Cengage learning.
- Choose Your Foods: Exchange Lists for Diabetes, American Diabetes Association and Academy of Nutrition and Dietetics, Copyright 2020
- Pronsky ZM, Powers and Moore's, Food Medication Interaction, Latest edition. http://www.foodmedinteractions.com/

| 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 | **KP1:** 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.** Acquire knowledge and skills for applying evidence-based medical nutrition for disease prevention and treatment.<br>**2.** Understand the pathophysiology related to discussed medical conditions and determine appropriate evidence based medical nutrition therapy<br>**3.** Complete a nutrition assessment and interpret nutrition assessment data to develop a nutrition prescription with goals and objectives including dietary and nutrient modifications to promote positive outcomes. | K1- Describes the traditional mode(s) of treatment (medical treatment) for each disease or disorder and the relationship of treatment modalities to nutritional status/support.<br>K2- Use the nutrition care process (NCP) to make decisions, to identify nutrition-related problems and determine and evaluate nutrition interventions, including medical nutrition therapy, disease prevention and health promotion.<br>K3- State the Academy Nutrition Care Process in diagnosing and evaluating outcomes.<br>K4- Outlines composition and therapeutic adaptation of routine hospital diets. | Exams<br>"On-line' reading |
| To provide optimal educational and training opportunities for students during their professional preparation for careers in nutrition. | **KP2:** demonstrate an understanding of food chemistry, technology, preparation, safety and correlates nutrition with food technology and future challenges**.** | | | |
| To participate in community services for health promotion and disease prevention programs | **KP3:** Explain the principles of cellular metabolic processes, the structure and function of the various physiological systems, and the principles of biochemistry | | | |
| To encourage creativity and innovation in solving problems of emerging cases in the field of clinical nutrition | **KP4:** Providing students with high levels of educational quality based on training on specific pathological conditions in therapeutic nutrition. | | | |
| | **SP1:** 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 | | S1- Summarizes the basic physiological function of the respective organ system.<br>S2- Perform nutrition diagnosis and intervention practically using NCP by practicing case studies<br>S3- Explain current research trends associated with each disease or disorder which may ultimately affect nutritional status/support<br>S4- Summarizes the clinical/nutritional implications of: anthropometric, biochemical data, medical tests & procedures, client history, nutrition focused physical exam and food history | Case studies<br>Practice<br>Written practical exam |
| To sustain the concept of collaboration to promote an appropriate diet solution in cases of health and disease | **SP2:** 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. | | | |
| | **SP3:** Assess diet, food and nutrient intake, and the consumption of food constituents in individuals and groups | | | |
| | **CP1:** Demonstrate consistent professional behavior in accordance with the legal and ethical boundaries of the dietetic profession | | C1- Show proper professional behaviour and work ethics<br>C2- Demonstrate effective leadership skills and team work in the class room as well as in the lab | Practice<br>Group discussion |
| | **CP2:** Critically apply knowledge of diet and health to evaluate and communicate and comment on dietary or health information both from scientific sources. | | | |
| | **CP3:** 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 | | | |

## 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**:

## COURSE REGULATIONS

***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**.**
- All the Lab. Sessions will require students to **WORK IN GROUP** or pairs. This does not mean one student doing one part and another student doing a completely independent part. Each student should help his/her partner on one particular aspect, so as to be familiar with all aspects of the experiment.
- Students misses more than 15% of total lectures will be deprived from the final exam**.**
- 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**.**
- Participation and discussion are encouraged for earning additional points (extra credits)**.**

***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**

***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

| Assessment | Instrument | Grade Weighting | Deadline Assessment |
|---|---|---|---|
| **Mid-term Assessment** | Mid-Term Examination | 30 % | 2/12/2026<br>Time & place: To be determined |
| **Continuous Assessment** | Case study presentation | 15 % | |
| | Assignment | 10 % | 1/11/2026 |
| | Quizzes | 5 % | |
| **End-of-block Assessment** | Written end-of-block Examination | 40 % | Date, Time & Place: To be determined later by the University |

**Description of Exams**

Test questions will predominantly 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, matching, true and false, and/or descriptive questions.

No make-up exams 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 LABORATORIES SCHEDULE AND CONTENT DISTRIBUTION

***"Labs. hours and weeks are approximate and may change as needed"***

Note: For Medical nutritional therapy (2) labs.; 1 lab per week (Wednesday); each lab duration covers 3 hours. The chapters of the textbook that are considered part of the course content will be included in exams.

| Week # | Date | Case # | Topic |
|---|---|---|---|
| 1 | 14/10 | **Orientation** | |
| 2 | 21/10 | Case # 1 | Ulcer Disease: Medical and Surgical Treatment |
| 3 | 28/10 | Case # 2 | Polypharmacy of the Elderly: Drug-Nutrient Interaction |
| 4 | 1/11 | **Assignment Deadline** | |
| 4 | 4/11 | Case # 3 | Metabolic Stress and Trauma |
| 5 | 11/11 | Case # 4 | Traumatic Brain Injury: Metabolic Stress and Nutrition Support |
| 6 | 18/11 | Case # 5 | Lymphoma Treated with Chemotherapy |
| 7 | 25/11 | Case # 6 | Esophageal Cancer Treated with Surgery and Radiation |
| 9 | 2/12 | Case # 7 | Cystic Fibrosis |
| 9 | 2/12 | **Mid-Exam** | |
| 10 | 9/12 | Case # 8 | Chronic Obstructive Pulmonary Disease |
| 11 | 16/12 | Case # 9 | Stroke |
| 12 | 23/12 | Case # 10 | Rheumatoid Arthritis |

# Assessment Rubrics

| Classroom Participation: Assessment Criteria | | | | | |
|---|---|---|---|---|---|
| **Criteria** | **Quality** | | | | **Score** |
| | **Excellent (4 points)** | **Good (3 points)** | **Satisfactory (2 points)** | **Needs Improvement (1 points)** | |
| **Degree to which student integrates course readings into classroom participation** | often cites from readings;<br>uses readings to support points;<br>- often articulates "fit" of readings with topic at hand. | - occasionally cites from readings;<br>- sometimes uses readings to support points;<br>- occasionally articulates "fit" of readings with topic at hand . | - rarely able to cite from readings;<br>- rarely uses readings to support points;<br>- rarely articulates "fit" of readings with topic at hand | - unable to cite from readings;<br>- cannot use readings to support points; cannot articulates "fit" of readings with topic at hand . | |
| **Interaction/ participation in classroom discussions** | - always a willing participant, responds frequently to questions;<br>- routinely volunteers point of view . | - often a willing participant,<br>- responds occasionally to questions;<br>- occasionally volunteers point of view . | - rarely a willing participant,<br>- rarely able to respond to questions;<br>- rarely volunteers point of view . | - never a willing participant.,<br>- never able to respond to questions;<br>- never volunteers point of view . | |
| **Interaction/participation in classroom learning activities** | - always a willing participant;<br>- acts appropriately during all role plays;<br>- responds frequently to questions;<br>- routinely volunteers point of view. | - often a willing participant;<br>- acts appropriately during role plays;<br>- responds occasionally to questions;<br>- occasionally volunteers point of view. | - rarely a willing participant.<br>- occasionally acts inappropriately during role plays;<br>- rarely able to respond to direct questions;<br>- rarely volunteers point of view . | - never a willing participant<br>- often acts inappropriately during role plays;,<br>- never able to respond to direct questions;<br>- never volunteers point of view. | |
| **Demonstration of professional attitude and demeanor** | - always demonstrates commitment through thorough preparation;<br>- always arrives on time;<br>- often solicits instructors' perspective outside class. | rarely unprepared; rarely arrives late;<br>- occasionally solicits instructors' perspective outside class . | - often unprepared; occasionally arrives late;<br>- rarely solicits instructors' perspective outside class . | - rarely prepared;<br>- often arrives late;<br>- never solicits instructors' perspective outside class | |

| *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.<br>Title slide and closing slide are included appropriately. | | There is some logical sequence of information.<br>Title slide and closing slides are included. | | | There is little or no logical sequence of information.<br>Title slide and/ or closing slides are not included. | | | | |
| **Slide Design** (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. | | | | |
| **Content** | Presentation covers topic completely and in depth.<br>Information is clear, appropriate, and accurate. | | Presentation includes some essential information.<br>Some information is somewhat confusing, incorrect, or flawed. | | | Presentation includes little essential information.<br>Information is confusing, inaccurate, or flawed. | | | | |
| **Language** | Spelling, grammar, usage, and punctuation are accurate.<br>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.<br>Less or not fluent and effective. | | | | |
| **Delivery** | Ideas were communicated with enthusiasm, proper voice projection and clear delivery.<br>There was sufficient eye contact with audience.<br>There were sufficient use of other non-verbal communication skills.<br>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.<br>Insufficient use of non-verbal communication skills.<br>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.<br>No use of non verbal communication skills.<br>Inappropriate delivery pace was used. | | | | |
| **Interaction with Audience** | Answers to questions are coherent and complete.<br>Answers demonstrate confidence and extensive knowledge. | | Most answers to questions are coherent and complete.<br>Answers somehow demonstrate confidence and extensive knowledge. | | | Answers to questions are neither coherent nor complete.<br>Is tentative or unclear in responses. | | | | |
| **Total score** | ***= (y*5/16)*** | | | | | | | | | |