# The Hashemite University







Deanship of Academic Development and International Outreach

عمادة التطوير الأكاديمي والتواصل الدولى

# Syllabus of Assessment of Nutritional Status (1905021358) Second Semester 2023 /2024

|                                               | COURSE INFORMATION                             |                                        |                        |  |
|-----------------------------------------------|------------------------------------------------|----------------------------------------|------------------------|--|
| Course Name: Assessment of Nutritional Status |                                                | Course Code: 1905021358                |                        |  |
| Semester:                                     | Second Semester                                | Section: 1                             |                        |  |
| Department:                                   | Department of Clinical Nutrition and Dietetics | Core Curriculum: Obligatory department |                        |  |
| Faculty:                                      | Applied Medical Sciences                       |                                        |                        |  |
| Day(s) and Time(s): Wednesday: 9:00-11:00     |                                                | Credit Hours:                          | 2                      |  |
| Classroom:                                    | MB 107                                         | Prerequisites:                         | Dietetics (1905021212) |  |
|                                               |                                                |                                        |                        |  |

#### **COURSE DESCRIPTION**

This course focuses on the tools used to assess the nutritional status of pediatrics, adults, elderly, and pregnant and lactating women such as the anthropometric, biochemical, nutrition-focused physical examination, and dietary and history assessment. The information in this course provides the students learning opportunities in the area of clinical nutrition, including the application of the nutrition care process and model to complex medical conditions .

#### **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.
- Encouraging the use of social media and communication between students to enhance the learning experience.
- Food models
- Online dietary assessment tools available at http://fnic.nal.usda.gov/nal\_display/index.php?info\_center=4&tax\_level=2&tax\_subject=256&topic\_id=1325
- Anthropometric tools available in the Clinical Nutrition Unit of the Hashemite University
- WHO Anthropometry Training Video

| FACULTY INFORMATION |                                              |  |  |
|---------------------|----------------------------------------------|--|--|
| 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:       | <b>Sunday</b> : 10:00-11:00, and 12:00-1:00  |  |  |
|                     | <b>Tuesday:</b> 10:00-11:00, and 12:00-1:00  |  |  |
|                     | Or to be determined by appointment           |  |  |

# **REFERENCES AND LEARNING RESOURCES**

# **Required Textbook:**

• Nieman, DC. 2019. **Nutritional Assessment**. 7<sup>th</sup> edition. New York, NY: McGraw-Hill. **ISBN 0078021405**.

# **Suggested Additional Resource:**

- Charney, P, and Malone, A. 2015. **ADA Pocket Guide to Nutrition Assessment.** American Dietetic Association, Chicago, Illinois
- Gibson, S. 2005. **Principles of Nutritional Assessment.** 2nd Edition. Oxford University Press, New York, New York.

| STUDENT LEARNING OUTCOMES MATRIX*                                                                                                      |                                                                                                                                                                                                                                                                      |                                                                                                                                                                           |                                                                                                                                                                                                                                        |                                        |  |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|--|
| Core Curriculum<br>Learning Outcomes                                                                                                   | Program Learning Outcomes                                                                                                                                                                                                                                            | Course Objectives                                                                                                                                                         | Course Student Learning Outcomes                                                                                                                                                                                                       | Assessment<br>Method                   |  |
| optimum educational standard in<br>the field of clinical nutrition and<br>general knowledge in food<br>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. Know the purposes of food and nutrition surveys and its role in nutrition intervention planning.                                                                       |                                                                                                                                                                                                                                        |                                        |  |
| 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.                                                                                                     | assessment of the nutritional status of individuals, household and communities.                                                                                           | K1- Know means of assessing dietary intake, body composition and growth, and micronutrient status and under what circumstances they would be used.  K2- Describe performance characteristics                                           | • Exams • "On-line' reading • Practice |  |
| 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                                                                                              | current best practices in dietary,<br>biochemical, and<br>anthropometric assessment of<br>nutritional status.                                                             | (validity, reliability, dependability, sensitivity and specificity) of nutritional status indicators and measures and how they are assessed.  K3- To gain an understanding of the rationales, advantages, and disadvantages of various |                                        |  |
| 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.                                                                                                               | 4. Be able to select and perform<br>the most appropriate methods to<br>be used for assessment of the<br>nutritional status of individuals,<br>households and communities. | approaches of nutritional assessment. K4- Identify principles of biochemical assessment focusing on selected Vitamins and minerals                                                                                                     |                                        |  |
|                                                                                                                                        | <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                             | nutritional assessment.                                                                                                                                                   | analyze and interpret food and nutrition surveys of individuals, household and communities.  S2- Gain an understanding of the appropriate                                                                                              |                                        |  |
| 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.                                                                  | interpretation of results.                                                                                                                                                | interpretation of results.  S3- Identify and compare/contrast methods of assessing body size and composition, dietary intake.                                                                                                          |                                        |  |
|                                                                                                                                        | <b>SP3:</b> Assess diet, food and nutrient intake, and the consumption of food constituents in individuals and groups                                                                                                                                                | 7. To demonstrate ability to measure, calculate, and interpret anthropometric data.                                                                                       |                                                                                                                                                                                                                                        |                                        |  |
|                                                                                                                                        | <b>CP1:</b> Demonstrate consistent professional behavior in accordance with the legal and ethical boundaries of the dietetic profession                                                                                                                              |                                                                                                                                                                           |                                                                                                                                                                                                                                        |                                        |  |
|                                                                                                                                        | <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 |                                                                                                                                                                           |                                                                                                                                                                                                                                        |                                        |  |

#### **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.

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.
- 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 a 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 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.

<u>The instructor has the right to fail the coursework or deduct marks where plagiarism is detected</u>

#### 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  | Grade Weighting | Deadline Assessment                                          |
|-------------|-----------------|--------------------------------------------------------------|
| First Exam  | 30 %            | 27/3/2024 Time & place: To be determined                     |
| Second Exam | 30 %            | 8/5/2024 Time & place: To be determined                      |
| Final Exam  | 40 %            | Date, Time & Place: To be determined later by the University |

#### **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, match, 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         |
| Α            |             | 3.75         |
| Α-           |             | 3.50         |
| B+           | Very Good   | 3.25         |
| В            |             | 3.00         |
| B-           |             | 2.75         |
| C+           | Good        | 2.50         |
| С            |             | 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 Assessment of Nutritional Status sections with 2 lecture periods per week (Sun. & Tues.), one lecture period covers 1 lecture hour. The chapters of the textbook that are considered part of the course content will be included in exams.

|         | Course Content                                                                                                                                                                                                                                                                          |                             |  |  |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--|--|
| Week    | Topics                                                                                                                                                                                                                                                                                  | Chapter in<br>Text/handouts |  |  |
| 1       | Introduction Nutrition Screening & Nutritional Assessment                                                                                                                                                                                                                               | Chapter 1                   |  |  |
| 2 - 4   | Dietary assessment Standards for nutrient intake Food Label Measuring the food consumption of individuals Food composition tables and databases Measuring food consumption at the national and household levels                                                                         | Chapter 2, 3                |  |  |
|         | First Exam                                                                                                                                                                                                                                                                              |                             |  |  |
| 5 - 8   | Anthropometric assessment of adults  Weight Height Circumferences Breadths Skinfold thickness Derived formulas  Anthropometric assessment of infants and children Introduction of Growth charts Anthropometric measurements of children Age calculation Interpretation of growth charts | Chapter 6                   |  |  |
|         | Second Exam                                                                                                                                                                                                                                                                             |                             |  |  |
| 9 - 11  | Biochemical assessment Assessment of nutrient status Fluid status Protein status Iron status Blood chemistry tests                                                                                                                                                                      | Chapter 9                   |  |  |
| 12 - 13 | Clinical assessment Protein energy malnutrition                                                                                                                                                                                                                                         | Chapter 10                  |  |  |
| 14 -15  | Assessment of the hospitalized patient                                                                                                                                                                                                                                                  | Chapter 7                   |  |  |

# **Assessment Rubrics**

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