# The Hashemite University







Deanship of Academic Development and International Outreach

عمادة التطوير الأكاديمي والتواصل الدولى

# Syllabus of Assessment of Nutritional Status/practical (140502359)

# Second Semester 2023 /2024

| COURSE INFORMATION  |  |   |  |  |
|---|--|---|--|--|
| Course Name   | : Assessment of Nutritional Status/practical | Course Code: 140502359                  |  |  |
| Semester: Second Semester   |  | Section: 2                              |  |  |
| <b>Department:</b> Department of Clinical Nutrition and Dietetics |  | Core Curriculum: Obligatory department. |  |  |
| Faculty:  | Applied Medical Sciences                     |   |  |  |
| <b>Day(s) and Time(s):</b> Wednesday: 11:30-2:30, and 2:30-5:30   |  | Credit Hours: 1                         |  |  |
| Classroom:  | Nutritional Clinic                           | Prerequisites: Dietetics (1905021212)   |  |  |
|   |  | Assessment of Nutritional Status        |  |  |
|   |  | (1905021358)                            |  |  |

#### **COURSE DESCRIPTION**

This course focuses on the standard techniques used to assess the nutritional status of pediatrics, adults, and the elderly. Specifically, different methods of dietary assessment in addition to the collection of a comprehensive nutritional history identification. Applying the standard procedures to collect anthropometric measurements for different age and gender groups. The information and measurements gathered will be analyzed and interpreted, to identify the nutritional problems. At the end of the course, students will directed to the nutrition care process to diagnose and manage nutritional problems.

#### **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:                      | Monday: 2:00-3:00                            |  |  |  |
|                                    | <b>Tuesday:</b> 8:00-9:00, and 9:00-10:00    |  |  |  |
| 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**.
- Munoz, N., and Bernstein M. 2019. **Nutrition Assessment: Clinical and Research Applications**. 1<sup>st</sup> edition. Burlington, MA: Jones & Barlett Learning. **ISBN:9781284127669.**

# **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.** 2<sup>nd</sup> Edition. Oxford University Press, New York, New York.

| STUDENT LEARNING OUTCOMES MATRIX*   |   |  |   |  |  |  |
|---|---|--|---|--|--|--|
| Core Curriculum Learning Outcomes   | Program Learning Outcomes   | Course Objectives  | Course Student Learning Outcomes  | Assessment<br>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 an in-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 their role in nutrition intervention planning.  |   | Assignments<br>& Quizzes   |  |  |
| To provide optimal educational and training opportunities for students during their professional preparation for careers in nutrition.  To participate in community | KP2: demonstrate an understanding of food chemistry, technology, preparation, and safety and correlate nutrition with food technology and future challenges.  KP3: Explain the principles of cellular metabolic processes,                        | assessment of the nutritional status of individuals, households, and communities.  3. To become familiar with the  | K1- Know the means of assessing dietary intake, body composition and growth, and micronutrient status and under what circumstances they would be used.  K2- Describe performance characteristics  | Assignments     Quizzes  |  |  |
| services for health promotion and disease prevention programs   | the structure and function of the various physiological systems, and the principles of biochemistry   | current best practices in dietary,<br>biochemical, and anthropometric<br>assessment of nutritional status.   | (validity, reliability, dependability, sensitivity, and specificity) of nutritional status indicators   |  |  |  |
| 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 the most appropriate methods to be used for the assessment of the nutritional status of individuals, households, and communities. | and measures and how they are assessed. K3- To gain an understanding of the rationales, advantages, and disadvantages of various approaches to 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 concerning nutrition and health through working with others, communication, self-management, and problem-solving and reflect on the various components              | advantages, and disadvantages of   | S1- Know the techniques required to plan, conduct, analyze, and interpret food and nutrition surveys of individuals, households, and communities.  S2- Gain an understanding of the appropriate   | <ul><li>"On-line' reading</li><li>Practice</li><li>Worksheet</li></ul> |  |  |
| 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 | <ul><li>interpretation of results.</li><li>7. To demonstrate the ability to</li></ul>  | applications of the various methods and the interpretation of results.  S3- Identify and compare/contrast methods of assessing body size and composition, and dietary intake.  S4- Collect, analyze, and interpret nutritional status                               | ∙Exam  |  |  |
|   | consumption of food constituents in individuals and groups  CP1: Demonstrate consistent professional behavior   | measure, calculate, and interpret anthropometric data.  8. To interpret laboratory   | data and be able to summarize findings in a report.<br>S5- Participate in discussions about current<br>controversies in nutritional status assessment.  |  |  |  |
|   | following the legal and ethical boundaries of the dietetic profession  CP2: Critically apply knowledge of diet and health to evaluate   | parameters relating to nutrition.  |   |  |  |  |
|   | 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 Needs 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 of 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 to earn 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 behaviours that compromise his/her 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                 | Instrument                           | <b>Grade Weighting</b> | Deadline Assessment                      |
|----------------------------|--------------------------------------|------------------------|--|
| Mid-term Assessment        | Mid-Term<br>Examination              | 30 %                   | 18/4/2024 Time & place: To be determined |
| Continuous Assessment      | Practicing and Group discussions     | 15 %                   | Continuous according to the schedule     |
|                            | Assignments                          | 10 %                   | Continuous according to the schedule     |
|                            | Quizzes                              | 5 %                    | Continuous Un-announced                  |
| End-of-block<br>Assessment | Written end-of-<br>block Examination | 40 %                   | 29/5/2024 Time & place: To be determined |

#### **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 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         |
| A-           |             | 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 1 lab. per week on 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 | Activity # | Торіс   |
|-------|------|------------|---|
| 1     | 28/2 |            | Orientation   |
| 2     | 6/3  | Iı         | ntroduction to the Nutritional assessment as part of the Nutrition Care Process |
| 3     | 13/3 | 1          | Using DRIs to evaluate nutrient intakes of individuals and groups               |
| 4     | 20/3 | 2          | Collecting a 24-hour recall   |
| 5     | 27/3 | 3          | Using the Exchange List to evaluate the nutrient intake of individuals          |
| 6     | 3/4  | 4          | Using the Food Label to evaluate the nutrient intake of individuals             |
| 7     | 10/4 | 5          | Completing a 3-day food record & measuring different foods and conversions      |
| 8     | 17/4 | 6          | Develop a food frequency questionnaire (FFQ) & analyze an example of FFQ        |
| 8     | 18/4 |            | Mid-Exam  |
| 9     | 24/4 | 7          | Anthropometric assessments: Stature, weight, and frame size                     |
| 10    | 1/5  | 8          | Anthropometric assessments: Circumferences                                      |
| 11    | 8/5  | 9          | Anthropometric assessments: Skinfold thicknesses                                |
| 12    | 15/5 | 10         | Assessment of Children's growth by Using growth charts (part 1)                 |
| 13    | 22/5 | 11         | Assessment of Children's growth by Using growth charts (part 2)                 |
| 14    | 29/5 |            | Final-Exam  |

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