

Course Syllabus

1	Course title	Advanced Diet Therapy
2	Course number	0603761
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	3
4	Prerequisites/corequisites	
5	Program title	MSC in Human Nutrition and Dietetics
6	Program code	036
7	Awarding institution	The University of Jordan
8	School	Agriculture
9	Department	Nutrition and Food Technology
10	Level of course	MSC
11	Year of study and semester (s)	1 st and 2 nd
12	Final Qualification	MSC in Human Nutrition and Dietetics
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	June 11, 2020

16. Course Coordinator: Prof. Hayder A. Al-Domi

Office numbers, office hours, phone numbers, and email addresses should be listed.
034, three hrs a week, 0535000 ext. 22419, h.aldomi@ju.edu.jo.

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

18. Course Description:

An advanced level study of the defects of normal biochemical and physiological regulatory processes in nutrient-based disease states, emphasizing the pathophysiological changes in disease - affected organs. These states include obesity, diabetes (metabolic syndrome), selected gastrointestinal diseases, cardiovascular diseases, liver and pancreas diseases, with focus on most recent practices of nutritional status assessment and dietary planning, especially in chronic diseases and organ transplant.

A. Aims:

At the end of this course, students are expected to:

- A1 Realize the concepts of the healthful diet, dietary guides, nutritional-clinical care process and diet planning.
- A2. Know the pathophysiology of diseases which require aggressive nutritional intervention and long term rehabilitation.
- A3. Interpret, nutritionally and metabolically, the symptoms and complications of chronic diseases and clinical conditions of multiple-complex aetiology
- A4. Apply advanced nutritional and metabolic concepts and diet management to clinical situations and diseases of complex aetiology.
- A5. Understand the importance of the use of total parenteral nutrition in dietetics.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to

- B1. Construct and formulate diets for treating and managing chronic diseases and clinical conditions which require careful dietary planning.
- B2. Counsel individuals and groups regarding the management of nutritional-clinical problems, which require aggressive nutritional intervention and long term rehabilitation.
- B3. Gain advanced knowledge about dietetics, especially those related to healthful diet, dietary guides, nutritional-clinical care process and diet planning.
- B4. Gain knowledge about the pathophysiology of diseases and clinical conditions of multiple-complex aetiology, and interpret their symptoms and complications from nutritional point of view.
- B6. Relate the concepts of dietetics and therapeutic nutrition to complicated diseases and clinical conditions of which require careful dietary planning.
- B6. Gain knowledge and skills on the use of total parenteral nutrition in dietetics.
- B7. Gain knowledge and skills on diet formulation and counseling regarding diseases, which require aggressive nutritional intervention and long term rehabilitation.
- B8. Gain knowledge and skills about scientific research methods of data collection, manipulation, processing and analysis related to therapeutic nutrition

B. Intellectual Analytical and Cognitive Skills: Student is Expected to

- B.1. Develop general mental capabilities involving reasoning, problem solving, planning, abstract thinking, complex idea comprehension, and learning from experience.
- B.2. Develop analytical thinking skills that are critical in the workplace, including skills essential for gathering data, solving complex problems, making rational decisions, as well as summarising data and executing well-thought-out projects
- B.3. acquire key competences that are needed to meet the challenges of job demands, education, and advanced training, societal expectations, and the demands of everyday life of middle-aged adults

C. Subject- Specific Skills: Students are expected to

- C1. Identify and define the criteria of the healthful diet.
- C2. Use dietary guides in clinical conditions utilizing local and traditional foods and dishes.
- C3. Interpret, nutritionally and metabolically, the symptoms and complications of chronic diseases and clinical conditions of multiple-complex aetiology.
- C4. Construct and formulate diets for treating and managing chronic diseases and clinical conditions which require careful dietary planning.
- C5. C8. Counsel individuals and groups regarding the dietary management of diseases of complex aetiology.

- C6. Locate and interpret current research literature related to dietetics and therapeutic nutrition.
 C7. Critically evaluate information on therapeutic nutrition and dietetics such as evaluating sources of facts, claims, bias, conflict and assumption.

D. Transferable Key Skills: Students are expected to

D1. Construct a nutritional-clinical care process plan for cases with diseases which require aggressive nutritional intervention and long-term rehabilitation.

D2. Evaluate the effectiveness of the nutritional-clinical care process plan and scientifically predict prognosis.

D3. Identify and define the components of total parenteral nutrition solutions and their formulation.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction to the course and overview of basic dietetic principles	1	Prof. Hayder Al-Domi (HD)	A1, A2, B1, C1, D1	Exams, Quizzes, Assignment, and Discussions (EQAD)	Journal articles. See list of references
Principles of the holistic NCP	2, 3	HD	A2, A3, B2, 3, C1, D1	EQAD	
Principles of enteral and parenteral feeding methods	4	HD	A3, B4, C1, D1	EQAD	
Management of critical illnesses	5	HD	A1, A4, B4, C1, D1	EQAD	
The “Diabetes” epidemic and its drivers: Epigenetics and risk for diabetes	6, 7		A4, A2, B5, 6, C1, D1	EQAD	
Midterm Exam TBA					
Update in the Aetiopathogenesis of obesity as an inflammatory disease, Adipose Tissue Remodelling, and Metabolic Health	8, 9		A1, A2, B1, C1, D1	EQAD	Journal articles. See list of references
Aetiopathogenesis of type 1 Autoimmune diabetes	10	HD	A2, A3, B2, 3, C1, D1	EQAD	
Refeeding and metabolic syndromes: metabolic and clinical changes	12, 13	HD	A3, B4, C1, D1	EQAD	
Changing face of liver transplantation for acute liver failure	14	HD	A1, A4, B4, C1, D1	EQAD	

Pathogenesis of diabetic nephropathy	14	HD	A1-4, B1-6, C1, D1	EQAD	
Oral Presentations	15	HD	A1-4, B1-6, C1, D1		
Final Exam: TBA					

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

- Lectures, group discussions and presentations by students for previously assigned topics (Core Content).
- Seminars and term papers of assigned topics (Acquiring critical thinking skills and independency).
- Text books, Journal articles, handouts, OHT, and PowerPoint presentations as well as web site searching constitute the main teaching tools.

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Discussion, assignment, presentation, quizzes, and exams and publishing high quality papers

Assignments:

- Individual students will be assisted to select a topic in the field of nutrition, clinical nutrition.
- A critical literature review on related topics; which will be presented to peers-students.
- Journal club; Critical evaluation of recent articles Students will be encouraged to researching newly published refereed Journal articles, books as well as online resources. Students will provide an oral presentation.

Evaluation	Points (%)		Activity/Instructions	Due Date
Midterm exam	30%		Tuesday, 24//3/2020	
Course project and participation	30%	10%	<ul style="list-style-type: none"> • A written mechanistic critical literature review on selected, relevant topic. • 2,000 words including a <ul style="list-style-type: none"> ○ summary table of 10 articles and ONE Summary Mechanism) ○ Citation/Reference): Author, year style/ alphabetical. ○ NO more than 25 References ○ Font size; NORMA, 12, Calibri). 	12/4/2020
		5%	<ul style="list-style-type: none"> • TOPIC selection <ul style="list-style-type: none"> ○ Title & 50 words justification of the review ○ 5 Original recently published references. 	Sunday, 16/2/2020
	10	7%	<ul style="list-style-type: none"> • ORAL presentation of the REVIEW: • Each student has 30 min oral presentation followed by group discussion. 	Starts: Sunday, 5/4/2020
		3%	<ul style="list-style-type: none"> • Group's discussion, and • Students WRITTEN And Cited relevant Questions 	Presentations will be according to students Name LIST
	10%	7	<ul style="list-style-type: none"> • Journal club: • Each student has 15 min. oral presentation followed by group discussion. • The selected article should be circled to all students in the class through a group e-mail before at least two week of the date of the presentation. 	Starts: Tuesday, 16/2/2020 Presentations will be according to students Name LIST
			3	<ul style="list-style-type: none"> • Group's discussion, and • Students WRITTEN and Cited relevant Questions
General Instructions:				
<p>The following should be submitted to the lecturer in the last week of the semester:</p> <ol style="list-style-type: none"> 1. HARD and SOFT copy (CD) of the literature review paper, 2. Power point of BOTH the review paper presentation and the journal club presentation, 3. Hard and soft copy of student groups questions, and Any other assignments. 				
Final Exam	40%	Final exams: 13/5/2020 -21/5/2020		
Total	100%			

23. Course Policies:

A- Attendance policies:

Attendance requirements

- Attendance/Absence Rules and Regulations of the University of Jordan regarding attendance WILL APPLY.
- **Lectures:** Attendance at lectures is **COMPULSORY**.

B- Absences from exams and handing in assignments on time:

- Attendance/Absence Rules and Regulations of the University of Jordan regarding attendance WILL APPLY.
- If student's attendance exceeded the limit determined by the Rules and Regulations of the University of Jordan (15% of lectures and laboratory sessions assigned for each course) , the student WILL BE DENIED ENTRANCE TO THE RESPECTIVE FINAL EXAMINATION.
- 15% of lectures and laboratory sessions assigned for each course is equivalent to missing 7.2 lectures.
- A student who is denied entrance to the examination due to absences is considered to have failed that course.
- Attendance/Absence Rules and Regulations of the University of Jordan regarding attendance WILL APPLY.
- Students who miss a lab class (because of documented illness/misadventure) must contact their lab supervisor at the earliest opportunity to arrange to attend a later session of the missed lab class, if applicable.
- If no later session is available, the student will be required to undertake a substitute for the missed component.
- In all cases, it is the student's responsibility to discuss missing work with the lab supervisor and to complete the make-up work.

C- Health and safety procedures:

- JU students should also be aware that they are required to abide by the University's Codes, Occupational Health and Safety and Social Justice policies.

D- Honesty policy regarding cheating, plagiarism, misbehaviour:

The Jordan University is committed to academic integrity, honesty and promotion of ethical scholarship. Under the University's Student Code of Conduct, students are expected to:

- act honestly and ethically in the production of all academic work and assessment tasks.
- give recognition to any direct quotes used from other authors or to those authors whose work has made an intellectual contribution to the contents of your work.
- acknowledge shared ownership of ideas in group projects or assessment tasks.
- The University's Student Misconduct Rule defines academic misconduct as "conduct by a student that in any way undermines or otherwise puts at risk the academic integrity of any course, unit of study or assessment (including examinations) or the University's academic reputation".
- The acknowledgement of sources underpins all academic work. The JU University take plagiarism and collusion seriously as these are the most common form of academic misconduct.

E- Grading policy:

- Midterm exam (30%),
- lab reports, assignment, discussion, presentation and quiz (20%, and
- final exam (50%).

F- Available university services that support achievement in the course:

- Concerns or complaints should be expressed in the first instance to the module lecturer; if no resolution is forthcoming, then the issue should be brought to the attention of the module coordinator (for multiple sections) who will take the concerns to the module representative meeting. Thereafter, problems are dealt with by the Department Chair and if still unresolved the Dean and then ultimately the Vice President. For final complaints, there will be a committee to review grading the final exam.
- For more details on University regulations please visit:
<http://www.ju.edu.jo/rules/index.htm>

24. Required equipment: (Facilities, Tools, Labs, Training....)

N/A

25. References:

Required book (s), assigned reading and audio-visuals:

1. Catharine Ross A., Caballero B., Cousins R. J., Tucker K. L., Ziegler T. R. (2014). Modern Nutrition in Health & Disease (Shils). 11th Edition. Philadelphia: Lippincott Williams & Wilkins, 2014.
2. Mahan L.K. and Escottstump, S. (2008), Krause's Food and Nutrition Therapy, 12th edition, W.B., Saunders Co., Philadelphia.

Recommended books, materials, and media:

1. Weigley, E.S., Mueller, D.H. and Robinson, C.H. et al. (1997) Basic Nutrition and Diet Therapy, 8th edn., Merrill-Printice Hall, New Jersey.
2. Passmore, R. and Eastwood, M.A.R. (2000). Davidson and Passmore Human Nutrition and Dietetics, 9th ed. E. and S. Livingstone LTD Edimburgh.
3. Pellett, and Shadarevian, S. (1970) Food Composition Tables for Use in the Middle East. AUB, Beirut
4. Schlenker. Eleanor D., and Long, Sara (2006). Williams Essentials of Nutrition and Diet Therapy, 9th edition, The C.V. Mosby Co., St. Louis.
5. American Dietetic Association (ADA) and American Diabetic Association (2003). Exchange Lists for Meal Planning, ADA Chicago.
6. Georgia Dietetic Association (1992) Diet Manual of the Georgia Dietetic Association Inc., 4th ed. Georgia.
7. Whitney. E. N. et. al., 2002. Understanding Normal and Therapeutic Nutrition, 6th edn. West Wadsworth Intern. Publ. Co. New York

26. Additional information:

- Students should be familiar with and required to abide by all University rules, policies processes and codes, related to their studies and time at the University of Jordan.

Name of Course Coordinator: Prof. Hayder Al-Domi -Signature: --Halddomi----- Date: 11/6/2020

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----