



Research Methodology in Clinical Nutrition and Dietetics (140502473)

First Semester 2022/2023

COURSE INFORMATION

Course Name: Research Methodology in Clinical Nutrition and Dietetics Semester: First Department: Department of Clinical Nutrition and Dietetics Faculty: Applied Medical Sciences	Course Code: 140502473 Section: 1 Core Curriculum: Elective Requirements
Day(s) and Time(s): Sunday, Tuesday and Thursday: 11:00- 12:00 Classroom: Building of Medical Schools 309	Credit Hours: 3 Prerequisites: -

COURSE DESCRIPTION

This course is designed to help students understand scientific research comprehensively. Topics will include the scientific method and inquiry fundamentals, ethical research considerations, research study designs, and basic quantitative and qualitative data collection methods. Through discussion, article analysis, and hands-on practice, this course will teach students how to conduct a research project from beginning to end

DELIVERY METHODS

- The course will be delivered through a combination of active learning strategies. These will include:
- PowerPoint lectures
 - Active classroom-based discussion
 - Supplementary articles
 - E-learning resources: e-reading and search through Microsoft Team

FACULTY INFORMATION

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Academic Title:	Professor
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Office Hours:	Sun and Tues: 10:00-11:00 Tuesday and Wednesday: 12:00-1:00

REFERENCES AND LEARNING RESOURCES

Required Textbook:

Drummond, Karen Eich & Murphy-Reyes, Alison. (2018). *Nutrition Research: Concepts and Applications*. Jones & Bartlett Learning. ISBN: 9781284101539

Suggested Additional Resources

Different types of published article

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/ 5366

Location: Building of Medical Schools 2167

Email: hhourani@hu.edu.jo

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. What is research	Explain key research concepts	Exam
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	1. Describe essential research methods associated with quantitative and qualitative research in applied nutrition and dietetics	Demonstrate the ability to choose methods appropriate to research aims and objectives Develop skills in qualitative and quantitative data analysis and presentation	Exam Group activity
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	1. Discuss research ethics		Discussion
	CP2: Critically apply knowledge of diet and health to evaluate and communicate and comment on dietary or health information both from scientific sources.			

	<p>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</p>	<ol style="list-style-type: none"> 1. Critically assess different research designs 2. Develop new research questions and hypotheses 	<p>Understand the limitations of particular research methods</p>	<p>Group activity</p> <p>Group activity</p>
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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

Assessment	Grade Weighting	Day and Date
First Hour Exam	25%	Sunday, 13 th Nov. 2022
Second Hour Exam	25%	Sunday, 18 th Dec. 2022
Group Activity	10%	
Final	40%	To be announced

Description of Exams

Test questions will predominately come from material presented in the lectures and selected articles. Semester exams will be conducted during the regularly scheduled lecture period. Exam will consist of essay, case-study, and short answer questions.

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*:

Letter Grade	Grade Points
A+	4.00
A	3.75
A-	3.50
B+	3.25
B	3.00
B-	2.75
C+	2.50
C	2.25
C-	2.00
D+	1.75
D	1.50

Weekly Lecture Schedule and Content			
Week	Lectures	Topic	Chapter
1	1	Introduction to research <ul style="list-style-type: none"> • What is research • Ways to Classify Research • Major Types of Nutrition Research Studies 	3
2	2	Research Ethics <ul style="list-style-type: none"> • Ethics and Human Subjects Research • Institutional Review Boards 	3
3	3	Writing research proposal <ul style="list-style-type: none"> • Identify a Topic and Research Question/Objective • Search the Literature and Write the Literature Review 	14
4,5 and 6	4,5 and 6	Quantitative Research Designs <ul style="list-style-type: none"> • Descriptive designs • Experimental designs 	8
First Hour Exam			
7 and 8	7 and 8	Determination of sample size and sampling methods <ul style="list-style-type: none"> • Sample Size Determination • Representativeness • Sampling Methods: probability and non-probability sampling 	Selected Papers
9 and 10	9 and 10	Analysis of data <ul style="list-style-type: none"> • Descriptive Statistics • Frequency Distributions • Range • Mean Deviation • Standard Deviation (Sd) 	3
11, 12, and 13	11, 12, and 13	Research article <ul style="list-style-type: none"> • Research Title and Authors • Introduction of Article • Methods • Results • Discussion/Conclusion 	Selected Papers

ASSESSMENT RUBRICS

Assessment Rubrics to be determined by the department. Add samples below.

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

		-occasionally volunteers' point of view.	-rarely volunteers point of view.		
Demonstration of professional attitude and demeanor	<ul style="list-style-type: none"> -always demonstrates commitment through thorough preparation; - always arrives on time; - often solicits instructors' perspective outside class. 	<ul style="list-style-type: none"> - rarely unprepared ; rarely arrives late; - occasionally solicits instructors' perspective outside class. 	<ul style="list-style-type: none"> -often unprepared; occasionally arrives late; - rarely solicits instructors' perspective outside class. 	<ul style="list-style-type: none"> -rarely prepared; - often arrives late; -never solicits instructors' perspective outside class 	