

COURSE DESCRIPTIONS

Faculty	Allied medical sciences				
Department	Medical laboratory sciences	NQF level	6		
Course Title	Scientific Research Ethics	Code	187108	Prerequisite	
Credit Hours	1	Theory	1	Practical	0
Course Leader	M.Sc Jaafar Abd Alrahman	email	j.aboabeleh@jadara.edu.jo		
Lecturers	M.Sc Jaafar Abd Alrahman	emails	j.aboabeleh@jadara.edu.jo		
Lecture time	عن بعد: الثلاثاء والاربعاء من الساعة السابعة والنصف مساء ولغاية الساعة الثامنة والنصف مساء	Classroom		Attendance	
Semester	2024--الصيفي	Production	2021	Updated	2023
Type of teaching	Online				

Short Description

The course provides students with knowledge regarding ethics in research and scientific method of problem-solving and includes: performing a literature review, asking scientific questions, hypothesis stating, study objectives, study designs, data collection and analysis, grant proposal writing, and report writing.

Course Objectives

1. Understand and explain basic steps of scientific research
2. Suggest and discuss scientific questions in the student field of study
3. Learn how to write a scientific proposal.
4. Learn how to write a scientific poster

Course Intended Learning Outcomes (CILOs)

A. Knowledge - Theoretical Understanding

- a1. Explain the basic steps of scientific research
- a2. outline the different variables present in scientific research

B. Knowledge - Practical Application

C. Skills - Generic Problem Solving and Analytical Skills
b1. Analyze the different types of scientific research and how they are conducted
D. Skills - Communication, ICT, and Numeracy
b2. prove the ability to Discuss scientific questions in the student field of study.
E. Competence: Autonomy, Responsibility, and Context
c1. Adapt the knowledge gained from this course, in Learning how to write a scientific proposal and a scientific poster
c2. Adapt the knowledge gained from this course, in learning how to give proper scientific presentations
Teaching and Learning Methods
Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations Audio-visual materials: Data show and PowerPoint presentations
Assessment Methods
Mid exam 30% Assignment (Research Proposal)10% article presentation 10% Assignment (scientific poster) 10% Final exam 40%

Course Contents					
Week	Hours	CILOs	Topics	Teaching & Learning Methods	Assessment Methods
1.	1	A1	Introduction to Scientific Research Methods	Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations	Final exam
2.	1	A1	Structure of A Research Paper	Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations	Final exam & presentation
3.	1	a1,a2	Structure of A Research Paper	Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and	Final exam& presentation

				Demonstrations	
4.	1	a1,a2	Research proposal	Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations	Final exam& assignment
5.	1	a1,a2	Quantitative Research	Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations	Final exam
6.	1	a1,a2,b1 .b2	Qualitative Research	Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations	Final exam
7.	1	A1,a2,b 1,b2	Scientific poster	Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations	Final exam& poster preparation
8.	1	B1,b2,c1	Ethics in Research	Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations	Final exam
9.	1	c1,c2	Student presentations	Data show and PowerPoint presentations	presentation
10.	1	c1,c2	Student presentations	Data show and PowerPoint presentations	presentation
11.	1	c1,c2	Student presentations	Data show and	presentation

				PowerPoint presentations	
12.	1	c1,c2	Student presentations	Data show and PowerPoint presentations	presentation
13.	1	c1,c2	Student presentations	Data show and PowerPoint presentations	presentation
14.	1	c1,c2	Student presentations	Data show and PowerPoint presentations	presentation
15.	1	c1,c2	Student presentations	Data show and PowerPoint presentations	presentation
16.	1	A1,b1,b2,c1,c2	Final Exam (According to university agenda)		

Infrastructure	
Textbook	Research Methods: A Process of Inquiry Graziano and Raulin 2018
References	• https://www.pearsonhighered.com/program/Graziano-Research-Methods-A-Process-of-Inquiry-8th-Edition/PGM1100056.html • Lecture handouts • NCBI Database (https://www.ncbi.nlm.nih.gov/): includes many updated textbooks that are available online FREE. • Internet: there are many websites that provide valuable updated data related to hematology including research paper, books, animation, etc. you can find more of these websites by searching in the internet using a suitable searching key. Many websites will be posted on E-learning during the semester.
Required reading	
Electronic materials	Provided to the students through JU e-learning website.
Other	In addition to the above, the students will be provided with handouts by the lecturer.

Course Assessment Plan							
Assessment Method	Grade	CILOs				c1	c2
		a1	a2	b1	b2		
First (Midterm)	30%		15			15	
Second (if applicable)							
Final Exam	40%	15		11	2	8	4
Coursework							

Coursework assessment methods	Assignments	10				10		
	Case study							
	Discussion and interaction							
	Group work activities							
	Lab tests and assignments							
	Presentations	10						10
	Quizzes	10				10		
Total		100	15	15	11	22	23	14

Plagiarism
Plagiarism is claiming that someone else's work is your own. The department has a strict policy regarding plagiarism and, if plagiarism is indeed discovered, this policy will be applied. Note that punishments apply also to anyone assisting another to commit plagiarism (for example by knowingly allowing someone to copy your code). Plagiarism is different from group work in which a number of individuals share ideas on how to carry out the coursework. You are strongly encouraged to work in small groups, and you will certainly not be penalized for doing so. This means that you may work together on the program. What is important is that you have a full understanding of all aspects of the completed program. In order to allow proper assessment that this is indeed the case, you must adhere strictly to the course work requirements as outlined above and detailed in the coursework problem description. These requirements are in place to encourage individual understanding, facilitate individual assessment, and deter plagiarism.