



**COURSE DESCRIPTIONS**

<b>Faculty</b>	Pharmacy				
<b>Department</b>	Medical laboratory sciences	<b>NQF level</b>			
<b>Course Title</b>	Seminar & Scientific Research Methodology	<b>Code</b>	902453	<b>Prerequisite</b>	100 CH
<b>Credit Hours</b>	1	<b>Theory</b>	1	<b>Practical</b>	0
<b>Course Leader</b>	M.Sc Sokiyna Ababneh	<b>email</b>	s.ababneh@jadara.edu.jo		
<b>Lecturers</b>	M.Sc Sokiyna Ababneh	<b>emails</b>	s.ababneh@jadara.edu.jo		
<b>Lecture time</b>		<b>Classroom</b>		<b>Attendance</b>	
<b>Semester</b>	Second 2021-2022	<b>Production</b>	2021	<b>Updated</b>	2021

**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.
<b>E. Competence: Autonomy, Responsibility, and Context</b>
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
<b>Teaching and Learning Methods</b>
Lectures, presentations and paper discussions Lectures which include: Discussions. Examples and Demonstrations Audio-visual materials: Data show and PowerPoint presentations
<b>Assessment Methods</b>
Assignment (Research Proposal) 20% Proposal presentation 10% Assignment (scientific poster) 20% Final exam 50%

Course Contents					
Week	Hours	CILOs	Topics	Teaching & Learning Methods	Assessment Methods
1.		A1	Introduction to Scientific Research Methods		
2.		A1	Structure of A Research Paper		
3.		a1,a2	Structure of A Research Paper		
4.		a1,a2	Research proposal		
5.		a1,a2	Quantitative Research		
6.		a1,a2,b1 .b2	Qualitative Research		
7.		A1,a2,b1,b2	Scientific poster		
8.		B1,b2,c1	Ethics in Research		
9.		c1,c2	Student presentations		
10.		c1,c2	Student presentations		
11.		c1,c2	Student presentations		
12.		c1,c2	Student presentations		
13.		c1,c2	Student presentations		
14.		c1,c2	Student presentations		
15.		c1,c2	Student presentations		

16.		A1,b1,b 2,c1,c2	<b>Final Exam</b> (According to university agenda)		
-----	--	--------------------	--	--	--

Infrastructure	
<b>Textbook</b>	<b>Research Methods: A Process of Inquiry</b> Graziano and Raulin 2018
<b>References</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.pearsonhighered.com/program/Graziano-Research-Methods-A-Process-of-Inquiry-8th-Edition/PGM1100056.html">https://www.pearsonhighered.com/program/Graziano-Research-Methods-A-Process-of-Inquiry-8th-Edition/PGM1100056.html</a></li> <li>• Lecture handouts</li> <li>• NCBI Database (<a href="https://www.ncbi.nlm.nih.gov/">https://www.ncbi.nlm.nih.gov/</a>): includes many updated textbooks that are available online FREE.</li> <li>• 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.</li> </ul>
<b>Required reading</b>	
<b>Electronic materials</b>	Provided to the students through JU e-learning website.
<b>Other</b>	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)								
Second (if applicable)								
Final Exam			15		11	12	8	4
Coursework								
Coursework assessment methods	Assignments			15		10	15	
	Case study							
	Discussion and interaction							
	Group work activities							
	Lab tests and assignments							
	Presentations							10
	Quizzes							
<b>Total</b>								

Plagiarism
<p>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).</p> <p>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</p>

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.