



Form: Course Syllabus	Form Number	EXC-01-02-02A
	Issue Number and Date	2/3/24/2022/2963 05/12/2022
	Number and Date of Revision or Modification	
	Deans Council Approval Decision Number	2/3/24/2023
	The Date of the Deans Council Approval Decision	23/01/2023
	Number of Pages	07

1.	Course Title	Graduation Project
2.	Course Number	0301498
3.	Credit Hours (Theory, Practical)	1
	Contact Hours (Theory, Practical)	1
4.	Prerequisites/ Corequisites	Finishing successfully 90 Credits
5.	Program Title	B.Sc. Mathematics
6.	Program Code	
7.	School/ Center	Science
8.	Department	Mathematics
9.	Course Level	Obligatory Specialization requirement
10.	Year of Study and Semester (s)	4 th year, 1 st or 2 nd semesters
11.	Other Department(s) Involved in Teaching the Course	None
12.	Main Learning Language	English
13.	Learning Types	<input type="checkbox"/> Face to face learning <input checked="" type="checkbox"/> Blended <input type="checkbox"/> Fully online
14.	Online Platforms(s)	<input checked="" type="checkbox"/> Moodle <input checked="" type="checkbox"/> Microsoft Teams
15.	Issuing Date	16 – 10 – 2024
16.	Revision Date	

17. Course Coordinator:

Name: Prof. Emad Abuosba	Contact hours:
Office number: M308	Phone number: 22088
Email: eabuosba@ju.edu.jo	

**18. Other Instructors:**

Name:

Office number:

Phone number:

Email:

Contact hours:

Name:

Office number:

Phone number:

Email:

Contact hours:

19. Course Description:

As stated in the approved study plan.

A problem will be assigned to the student in one of the different mathematical tracks. He will be asked to rely on himself to make a survey on the problem, and to find a solution for it. It is expected from the student to develop the abilities of research and independent work together with team work and to train himself to observe a time table to perform his project and to be capable to explain and express his findings in a professional manner. The student will be required to write down his final year project as a complete report (dissertation) according to the department instructions and to represent it in front of a specialized committee.

20. Program Student Outcomes (SO's):

(To be used in designing the matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program)

1. Identify, formulate, and solve broadly-defined technical or scientific problems by applying knowledge of Mathematics and Science and/or technical topics to areas relevant to the discipline.
2. Formulate or design a system, process, procedure or program to meet desired needs.
3. Develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
4. Communicate effectively with a range of audiences in oral or written forms and exhibit ethical and professional values.
5. Reflect the impact of technical and/or scientific solutions in economic, environmental, and societal contexts.



6. Function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.
7. Utilize research methods, critical and creative thinking skills to assess and analyze information) to solve problems properly, then draw valid reasoning and logical conclusions leading to true consequences.
8. Utilize techniques, skills, and modern scientific tools such as mathematical packages, statistical software, graphing calculators, and online resources necessary for professional practice.

21. Course Intended Learning Outcomes (CLO's):

(Upon completion of the course, the student will be able to achieve the following intended learning outcomes)

CLO 1. Read, understand and write mathematical proofs.

CLO 2. Apply knowledge of mathematics, and applied science to real life problems.

CLO 3. Communicate in an effective manner including written reports and oral presentations.

CLO 4. Use techniques, skills and modern scientific tools necessary for professional practice.

CLO 5. Work on multidisciplinary teams and communicate effectively.

CLO 6. Read write and criticize proofs.

CLO 7. Perform logical thinking.

CLO 8. Understand professional and ethical responsibility and recognize the need for and be able to engage him in life-long learning.

Course CLOs	The learning levels to be achieved					
	Remembering	Understanding	Applying	Analysing	evaluating	Creating
CLO 1	•	•				
CLO 2				•		•
CLO 3					•	•
CLO 4			•			
CLO 5					•	•
CLO 6				•		
CLO 7				•	•	
CLO 8						•



22. The matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program:

Program SO's Course CLO's	SO (1)	SO (2)	SO (3)	SO (4)	SO (5)	SO (6)	SO (7)	SO (8)
CLO (1)							•	
CLO (2)	•	•	•					
CLO (3)				•		•		
CLO (4)								•
CLO (5)						•		
CLO (6)							•	
CLO (7)							•	
CLO (8)					•			

23. Topic Outline and Schedule:

Week	Lecture	Topic	CLO/s Linked to the Topic	Learning Types (Face to Face (FF)/ Blended (B)/ Fully Online)	Platform Used	Synchronous (S) /	Evaluation Methods	Learning Resources
1	1	Orientation: How to write log books and reports, Teamwork and distributing work, etc.	1,2	FF	Teams	S	Oral	Open Sources
2	2	Orientation: How to write log books and reports, Teamwork and distributing work, etc.	1,2	FF	Teams	S	Oral	Open Sources
3	3	Selecting the problem	1,2	FF	Teams	S	Oral	Open Sources
4	4	Survey	3-8	B	Teams	A	Oral	Open Sources



5	5	Survey	3-8	B	Teams	A	Oral	Open Sources
6	6	Survey	3-8	B	Teams	A	Oral	Open Sources
7	7	Writing the report	3-8	FF	Teams	S	Oral	Open Sources
8	8	Writing the report	3-8	FF	Teams	S	Oral	Open Sources
9	9	Writing the report	3-8	FF	Teams	S	Oral	Open Sources
10	10	Writing the report	3-8	FF	Teams	S	Oral	Open Sources
11	11	Writing the report	3-8	FF	Teams	S	Oral	Open Sources
12	12	Writing the report	3-8	FF	Teams	S	Oral	Open Sources
13	13	Preparing the oral presentation	3-8	B	Teams	A	Oral	Open Sources
14	14	Preparing the oral presentation	3-8	B	Teams	A	Oral	Open Sources
15	15	Oral Exam	3-8	FF	Teams	S	Oral	Open Sources

**24. Evaluation Methods:**

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

Evaluation Activity	Mark	Topic(s)	CLO/s Linked to the Evaluation activity	Period (Week)	Platform
Exit Exam	15		2,6,7	2	Moodle
Class Work	45		1 – 8	10	On Campus
Report	20		1 – 8	12	On Campus
Oral Exam	20		1 – 8	15	On Campus

25. Course Requirements:

Computer

- Account in Microsoft Teams

26. Course Policies:

According to university regulations, attendance is mandatory. If a student misses more than 10% of the meetings with the supervisor without excuse, then he/she will be assigned a falling grade in class.

There are severe sanctions for cheating, plagiarizing and any other form of dishonesty. The university regulations on cheating will be applied to any student who cheats in his report.

**27. References:**

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

B- Recommended books, materials, and media:

28. Additional information:

Name of the Instructor or the Course Coordinator: Prof. Emad A. Abuosba	Signature:	Date: 16 – 10 - 2024
Name of the Head of Quality Assurance Committee/ Department: Prof. Manal Ghanem	Signature:	Date:
Name of the Head of Department: Prof. Baha Alzalg	Signature:	Date:
Name of the Head of Quality Assurance Committee/ School of Science: Prof. Emad A. Abuosba	Signature:	Date:
Name of the Dean or the Director: Prof. Mahmoud I. Jaghoub	Signature:	Date: