



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	06

1.	Course Title	Topology II
2.	Course Number	0301762
3.	Credit Hours (Theory, Practical)	3
	Contact Hours (Theory, Practical)	3
4.	Prerequisites/ Corequisites	0301761
5.	Program Title	Master in Mathematics
6.	Program Code	
7.	School/ Center	Science
8.	Department	Mathematics
9.	Course Level	Elective
10.	Year of Study and Semester (s)	1 st year.
11.	Other Department(s) Involved in Teaching the Course	None
12.	Main Learning Language	English
13.	Learning Types	<input checked="" type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input type="checkbox"/> Fully online
14.	Online Platforms(s)	<input type="checkbox"/> Moodle <input type="checkbox"/> Microsoft Teams
15.	Issuing Date	22- 11 - 2024
16.	Revision Date	

17. Course Coordinator:

Name: Dr. Ayat Ababneh	Contact hours:
Office number: 228	Phone number: N/A
Email: a.ababneh@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:

Locally compact and K-spaces, Cech complete spaces, metric and metrizable spaces, complete metric spaces, pathwise and local connectedness, Baire space and Baire category theorem, uniform spaces.

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. Read, analyze and write logical arguments to prove mathematical and statistical concepts and theorems.
3. Communicate with mathematical and statistical ideas clearly and consistently, in writing and verbally.

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: Master the basic concepts and theorems related to locally compact and k-spaces.

CLO 2: Define quotient spaces and countably compact spaces.

CLO 3: Define pathwise and local connected spaces and prove theorems related to them.

CLO 4: Identify uniform spaces and prove theorems related to them.



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

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

Course CLO's	Program SO'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)	•		•					

23. Topic Outline and Schedule:

Week	Lecture	Topic	CLO/s Linked to the Topic	Learning Types (Face to Face (FF)/ Blended (BL)/ Fully Online (FO))	Platform Used	Synchronous / Asynchronous Lecturing	Evaluation Methods	Learning Resources
1	1.1	Locally compact and k-space	1	FF		S	Homework	
	1.2	Locally compact and k-space	1	FF		S	Homework	
2	2.1	Locally compact and k-space	1	FF		S	Homework	
	2.2	Locally compact and k-space	1	FF		S	Homework	
3	3.1	Locally compact and k-space	1	FF		S	Homework	



	3.2	Locally compact and k-space	1	FF		S	Homework	
4	4.1	Cech complete spaces	1,2	FF		S	Homework	
	4.2	Cech complete spaces	1,2	FF		S	Homework	
5	5.1	Cech complete spaces	2	FF		S	Homework	
	5.2	Cech complete spaces	2	FF		S	Homework	
6	6.1	Cech complete spaces	2	FF		S	Exam	
	6.2	Metric and merizable spaces	2	FF		S	Homework	
7	7.1	Metric and merizable spaces	2	FF		S	Homework	
	7.2	Metric and merizable spaces	2	FF		S	Homework	
8	8.1	Metric and merizable spaces	3	FF		S	Homework	
	8.2	Complete metric spaces	3	FF		S	Homework	
9	9.1	Complete metric spaces	3	FF		S	Homework	
	9.2	Complete metric spaces	3	FF		S	Homework	
10	10.1	Pathwise and local connectednes	3	FF		S	Homework	
	10.2	Pathwise and local connectednes	3	FF		S	Homework	
11	11.1	Pathwise and local connectednes	3	FF		S	Homework	
	11.2	Baire spaces and Baire category theorem	3	FF		S	Homework	
12	12.1	Baire spaces and Baire category theorem	3	FF		S	Exam	
	12.2	Baire spaces and Baire category theorem	3	FF		S	Homework	
13	13.1	Baire spaces and Baire category theorem	4	FF		S	Homework	
	13.2	Baire spaces and Baire category theorem	4	FF		S	Homework	
14	14.1	Uniform spaces	4	FF		S	Homework	
	14.2	Uniform spaces	4	FF		S	Homework	
15	15.1	Uniform spaces	4	FF		S	Homework	
	15.2	Uniform spaces	4	FF		S	Homework	

24. Evaluation Methods:

Opportunities to demonstrate the 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
Homeworks	20		1		
Exam 1	20		2 – 3	6	On Campus
Exam 2	20		1 – 4	12	On Campus
Final Exam	40		1 – 4	16	On Campus



25. Course Requirements:

Students should have a computer, internet connection, webcam, and an account on Microsoft Teams.

26. Course Policies:

1. The student is not allowed to take the course and its pre-requisite at the same time.
2. Attendance is essential to succeed in this course. You are expected to attend every class; please notify your instructor if you know you are going to be absent. All exams must be taken at the scheduled time. Exceptions will be made only in extreme circumstances, by prior arrangement with the instructor.
3. If a student is absent more than 10% of lectures without an excuse of sickness or due to other insurmountable difficulty, then he/she shall be barred from the final examination also he/she will get a failing grade in this course.
4. Medical certificates shall be given to the University Physician to be authorized by him. They should be presented to the Dean of the Faculty within two weeks of the student's ceasing to attend classes.
5. Test papers shall be returned to students after correction. His/her mark is considered final after a lapse of one week following their return.
6. Cheating is prohibited. The University of Jordan regulations on cheating will be applied to any student who cheats in exams or on homework.

27. References:

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

A First Course in Topology by Munkres.

B- Recommended books, materials, and media:

General Topology by Willard.



28. Additional information:

--

Name of the Instructor or the Course Coordinator: Dr. Ayat Ababneh	Signature:	Date: 22 – 11 – 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: