



مركز الاعتماد
وإضمان الجودة
ACCREDITATION & QUALITY ASSURANCE CENTER



The University of Jordan

Accreditation & Quality Assurance Center

Course Syllabus

Course Name: Genaral Topology-II

1	Course title	General topology--II
2	Course number	0332462
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	
4	Prerequisites/corequisites	Topology-0331361
5	Program title	BS.c.
6	Program code	
7	Awarding institution	
8	Faculty	Science
9	Department	Mathematics
10	Level of course	undergraduate
11	Year of study and semester (s)	4 th year
12	Final Qualification	
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	7/11/2017

16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.

Office number:302, phone :097995808

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

18. Course Description:

Separation axioms T_2, T_3, T_4 and some examples and theorems related to them. Compact spaces and some related theorems. Connected spaces and some related theorems. Metric spaces and some related examples and theorems. Sequences and their convergence in topological spaces.

19. Course aims and outcomes:

A- Aims: This course is designed to help students to choose a field of study in mathematics.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to understand many concepts in topology and it will help them to get good results in higher courses in general topology. Students completing this course will provide them to begin a career teaching mathematics at the secondary school level, or to begin a career at banks, insurance companies, or other industrial sectors.

20. Topic Outline and Schedule:**CONTENTS****CHAPTER – 1: countability and separation axioms**

- 1-First countable spaces
- 2 – Second countable spaces
- 3 – T_1 – spaces and T_2 - spaces
- 4 – Regular spaces and T_3 – spaces
- 5 – Normal spaces and T_4

CHAPTER – 2: Compactness

- 1 – compact spaces and some related theorems
- 2-More properties of compact spaces
- 3 - Locally compact spaces

CHAPTER – 3: Connectedness

- 1 – connected spaces
- 2 – More properties of connected spaces
- 3 – Components and locally connected spaces

CHAPTER – 4: Metric spaces

- 1 – The real line \mathbb{R}
- 2 – Definition and examples of metric spaces
- 3 – Open and closed spheres(or balls)
- 4 – Equivalent metric topologies
- 5 - Continuity of functions between metric spaces

CHAPTER – 5: Convergence

- 1 – Sequences
- 2 – Convergence in topological spaces
- 3 - Subsequences

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

22. Evaluation Methods and Course Requirements:

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

23. Course Policies:

24. Required equipment:

25. References:

A- Required book (s), assigned reading and audio-visuals: General topology by Stephen Willard.

B- Recommended books, materials, and media: Topology by James bunkers, General topology by John Kelley, General topology by Ryszard Engelking.

26. Additional information:

Name of Course Coordinator: د. نيسير نور Signature: ----- Date: -----

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:
Head of Department
Assistant Dean for Quality Assurance
Course File