Jordan University of Science and Technology

Faculty of Science & Arts

Mathematics Department

MATH362 Topology (1)

Second Semester 2022-2023

Course Catalog
3 Credit Hours. An Introduction to the basic ideas and methods of point set topology. Topological spaces: definition, basis, subbases, product spaces, continuous functions, separation axioms: T0, T1, and T2. Connectedness and compactness.

Text Book	
Title	General Topology
Author(s)	Paul E. Long. Charles E.
Edition	1st Edition
Short Name	TextBook
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref 1	Topology	James R. Munkres	1st Edition	
Ref 2	Foundations of General Topology	William J. Pervin	1st Edition	
Ref 3	Introduction to General Topology	Cullen F Helen	1st Edition	

Instructor	
Name	**Prof. Samer Al Ghour**
Office Location	PH2
Office Hours	Sun : 11:00 - 12:30 Mon : 13:00 - 14:00 Tue : 11:00 - 12:30 Wed : 13:00 - 14:00 Thu : 11:30 - 12:30

Email	algore@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Mon, Wed : 11:30 - 13:00 Room: SF12

Prerequisites		
Line Number	**Course Name**	**Prerequisite Type**
902450	MATH245 Set Theory And Logic	Prerequisite / Pass

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Weeks 1, 2, 3, 4	Chapter 3: Defining a topology, Closed sets, Interior, Exterior, and Boundary of a set, Cluster points	From **TextBook**
Weeks 5, 6, 7	Chapter 4: Bases, Finite products of a topological spaces & Subbases	From **TextBook**
Weeks 8, 9, 10	Chapter 5: Defining a continuous functions, Open functions and homeomorphisms	From **TextBook**
Weeks 11, 12	Chapter 6: The separation axioms and Hausdorff spaces	From **TextBook**
Weeks 13, 14, 15	Chapter 8: Connected spaces, Compact spaces	From **TextBook**
Week 16	Final Exams	

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Be able to demonstrate knowledge and understand concepts such as: open sets, closed sets, interior, closure, derived sets, boundary sets, bases and finite products. [50SLO1]	50%	
Be able to use continuous functions and homeomorphisms to understand structures of topological spaces. [25SLO1]	25%	
To be able to demonstrate knowledge and understand T0 spaces, T1 spaces, T2 spaces, connected spaces, and compact spaces. [25SLO1]	25%	

Relationship to Program Student Outcomes (Out of 100%)					
SLO1	SLO2	SLO3	SLO4	SLO5	SLO6
100					

Evaluation	
Assessment Tool	**Weight**
Midterm Exam	50%
Final Exam	50%

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