Syllabus-Topology

Mustansiriyah University **4th grade (Applied. Math.)**
College of Science-Department of Mathematics **2024-2025/ First Semester**

Course Title:

General topology

Course Level:

4th Year

Credit hours: 3

Instructor

Dr. Hatim Kareem Khudhair

Email

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Office Location

College of science building section 2

(Room 10)

Office Hours

Sun. 10:00-11:00 am

Wed. 12:00-01:00 pm

Course Schedule

Sun. 12:15-01:30 pm

Wed. 01:00-02:30 pm

Course Overview

This course provides the concept of topological spaces. We will introduce the concepts of topology and give some examples and theorems. On the other hand, we will study derived sets such as; interior, exterior, boundary, limit and closure points with theorems and relation between them (see chapter1). In chapter 2, continuous, open, closed and homeomorphism functions will be introduced on topological Spaces. As well as, we will provide the relations between the functions with examples and theorems. The concepts of Compactness will be given with theorems and examples in chapter 3.

Course References

- ***English ref.***

[1] N. Bourbaki, General topology, Part I, Addison Wesley, Reading, Mass, 1996.

[2] R. Englking, Outline of general topology, Amsterdam, 1989.

[3] C. Kuratowski, Topologies, Warsaw,1952.

[4] S. Willard, General topology, Addison Wesley Publishing Company, Inc, USA, 1970.

[5] S. Michael, Elementary Topology, Second edition, Gemidnami, 1972.

- ***Arabic ref.***

[1] أساسيات التبولوجيا العامة – تاليف : وليام بيرفن – ترجمة : د. عطا الله ثامر العاني
[2].التبولوجيا العامة – تاليف : د. عريبي الزوبعي

Exam Schedule

Exams	Day	Subject
Exam 1	Sun. 03-11-2024	Chapters 1 & 2
Exam 2	Sun. 22-12-2024	Chapters 3
Exam 3 (optional)	Sun. 05-01-2025	Comprehensive
Final exam	date TBD	Comprehensive

Grading Requirements

Final grades will be determined as follows:

Tests	Two exams and the third exam will be comprehensive and Optional.	25%
Attendances	Please see attendance policy below	5%
Final exams		70%
		100%

Note: ***No Cheating in the exams anymore.***

Attendance Policy

Let x be an absence number, then

$$\boldsymbol{If\ x \in A\ such\ that\ A = \{0, 1, 2\}, then\ you\ will\ obtain\ 5\ pionts}.$$

$$\boldsymbol{If\ x \in B\ such\ that\ B = \{3, 4\}, then\ you\ will\ obtain\ 4\ pionts}$$

$$\boldsymbol{If\ x \in C\ such\ that\ C = \{5, 6\}, then\ you\ will\ obtain\ 3\ pionts}.$$

$$\boldsymbol{If\ x \in D\ such\ that\ D = \{7, 8\}, then\ you\ will\ obtain\ 2\ pionts}.$$

$$\boldsymbol{If\ x \in E\ such\ that\ E = \{9, 10\}, then\ you\ will\ obtain\ only\ 1\ piont}.$$

$$\boldsymbol{however,\ if\ 11 \leq x \leq 24, then\ you\ will\ get\ zero\ points}.$$

Note: ***Excuses are allowed for you (official only).***

Good Luck