

**THE UNIVERSITY OF TEXAS AT EL PASO**  
**COLLEGE OF SCIENCE**  
**DEPARTMENT OF MATHEMATICAL SCIENCES**

**Course #:** MATHEMATICS 5341

CRN#17354

**Course Title:** General Topology

**Credit Hours:** 3

**Term:** Fall 2024

**Course Meetings & Location:** MW 3:00-4:20 HSSN 212

**Prerequisite:** Department approval

**Instructor:** Joe Guthrie

**Contact Info:** Office Location: Bell Hall 300

Telephone: 747-6755

email: [jguthrie@utep.edu](mailto:jguthrie@utep.edu)

Fax: 747-6502

Emergency Contact: 747-5761

**Office Hours:** MW 1:30-2:30 and by appointment.

**Textbook:** Willard, *General Topology* (Required)

**Course Objectives:** Students are expected to make considerable progress in the following areas:

#	Objective
1	Students will become familiar with the basics of general topology including topologies, continuity, separation and countability, compactness, metric spaces, and connectedness.
2	Students will be able to write clear and concise mathematical proofs using correct logical steps from hypothesis to conclusion
3	Students will be able to work with concrete examples such as the Cantor set.

**Course Activities and Assessment:**

**Homework:** Homework will be assigned each class day and discussed at the next class meeting. Students will be expected to give solutions at the board and will be assigned a grade for participation. Selected assignments also may be collected and graded.

**Exams:** There will be two mid-term in class exams as well as a final exam. The final exam will cover the entire course and will be held 1:00-3:45 Monday December 9.

**Course Grade:** At the end of the semester, you will have percentage scores for your homework and for your mid-term and final exams. The homework and class participation will count 15%, each mid-term exam will count 25%, and the final exam will count 35% toward your course average. Grades will then be assigned according to:

A: 90-100%    B: 80-89%    C: 70-79%    D:60-769%    F: 0-59%.

If you have problems with the course material, need to be absent for an exam, or have any other circumstances that may affect your performance in the course, contact me by phone or email as soon as possible.

**Drop policy:** The deadline to drop with an automatic W is Friday November 1.

**Make-up Policy:** Makeup exams will be given only in extraordinary and unavoidable circumstances and with advance notice to me by phone or email.

**Attendance Policy:** Prompt attendance at all class meetings is expected.

**Academic Integrity Policy:** You are expected to conform to the UTEP policy on integrity. See <http://academics.utep.edu/Default.aspx?tabid=23785>.

**Disability Statement** If you have or suspect you have a disability and need an accommodation, you should contact the Disabled Student Services Office (DSSO) at 747-5148 or at <dss@utep.edu> or go to Room 106 Union East Building. You are responsible for presenting to me any DSS accommodation letters and instructions.

**Military Statement:** If you are a military student with the potential of being called to military service or training during the semester, please let me know during the first week of classes and contact me as soon as possible if you do receive such an assignment.

### MATH 5341 Topology Homework

- 1 A, B, C, H
- 2 A, B 2, D
- 3 A, E, H
- 4 A, B, F
- 5 A, B, D, F
- 6 A 4 6, C
- 7 A, C, E, G
- 8 A, B 1, G 1 2, J
- 9 A 1 2, B, H 1 2
- 10 A, C
- 11 Omit
- 12 Omit
- 13 A 1 2, B 1 2
- 14 A 1 2
- 15 A 1 2
- 16 A 1 2 3 4, D 1 2, G 1 2
- 17 A 1 2, B 1 2 3 5 6 7
- 18 A 1 3
- 19 A
- 20 Omit
- 21 Omit
- 22 A 2, F 1
- 23 E 1
- 24 Omit
- 25 Omit
- 26 A 1 3, E, H
- 27 A
- 28 Omit
- 29 Omit

30 Omit  
31 Omit  
32 A  
33 A  
34 E