MA 640: General Topology
Syllabus

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Course Information

General Topology, MA 640, 3 Semester Hours

Summer 2025, Full Session, Section I01, CRN: 33497

Online Course

Course Description

This course is an introduction to point-set topology. Topics include sets and orders, open and closed sets, compactness, connectedness, quotient spaces, product spaces, separation axioms, the Tychonoff Theorem and Urysohn Lemma, Tietze Extension Theorem.

Prerequisites/Corequisites

MA 630: Foundations of Advanced Math with a grade of C or higher.

Course Objectives

By the end of this course, students will be able to:

- Write proofs on topics of point-set topology.
- Demonstrate knowledge of topological spaces.
- Demonstrate knowledge of topological properties of abstract spaces.

Course Structure

Textbook

Topology by James Munkres (2nd Edition). ISBN 9780134689517

Software

LaTeX, Respondus Lockdown Browser

Course Content

The following chapters of *Topology* will be covered:

1. Set Theory and Logic
2. Topological Spaces and Continuous Functions
3. Connectedness and Compactness
4. Countability and Separation Axioms
5. The Tychonoff Theorem

Online Learning

All course content will be on Canvas. For each section in the textbook that are covered, there is a corresponding `Module`. Each assignment will be linked to at the bottom of the corresponding `Module` as well as being found in the `Assignments` tab. Each exam will have its own `Module`.

The term exams will require the Respondus Lockdown Browser and the exams will also require the Respondus monitor (webcam). You can find more info at https://web.respondus.com/ respondus-lockdown-browser-the-student-experience/. To use Respondus, you must have a webcam + microphone and must download the Respondus computer application.

Grading Policy

1. *Discussion:* Students will be required to complete the 'What is Topology?' class discussion for the first and last day of class. Students are required to post in the discussion board and it is recommended that students give feedback to their peers' posts as well. This discussion will count towards 5% of the overall grade.
2. *Homework:* Homework will be assigned for each section that is covered in the notes. This will not include all 37 sections of the first 5 textbook chapters. All homework assignments will be given a due date corresponding to the module in which the material appears. Homework may be completed after the due date for 50% credit up to 2 days late. Students struggling with the homework problems are encouraged to email the professor. Homework will count towards 30% of the overall grade.
3. *Projects:* Students will be assigned a project for the given term. More information will be given through Canvas midway through the term. The project will count towards 10% of the overall grade.
4. *Midterm Exams:* There will be two midterm exams assigned in Canvas and taken using Respondus Lockdown Browser. These exams count toward 15% each of the overall grade. The exam dates are further down.
5. *Final Exam:* The final exam is COMPREHENSIVE. You must take the final exam on Wednesday, July 30. The final exam is worth 25% of the overall grade.

Midterm Exams

There will be two midterm exams, each worth 15% of the overall grade. Each exam will be available online through Canvas and will require Respondus Lockdown Browser. The dates of the exams are as follows:

- Exam 1: Friday, June 27th
- Exam 2: Friday, July 25th

Final Exam

The final exam is a comprehensive exam. This exam will be worth 25% of your overall grade. The final will be given through Canvas using the Respondus Lockdown Browser. You must take the final exam on **Wednesday, July 30**. There can be no exceptions to this date. Make any necessary arrangements now in order to ensure attendance.

Respondus

All semester exams will be taken online and proctored by the Respondus Lockdown Browser. This system will verify your identity and will then record both your webcam/microphone throughout the exam. The instructor will then watch the exam video and look for any flagged suspected exam rule violations. After completing the video review, if warranted, your instruc- tor will contact you directly to discuss rule violations. Attempts to circumvent course security measures will be considered academic dishonesty and dealt with according to the University's Academic Integrity and Honesty policies in the section below.

Exam Rules:

1. When entering an exam, you will go through an identity verification process. You will be asked to:
    - *Take a picture of yourself*. The purpose of this is to verify who is taking the exam.
    - *Take a picture of your ID*. The purpose of this is to verify that the person taking the exam is the person who is actually enrolled in the course. *This needs to be a valid picture ID, such as a student ID, driver's license or state ID, etc.
    - *Complete a 360-degree room scan*. This is to verify you do not have any unauthorized materials or persons in your testing area. Details about the room scan are included below.
2. 360-degree Room Scan Details
    - Show your entire desktop area, plus turn the webcam around in a complete circle to show all walls in your room. Be sure you go slow and show all areas to prevent being flagged.
    - You may use scratch paper. All sides of each sheet must be shown to the camera during the room scan. Nothing should be written on the papers. After completing the exam, you must rip up and throw away the scratch paper and show the webcam before the exam is submitted.
3. You should be alone in the room while taking exams.
4. You may not leave the room during the exam.
5. You may not use your cell phone during the exam.
6. You may not use headphones, textbooks, notes, internet, etc. during the exam.
7. You may not have multiple monitors connected when taking an exam.
8. You should ensure that you are in full view of the webcam throughout the entire exam in a properly lit room.
9. IF you are disconnected from the exam or experience technical problems while you are taking the exam, you must contact Canvas Tech Support to receive assistance with the issue. You should also contact your instructor with a summary of the problem and how (or if) it was resolved.

Academic Integrity and Honesty

Students of the university academic community are expected to adhere to commonly accepted standards of academic honesty. Allegations of academic dishonesty can reflect poorly on the scholarly reputation of the University including students, faculty and graduates. Individuals who elect to commit acts of academic dishonesty such as cheating, plagiarism, or misrepresentation will be subject to appropriate disciplinary action in accordance with university policy.

Incidents of possible student academic dishonesty will be addressed in accordance with the following guidelines:

1. The instructor is responsible for investigating and documenting any incident of alleged academic dishonesty that occurs under the instructor's purview.
2. If the instructor finds the allegation of academic dishonesty to have merit, then the instructor, after a documented conference with the student, will develop a plan for disciplinary action. If the student agrees to this plan, then both instructor and student will sign the agreement. The faculty member will forward a copy of the signed agreement to the Office of Student Conduct for record-keeping purposes.
3. If the student disagrees with the instructor's proposed plan for disciplinary action and wishes to take further action, he/she is responsible for scheduling a meeting with the chair of the department where the course is housed to appeal the proposed disciplinary plan. The department chair shall mediate the matter and seek a satisfactory judgment acceptable to the faculty member based on meetings with all parties. If a resolution is reached, the disposition of the case will be forwarded to the Office of Student Conduct.

   If a resolution at the departmental level is not reached and the student wishes to take further action, he/she is responsible for scheduling a meeting with the dean of the college where the course is housed to appeal the proposed disciplinary plan. The college dean shall mediate the matter and seek a satisfactory judgment acceptable to the faculty member based on meetings with all parties. If a resolution is reached, the disposition of the case will be forwarded to the Office of Student Conduct. If a resolution at the college level is not reached and the student wishes to take further action, he/she is responsible for scheduling a meeting with the Vice President for Academic Affairs and Provost (VPAA/P) to appeal the proposed disciplinary plan. The VPAA/P shall mediate the matter and seek a satisfactory judgment acceptable to the faculty member based on meetings with all parties. After reviewing all documentation, the VPAA/P may, at his/her discretion, choose either to affirm the proposed action, to refer the case to the Office of Student Conduct for further review, or to dismiss the matter depending on the merits of the case. The final disposition of the case will be disseminated to appropriate parties, including the Office of Student Conduct.
4. If a student is allowed academic progression but demonstrates a repeated pattern of academic dishonesty, the VPAA/P may, after consultation with the Office of Student Conduct, assign additional penalties to the student, including removal from the University.

Disability Accommodations

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the University offers reasonable accommodations to students with eligible documented learning, physical and/or psychological disabilities. Under Title II of the Americans with Disabilities Act (ADA) of 1990, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Amendment Act of 2008, a disability is defined as a physical or mental impairment that substantially limits one or more major life activities as compared to an average person in the population. It is the responsibility of the student

to contact Disability Support Services to initiate the process to develop an accommodation plan. This accommodation plan will not be applied retroactively. Appropriate, reasonable accommodations will be made to allow each student to meet course requirements, but no fundamental or substantial alteration of academic standards will be made. Students needing assistance should contact Disability Support Services (256-765-4214).

Title IX

The University of North Alabama has an expectation of mutual respect. Students, staff, administrators, and faculty are entitled to a working environment and educational environment free of discriminatory harassment. Both the Equal Employment Opportunity Commission and the State of Alabama regard sexual harassment as a form of sex/gender discrimination and, therefore, as an unlawful discriminatory practice. This includes sexual violence, sexual harassment, domestic and intimate partner violence, stalking, gender-based discrimination, discrimination against pregnant and parenting students, and gender-based bullying and hazing.

Faculty and staff are required by federal law to report any observations of harassment (including online harassment) as well as any notice given by students or colleagues of any of the behaviors noted above. Retaliation against any person who reports discrimination or harassment is also prohibited. UNA's policies and regulations covering discrimination and harassment may be accessed at www.una.edu/titleix. If you have experienced or observed discrimination or harassment, below are some resources to contact.

Confidential Reporting: If a reporting party would like the details of an incident to be kept confidential, the reporting party may speak with

Student Counseling Services	256-765-5215
University Health Services	256-765-4328
Women's Center	256-765-4380
Rape Response	256-767-1100 (hotline)/265-765-0025 (office)
Safe Place (domestic violence)	256-767-6210 (hotline)/265-767-3076 (office)

Formal Reporting: If a reporting party would like the University to investigate an incident, the reporting party may speak with:

UNA Police	256-765-4357
Title IX Coordinator	256-765-4223