Course Syllabus

Course Information

Course Number, Section: 84317, MATH4341.001.16F Course Title: Topology Term: Fall 2016, Monday 08/22 (class begins) -- Wednesday 12/07 (class ends) Meeting: MW 11:30 AM--12:45 PM, PHY 1.202

Professor Contact Information

Instructor: Dr. Anh Tran Office Phone: (972)883-6587 Office Location: FO 2.604B Email Address: <u>att140830@utdallas.edu</u> Office Hours: MW 1--2pm or by appointment

Course Pre-requisites, Co-requisites, and/or Other Restrictions

Pre-requisite: Math 2451 & Math 3310 *Co-requisite*: None

Course Description

This is a course in point-set topology, with excursions into algebraic topology as time permits. Topology is the study of continuous functions, limits, and associated notions. Roughly speaking, it considers those aspects of shape which do not rely on geometry. Topics covered: set theory, topological spaces and continuous, functions, metrizability; other topics as time permits.

Student Learning Objectives/Outcomes

At the end of this course you should be able to

- 1. write proofs,
- 2. define and explain fundamental topological notions,
- 3. reason about topological objects and continuous functions,
- 4. state and apply the fundamental theorems of point-set topology.

Required Textbooks and Materials

Topology (2nd edition) by James Munkres.

There will be some guest lectures on current topics of topology.

Assignments & Academic Calendar

Chapters: 1, 2, 3, 4 of Munkres' text (with additional topics as time permits).

Homework: Homework assignments will be given on a regular basis. Each one of them is going to have a specific deadline. Students are expected to work on each assignment individually and turn it by the specific deadline. Students are strongly encouraged to work more than the class assignments.

Midterm Exams (2): Monday, September 26 and Wednesday, November 02 (in-class exams) *Final Exam*: TBA, take-home exam

All students are expected to take the examinations at the announced time. Students are required to inform the instructor of suspected honor code violations. Show all details of your work for each problem you solve during exams (unsupported answers will receive little or no credit). The class assignments will be returned to you as soon as possible. Any document not picked up by the end of finals week will be destroyed. Graded exams will not be returned to the students but the final exam will be held for review for one year.

Important dates: 09/07: Last day to drop a class without a W 11/07: Last day to withdraw with an automatic W

Grading Policy

25%: Homework assignments (The worst one will be dropped.)50%: Midterm exams (2)25%: Final exam

Grade Scale

[95,100] → A+	[90,95) → A	[85,90) → A	
[80,85) → B+	[75,80) → B	[70,75) → B	
[65,70) → C+	[60,65) → C	[55,60) → C	
[50,55) → D+	[45,50) → D	[40,45) → D	$[0,40) \rightarrow \overline{F}$

Course & Instructor Policies

Assignments and Late Work: Any assignment will have a specific deadline. Failure to meet the deadline will result in a 25% reduction per each 24 hours late, of the point value for the assignment.

Class Attendance: Attendance is mandatory. Attendance for exams is mandatory.

Classroom Citizenship: Any action which disturbs your classmates or interrupts the lecture is unacceptable. Examples of such actions include the following:

1. Entering the classroom late. Please be punctual.

2. Leaving the classroom before the end of lecture.

3. Consuming of food and drinks.

4. Any electronic equipment may be used only with a permission of the instructor.

5. Cell phones, etc., need to be turned off unless you are a member of an emergency response team.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.