

Introduction to Topology

Math 145A, Spring 2011

Instructor: Dr. Julie Bergner

Class: MWF 8:10-9:00 am, SPR 2340

Office: Surge 226

Phone: 827-3507

E-mail: jbergner@math.ucr.edu

Course Web Page: <http://www.math.ucr.edu/~jbergner/math145aw11.htm>

Office hours: M 9:10-10:00 am, W 10:10-11:00 am, F 2:10-3:00 pm, and by appointment.

Teaching Assistants: Spencer Shepard and Jacob West

Textbook: *Introduction to Metric and Topological Spaces, Second Edition*, by Wilson A. Sutherland.

Course Objectives: The purpose of this class is to introduce the notion of topological spaces, first for metric spaces and then more generally. The main ideas of open and closed sets, continuity of functions, connectedness, and compactness are foundational ideas in mathematics and will be used for more advanced topics in topology in Math 145B, and for a rigorous treatment of calculus in Math 151.

Grades: Grades will be based on homework (worth 20% of your grade), quizzes (worth 10%), two in-class exams (tentatively Wednesday, February 2, and Wednesday, February 23; worth 20% each), and a final exam (tentatively Friday, March 18, 3:00-6:00 pm; worth 30%).

Late homework will be accepted but penalized. No make-up exams will be given except under extreme circumstances. Please note that travel plans are not considered extreme circumstances.

Any instance of cheating will result in a failing grade for the course.

Homework: Homework problems will be assigned during each class period and is to be turned in on Wednesday at the beginning of class (starting the second week of the quarter). You are encouraged to work together on the assignments, but you must write up your own work. Copying a solution directly from another student is cheating and will be treated as such. The discussion sections on Tuesdays, as well as office hours, will give you the opportunity to get help on homework. Occasional in-class activities will be counted toward your homework grade.

Discussion Section: These sessions will give you a further chance to go

over material with the teaching assistant. There will often be quizzes given in discussion. More information will be given in class on Tuesday.

Emails: Emailing the professor and TAs when needed is encouraged, but should be done professionally. All email communication must state clearly who is sending the email and must be written in ordinary English. Emails from an unidentified sender or containing text message abbreviations will be treated as spam and deleted.

If you have any condition, such as a physical or learning disability, which will require academic accommodations, please notify me in the first two weeks of the course.