MATH 290B: Topology, Winter 2021

General Information

- Instructor: Jianfeng Lin (jil063@ucsd.edu)

- TA: Itai Maimon (imaimon@ucsd.edu)

- Lecture Time: Monday, Wednesday, Friday 10:00AM-10:50AM.

- Location: Lectures will be delivered remotely through Zoom.
  Meeting ID: 942 6826 4257. Note: this is different from the meeting ID of 290A. Password: Hausdorff

- Homepage: Canvas

- Instructor's Office hours: Monday and Friday 11:00AM-Noon, Wednesday 9:00PM-10:00PM. (Same ID and Password as the lecture). .

Grading

- Homework - 40%, Midterm Exam - 20%, and Final Exam - 40%.

- Students who are taking the course for a P will have an option to skip the final exam. In this case, students who choose to opt out the final must inform the the instructor by the end of Week 10 and the grad will be calculated based on the Homework (70%) and the Midterm (30%). **This option is not available for students who are taking the class for a letter grade.**

Attendance

The attendance is **not** mandatory. All lectures will be recorded on Canvas to accommodate students in different time zones.

Exams

There will be one midterm exam and one final exam. Both exams will be close-book and close-note. To accommodate students from different time zones, both exams will have two exam times:

- Midterm (**February 5**):
  Default exam time: 10:00AM-11:30AM (in class);   Alternative exam time: TBD

- Final (**March 19**):
  Default exam time: 8:00AM-11:00AM;   Alternative exam time: TBD.

In general, neither rescheduled nor make-up exams will be allowed unless a written verification of a valid excuse (such as hospitalization, family emergency, religious observance, court appearance, etc.) is provided. Help and accommodation will be provided in handling any exam issues related to the COVID-19 outbreak.

Homework Policies

There will be nine homework assignments given weekly. They are due at 11:59 PM on the Sundays. (The first homework is due on January 17). Homework assignments will be downloaded and submitted through **Gradescope**. The homework will be partially graded. Homework assignments will be posted at least 7 days before the due date.

Students are encouraged to discuss the homework problems with each other or with the instructor. But students must write their answers by themselves and in their own words. Students must acknowledge all sources consulted at the beginning of their answers.

In general, no late homework will be accepted unless a written verification of a valid excuse (such as hospitalization, family emergency, religious observance, court appearance, etc.) is provided. Help and accommodation will be provided in handling the homework issues related to the COVID-19 outbreak.

Academic Integrity

Every student is expected to conduct themselves with academic integrity. **The instructor may give an oral follow-up if he notices a potential academic integrity violation in the midterm or final.** Violations of academic integrity will be treated seriously. See here for UCSD Policy on Integrity of Scholarship.

Further Information About the Course

Math 290B is the first quarter of a 3-quarter sequence course that covers fundamental materials in algebraic topology. It serves as the class that helps our graduate students prepare for the topology qualifying exam.

This course will assume the familiarity with the point set topology and basic abstract algebra. The focus of this quarter will be singular homology and cohomology theory. The main references are:

1. Haynes Miller's lecture notes (Lecture 11-38).

2. Allen Hatcher's book Algebraic Topology (Chapter II and III).

Accommodation

Students requesting accommodations for this course due to a disability must provide a current electronic Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD) through email. Students are required to present their AFA letters to Faculty (please make arrangements to contact me privately) and to the OSD Liaison in the department in advance (by the end of Week 2, if possible) so that accommodations may be arranged. For more information, see here.