Spring 2016 Introduction to Topology 18.901

Instructor: Joseph Hirsh email: jhirsh@mit.edu

Office: 2-232B

Office hours: W 4-6pm

Recommended textbook: Topology (2nd edition) by James Munkres

Textbook: The class will be self-contained and there is no required textbook. A good complement to the lectures, however, is Munkres' Topology textbook. The book also has tons of good exercises.

Problem Sets: There will be weekly problem sets. These will be posted on the course website on Thursdays, and must be handed in during class the following Thursday. You are welcome to collaborate with other students on homework problems, but you must write up the solutions yourself. Writing up solutions carefully is a very important part of the homework: as any mathematician could tell you, there is a significant difference between understanding an argument (or believing you understand it), and writing a detailed proof of it.

Please read Munkres' Comments on Style, available on the course website, for general guidelines on mathematical writing which apply in particular to writing homework solutions. In summary, always write complete sentences with proper grammar and punctuation, and keep in mind that your job is to explain a logical argument to the grader, who is a mere human being with no mind-reading abilities.

Problem Seminar: Each week, the last problem in the set will be especially challenging. A group of students will present the solution to this problem (or part of it) during the first half hour or so of the Tuesday session. I will give more details about this in class.

Grade: Counting towards your final grade are 10 psets and 2 in-class exams. The final grade will be computed as:

PSets: $7 \times 8\% = 56\%$ Exams: $2 \times 22\% = 44\%$

where only the best 7 problem set scores are counted toward your final grade.

Student Services: If you are dealing with a personal or medical issue that is impacting your ability to attend class, complete homework, or take an exam, please discuss this with Student Support Services (S^3) . The deans in S^3 will verify your situation, and then discuss with you how to address the missed work. Students will not be excused from psets or exams without verification from Student Support Services. You may consult with Student Support Services in 5-104 or at 617-253-4861. Alternatively, S^3 has walk-in hours Monday–Friday 10:00–11:00am and 2–3pm.

Student Disability Services: All students are welcome in this class, regardless of how they learn best. If you need an adjustment to the teaching format, I encourage you to speak with me early in the semester. In addition, you should know that MIT is committed to the principle of equal access. Students who need disability accommodations are encouraged to speak with Kathleen Monagle, Associate Dean, early in the semester so that accommodation requests can be evaluated and addressed in a timely fashion. Even if you are not planning to use accommodations, it is recommended that you meet with SDS staff to familiarize yourself with the services and resources of the office. You may also consult with Student Disability Services in 5-104, via phone at 617-253-1674, or via email at uaap-sds@mit.edu.

If you already have a disability accommodation letter from SDS, please speak with the Mathematics disabilities accommodation coordinator Theresa Cummings in 2-110 (or reach her via email at tcumming@mit.edu) as soon as possible to make arrangements for the semester.