TOPOLOGY SYLLABUS, SUMMER, 2019

JOHN C. MAYER

Course: MA 671 Topology II
Meetings: TuTh 3:00 - 5:00 PM HHB 426 or possibly CH 458 or 402
Instructor: John Mayer CH 490A
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Office Hours: tba or by appointment

Format of Course. This is a “do-it-yourself” course. You are strongly discouraged to consult any textbook, internet site, or “expert.” You may talk to each other informally and to me, but work presented at the board must be your own or properly credited. It is OK to say “The idea for this proof was suggested to me by ...” and incurs no penalty.

Material. The only material for the course will be a set of Topology Notes which will be updated and distributed periodically. Chapters 1-6 have been distributed in Topology I and will be available in Canvas or directly from me. Occasionally, there may unfortunately be errors in the notes. Please point them out and they will be corrected in the next update. We will begin by finishing the problems in Chapter 6 and moving on to Chapter 7, also posted to Canvas.

Most items appearing in italics (theorems, lemmas, propositions, corollaries, problems, and examples) are for students to work and present proofs and explanations at the board. Set out items not in italics (definitions, axioms, remarks, conjectures, and questions) are for your use and reference.

Exercises are also in italics, but are not usually to be presented at the board. They may count toward your grade (see “Rules” below). You are responsible for knowing how to solve them. You may use true statements from the exercises in your boardwork without proof.

Rules.

(1) Mere presence counts 1 point per class meeting.
(2) Each item presented at the board and defended correctly counts 2–4 points, depending upon quality of explanation/proof/defense.
(3) Priority order for presenting is determined (in order) by:
   (a) Persons with lowest board point total.
   (b) Persons who have not yet presented that day.
   (c) Random experiments to break ties.
(4) Exercises are not presented in class, but may be turned in for a written homework grade (see “Grading” below). (Deadline is first Monday after we move beyond the subsection in which the exercise appears.) Proof and/or explanation is always required — a bare answer never suffices.
(5) There are two tests: midterm and final (see “Grading” below).

Date: April 23, 2019.
1991 Mathematics Subject Classification. Primary: 54F20.
Key words and phrases. topology.
**Grading.** Items will be weighted the flexible amounts indicated below so as to produce the best individual grade. You can (and may) rely entirely on boardwork for your grade.

- **Boardwork** 30–100% rank-ordered subject to a minimum
- **Homework** 0–20% rank-ordered subject to a minimum
- **Tests and Quizzes** 0–50% mid-term and final count equally

You *are not required* to do any written homework unless you want to. It can only help your grade. You *are required* to take the tests and quizzes, though they cannot hurt you much if your boardwork total is excellent. Any day that there is not enough board work to keep the class engaged, there will be a quiz!

**Attendance.** Attendance in class is required, as you are there not only to present your own results, but to critique the work of others. Participation is expected. Unexcused absence is a 2 point penalty per day on your boardwork total. Lateness of above 20 minutes is a 1 point penalty. After a warning from me, your grace time may be shortened.

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