SPRING 2015 MATH 4200/6200 COURSE SYLLABUS

PETE L. CLARK

Course: Math 4200/6200: Point Set Topology
Course Webpage: http://www.math.uga.edu/~pete/MATH4200S15.html
Instructor: Associate Professor Pete L. Clark, Ph.D.
Lectures: MWF 12:20-1:05 pm, Boyd 302
Problem Session: TBA
My Office: Boyd 502
Office Hours: MWF 1:05-2 pm, and by appointment

Course text: The course text is Set Theory and Metric Spaces, by Kaplansky. It is strongly recommended but not strictly required. It is lovely in every way, including the price. This text will cover slightly less than half of the material of the course. The remainder will be given as typed lecture notes.

Topics Covered: I. Topology of $\mathbb{R}$ and Order Topologies: about two weeks
II. Metric Topology (Chapters 4-6 from Kaplansky): about five weeks
III. Introduction to General Topology: about four weeks
IV. Metrization and Embedding Theorems: about three weeks
V. Filters and Tychonoff’s Theorem: about one week

Prerequisites: This is an appropriate course to take at the end of one’s undergraduate career (or at the beginning of one’s graduate career). Math 3100 (Sequences and Series) and Math 3200 (Introduction to Proof) are formal prerequisites. Further exposure to the theoretical side of calculus as in Math 2400/2410, Math 3500/3510 and/or Math 4100 would be helpful. Prior exposure to “abstract structures” – e.g. groups, fields, partially ordered sets – would also be helpful. The prerequisites for the 6200 version are the same, but more mathematical maturity will be assumed.

Course grade:
homework 30%
midterm exam 30%
final exam 30%
Math 4200: class participation 10%     Math 6200: final project 10%

The midterm will occur before the withdrawal deadline of Thursday, March 19.

Attendance Policy: The official attendance policy of the university states: Students are expected to attend classes regularly. A student who incurs an excessive number of absences may be withdrawn from a class at the discretion of a professor.

C.f.: http://bulletin.uga.edu/bulletin/ind/attendance.html
A student who misses more than seven classes without excuse should expect to be withdrawn. For 4200 students: your class participation grade start at 10. You are allowed two unexcused absences without penalty. After each subsequent unexcused absence, two points will be deducted from your class participation grade.

**Final Exam**: The final will be on Monday, May 4 at noon in Boyd 302.

**The Mandatorium**:\(^1\)

As a University of Georgia student, you have agreed to abide by the University’s academic honesty policy, A Culture of Honesty, and the Student Honor Code. All academic work must meet the standards described in A Culture of Honesty found at: www.uga.edu/honesty. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

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\(^1\)I am told that *all UGA course syllabi* must contain the following paragraphs.