General course information

Instructor: Balázs Szegedy  Office: IC458  e-mail: szegedyb@gmail.com


Prerequisites: MATB24 (Linear Algebra II)  MATB43 (Introduction to Analysis)

Course overview and syllabus: MATC27 is an introductory course in general Topology.

1. Chapter 1: Sections 1 - 11 (Fundamentals of set theory, notation, logic, and related tools used in topology. Some of this material is covered in MATB43 and will be a review. Other of this material is probably quite new.)

2. Chapter 2: Sections 12 - 22 (Definition of topological space, types and examples, basis for a topology, product and subspace topology, continuous functions, homeomorphisms, quotient topology, examples. This chapter marks the beginning of our study of topology.)

3. Chapter 3: Sections 23 - 29 (Connectedness, compactness, local properties, examples.)

4. Chapter 4: Sections 30 - 33 (Countability and separation axioms, the Urysohn lemma. We omit sections 34 - 36.)

5. Chapter 5: Section 37 (The Tychonoff theorem. We omit Section 38.)

6. Chapter 7: Sections 43 - 46 (Complete metric spaces, space-filling curves, compactness in metric spaces, modes of convergence. We omit Chapter 6 and Section 47 of Chapter 7.)

Grading scheme:

Assignments (probably six) 30% (your lowest assignment is omitted)

Midterm Test 25% (date/time/place TBA)

Final Examination 45% (date/time/place TBA)

Assignments Assignments will be posted on my website and handed-out in class. You may certainly collaborate with your colleagues in trying to solve the assignment problems. However, your submitted work must be written in your own words. If your work appears too often to be too similar to another students work, all such students will be called in to question for plagiarism and the assignment mark of all offending students will be appropriately penalized. Assignments are due not later than 10 minutes past the hour beginning the lecture due day. Assignments received the after this time on the due day will be accepted for grading, but will earn a 50% reduction their mark. Assignments received after the due day will earn a score of zero. Detailed solutions to assignments will be posted at the website.

Calculators: The following are prohibited during test/exam writing: calculators, I-Pods, Blackberry, Laptop computers, Cell Phones and any other electronic calculating or data storage device.

Office Hours: I will have office hours in my office on Tuesdays and Thursdays. You may also make an appointment with me to get individual or small group help.