Topology II
MA 671-OX
Summer 2017

Instructor: Alexander Blokh
Office Hours: CH 494A, TT 9:00 - 10:00 AM
Contacts: email ablokh@math.uab.edu or phone 934-2154
Class Meetings: T Th, 3:00-5:00pm, CH458

Material: J. R. Munkres, Topology, second edition. We will begin with review of Topology I. This will also include some sections of the textbook that were not covered in Topology I (e.g., Section 22: Quotient spaces) as well as in-depth discussion of some non-mandatory exercises from the textbook. Other topics will include connectedness (parts of chapter 3 of the textbook), complete metric spaces and functional spaces (chapter 7 of the textbook), and possibly initial ideas of algebraic topology (such as the fundamental group or separation theorems in the plane).

Some of the topics above may not be covered in the course if we do not have time.

Organization
Students will present material in class. If you have questions and do not understand something, feel free to come to my office any time. I am in most days and you should have no problem finding me.

Mathematics is learned by actively doing it. Hence you should often ask questions during presentations. Also, if you are presenting, you should anticipate questions and prepare answers for them (if you initially don’t understand why a statement is true others will most likely have the same problem; hence supply more argument).

Similarly, working problems is crucial for testing and improving your understanding of the material. Topology is very abstract and you have to learn to accept that you are given a set of rules and you must work within them. Why these rules are this way may only be clear later.

Finally you must memorize basic definitions and facts; you cannot function without knowing what a topological space is, what it means for a set to be open, what it means to be the basis for a topology etc.

Grading
Presentations count for 30%
Midterm 30%
Final exam 40%