California State University Long Beach
Math 550B Topology II, Fall 2014

Professor : Ryan Blair
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Office : FO3-101
Office Hours : TuTh 5:15-6:15pm

Class Meetings: TuTh 4-5:15pm LA5-265

Text: *Topology* by J. Munkres, 2nd edition and *Algebraic Topology* by A. Hatcher
(Hatcher's book can be found here: http://www.math.cornell.edu/~hatcher/AT/ATpage.html)
Course web page: http://www.csulb.edu/~rblair/Math550BF14/index.html

Prerequisites: Math 550A

Course description: This course is an introduction to algebraic topology. We will cover the following topics together with additional topics as time permits: homotopy of maps, fundamental group, covering spaces, free groups, amalgamation of groups, Seifert–van Kampen theorem, simplicial complexes, chain complexes, exact sequences, simplicial homology, Mayer–Vietoris sequence.

Attendance: To be successful in this course, you should be present for all class meetings. For more information, see
http://www.csulb.edu/divisions/aa/catalog/current/academic_information/class_attendance.html

Homework: Homework assignments will be announced in class and posted on the course web page. They will be due as noted, typically once a week and always at the beginning of class. You are responsible for being aware of the assignments and due dates. Each homework will contain a reading assignment from the book and a list of problems. You are expected to complete and turn in all. Doing the full assignment is absolutely crucial! Late homework is not generally accepted.

You are strongly encouraged to work in groups to exchange ideas and help each other understand how to approach problems, but the work you turn in must be your own! If you work with others on an assignment, be sure to indicate the names of the other students on your homework. Homework must be legible, well-organized, and written in complete sentences. Handwritten work is fine, but you are encouraged to type up the problems in LaTeX.

Exams: There will be two midterm exams, according to the following tentative schedule:
1) Midterm 1: in class, October 7th
2) Midterm 2: in class, November 18th

Final Project: The final project will give you the opportunity to explore a topic in algebraic topology at a deeper level. The project will have a written and oral presentation component. Additional information regarding the final project will be distributed later in the course.

Grades: Your grade for the course will be determined based on the following factors:
Homework 40 %
Midterm exams 15 % each
Final Project 30 %

Office hours: I will hold regular office hours at the times noted above, unless I email or tell you otherwise in class. Alternatively, you may set up an appointment to meet with me.

Accommodations: Students needing accommodations because of a disability should first register with Disabled Student Services and present the appropriate forms issued by DSS to the instructor no later than two weeks from the date classes begin. Information regarding DSS can be found at http://www.csulb.edu/divisions/students2/dss/.

Withdraw: The last day to withdraw without receiving a W is **October 29**. The last day to withdraw without the CNSM dean's signature is **November 14**. Plan early since it's sometimes hard to track people down for signatures. Any office hour may be cancelled due to illness or necessary appointments, and the students should not therefore depend on a faculty member being in his/her office for a particular office hour. Students should secure any necessary signatures well in advance of any deadlines.

Academic Integrity: Academic integrity is expected for assignments and exams. The usual penalty for a student caught cheating or plagiarizing includes an F in the course. Further penalties may include probation, suspension, or expulsion from the university. More information can be found on http://www.csulb.edu/divisions/aa/catalog/current/academic_information/cheating_plagiarism.html

Note: The instructor reserves the right to alter anything on this syllabus at any time during the semester. Any alterations will be announced in class.