Math 872 Algebraic Topology
Section 001

Lecture: TuTh 11:00 - 12:15 Avery 112

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WWW: http://www.math.unl.edu/∼mbrittenham2/
WWW pages for this class: http://www.math.unl.edu/∼mbrittenham2/classwk/872s07/

The class page will (eventually) be home to the homework assignments, their solutions (suitably locked away), the instructor's running lecture notes, and anything else the instructor can think of.

Course lock box: http://www.math.unl.edu/∼mbrittenham2/classwk/872s07/lockbox/

This is a password-protected web page, for course items that are not for public consumption. The username for the lockbox is *"m872"* and the password is . ________________ ..

Office Hours: (tentatively) Th 9:30 - 10:30, We 1:00-2:00, and Th 9:30 - 10:30, and whenever you can find me in my office and I'm not horrendously busy. You are also quite welcome to make an appointment for any other time; this is easiest to arrange just before or after class, or by email.

Texts: *Topology: a First Course*, by James Munkres (**second edition**), and *Algebraic Topology*, by Allen Hatcher.

Our primary plan will be to go through Chapters 0 through 2 of Hatcher's book, probably using Munkres as our source for the first chapter (fundamental groups). This goal may change, based on the interests of those attending.

The basic goal of algebraic topology is to use algebra to study topological spaces; more precisely, to characterize (to the extent possible) topological properties in terms of algebraic *invariants*. Our principal topics will be the fundamental group and homology groups of a topological space. We will learn how to compute them, how they behave under various "natural" topological operations, and some of the topological (and algebraic) results that can be proved using these tools.

Your final grade will be based on a single component: homework. Homework will be assigned every two to four class periods, and will typically be due one week after it is assigned. Cooperation with other students on these assignments is acceptable, and even encouraged, although you should make every effort to work through them on your own, and you should certainly write them up on your own.

Departmental Grading Appeals Policy: Students who believe their academic evaluation has been prejudiced or capricious have recourse for appeals to (in order) the instructor, the departmental chair, the departmental appeals committee, and the college appeals committee.

Some important academic dates

Jan. 8: First day of classes.
Jan. 15: Martin Luther King Day - no classes.
Jan. 19: Last day to withdraw from a course without a **'W'**.
Mar. 2: Last day to change to or from P/NP.
Mar. 11-18: Spring break - no classes.
Apr. 6 Last day to withdraw from a course.
Apr. 28: Last day of classes.