

## 18.905 Fall 2006

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**Instructor:** Tyler Lawson

**Class location:** 2-255, MWF 1pm-2pm

**Office:** 2-171

**Office phone:** 3-4385

**Office hours:** Monday 2pm-4pm

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**Website:** <http://math.mit.edu/~tlawson/18.905.html>

**Course outline.** This course is intended as a graduate-level introduction to the machinery of algebraic topology. Specifically, we will focus on singular homology and the dual theory of singular cohomology.

**Prerequisites.** The prerequisites for the course are basic point set topology (18.901 or equivalent) and algebra (18.701, 18.703 or equivalent).

**Text.** The textbook for this course is Allen Hatcher's *Algebraic Topology*. The text is freely available online, but the bookstore also sells bound copies. We will be focusing on chapters 2 and 3. Other texts you might find interesting or useful include the following.

*A basic course in algebraic topology*, by W. S. Massey.

*An introduction to algebraic topology*, by J. J. Rotman.

*Elements of algebraic topology*, by J. Munkres.

**Exams.** There are no exams for this course.

**Assignments.** Your grade for this course will be based on weekly assignments. Assignments are due each Wednesday in-class. There will be 12 assignments in all. Assignments and outlines of their solutions will be posted to the course website.

**Grading.** Your lowest assignment grade will be not be counted towards your final grade. The remaining assignments will be given equal weight.

**Late policy.** No late assignments will be accepted without *prior* arrangement.