## SPRING 2006 MTG 5326

Topology I

MWF 11:15-12:05106 Love

Instructor: W. Heil 115 Love

**Prerequisites:** Graduate standing (or permission of associate chair)

**Objective:** This course is an introduction to Elementary Topology and is the first course in a sequence of three topology courses. A mastery of the contents of all three is required for the Ph.D. qualifying exams in Topology.

**Contents:** metric spaces, topological spaces, quotient spaces, connectedness, compactness, separation properties, 2-manifolds, homotopy, fundamental group

**Text:** Czes Kosniowski, A first course in algebraic topology (Sections 1 through 16), Cambridge University Press (1980). The book is out of print and will be offered as a reprint by Target Copy.

**Grading:** There will be three take-home exams. Grades will be based on the final accumulation of scores in the tests. Homework problems will be assigned (but not collected) and discussed in class. Participation in these discussions (and/or presentations in class) will determine +/grades.

