Math 440/540 – Topology I
Winter 2015
Course Syllabus

Instructor: Anton Kaul
Office: 25-312 (Faculty Offices East)
Phone: 6-1678
email: acaul@calpoly.edu
Office Hours: Monday 2-3, Tuesday 12-1, Thursday 12-1, Friday 2-3
Course Web Page: www.calpoly.edu/~akaul/teaching/Math440

Textbook
The text for the course is Gamelin and Green, Introduction to Topology, 2nd ed.

Course Description
The first part of this quarter will be spent covering the standard topics of point-set topology, including metric spaces, topological spaces, compactness, completeness, connectivity, product spaces and quotient spaces. We will then move on to homotopy theory, including covering spaces and the fundamental group.

Homework
Homework contributes 40% to your final course grade. Homework sets will be assigned at regular intervals throughout the quarter (roughly once a week). Each assignment will be worth 20 points. The points will be allocated as follows:

- (15 points) I will choose a subset of the problems. These exercises will be graded carefully, with an emphasis on the format and logical flow of your proofs. Since I will not announce my selections until after the assignments are turned in, students should treat each problem as though it will be graded.

- (5 points) The remaining 5 points will be based on the level of completion and overall appearance of your write-ups.

I will announce the assignments (and due dates) in class. I will also post this information on the web. Once everyone has turned in their homework I will post solutions. Late homework will be accepted but penalized at a rate of 5 points per day.

Exams
An in-class midterm exam will be given on Friday, February 13 and contributes 25% to your course grade. The final exam, which will be comprehensive, contributes 35% to the overall course grade.

Final Projects (540 students only)
MATH 540 students are required to submit a final project by the last day of the quarter (March 13, 2015). Further instructions will be given later in the quarter.

Grading
Grades will be assigned according to the usual scale (90% ↔ A’s, 80% ↔ B’s, etc.). However, I reserve the right to lower the standard if deemed necessary (i. e., there may be a curve, but it will not hurt your grade).