The course and prerequisites: This course deals with the concept of infinity, primarily from a mathematical perspective, but also as it relates to other aspects of thought and culture, such as science, philosophy, and art. No specific mathematical background will be assumed; the mathematical content will be self-contained, with background provided as needed.

Mechanics: We will meet Mondays, Wednesdays, and Fridays from 1:20 to 2:27 p.m. The CRN is 10461, and the classroom is 239 Elliott Hall.

Instructor: Professor Jerrold W. Grossman, 346 SEB, (248) 370-3443. My preferred e-mail address is grossman@oakland.edu. Rather than listing set office hours, my policy is that I'm almost always around and you are encouraged to come for help or just to chat whenever you wish.

Format: A typical class session will consist of lecture and discussion. Please participate actively! Students will read about the subject in a book by Adrian William Moore entitled The Infinite. The instructor will provide other materials as needed. There are many other books on the subject, and each student will be expected to read one of them during the first half of the semester, write a short reaction to it, and share something from it with the rest of the class.

Homework: Students will do homework on the mathematical material, to be handed in for grading about once a week. I encourage working together in most cases, and in some cases you can submit joint work; I will make it clear what the ground rules are for each assignment. Homework solutions will be discussed in class.

Tests: There will be a few in-class tests or quizzes during the semester, announced about a week in advance, and a final exam (at noon on April 24).

Term paper: Each student will write a term paper on some aspect of infinity and present the results orally to the rest of the class near the end of the semester. The paper should be maybe 10 pages long (double spaced) and the presentation half an hour. Come discuss the topic and your plans with me regularly before it is due; you can also share outlines and drafts.

Website for the course: I have put some material that might be of interest on a course Web page (personalwebs.oakland.edu/~grossman/HC207), also accessible via WebCT; please have a look at it.

Calculator: You should have a calculator for this course, at least of the “scientific” type. Familiarize yourself with its operation.

Grades: The homework will count 25% of your course grade, the totality of the in-class tests 20%, the final exam 15%, the term paper and presentation 20%, the individualized book report and presentation 10%, and class participation 10% (missing more than one class for whatever reason will impact negatively on the last of these). Make sure to focus on clear and effective communication in all your written and oral work in this class.