

Math 41W (History of Mathematics): Spring 2007
Jeff Suzuki

Introduction

This course will follow the evolution of mathematics from ancient times to the 20th century. A primary goal of this course is to understand the development of mathematics of an era by attaining proficiency in the contemporaneous mathematical tools and concepts.

My info

My office is in Ingersoll 2316. There are two doors and the outer door tends to close, but if I'm in, the outer door will be unlocked. I can be most easily reached by email: jeff_suzuki@yahoo.com

Office hours will be: Tuesday 12:30-3:30, Tuesday 5:30-6:20, Thursday 5:30-6:20, and other hours by appointment.

Prerequisites

You should have taken Math 4.3 (calculus II) or the equivalent.

Textbook

The text for this course is *A History of Mathematics* (Prentice Hall, 2002), 1st edition, by Jeff Suzuki.

Grading

Your grade will be based on the following components:

1. Homework Sets (25%): Homework *problems* will be assigned on a regular basis (almost every class), but not collected. Homework *sets* will be given out separately and collected.
2. Exams (25% each, for a total of 50%): There will be two exams, a midterm and a final. The midterm is tentatively scheduled for.
3. Written work (25%): Math 41 is designated a "W" (writing intensive) course. There will be a final paper and periodic in-class written work. In addition, both exams and homework will have written response questions.

Your final grade will be based on the following scale: 90% and above, A; 80% and above, B; 70% and above, C; 60% and above, D. There is no curve.

Academic Honesty Policy

It is expected that the work on an assignment will be solely the work of the student receiving credit for it.

Tentative Schedule

January 30, February 1	Egyptian Mathematics (1.1-1.3)
February 6, 8	Babylonian Mathematics (2.1, 2.2) Greek number theory (3.2)
February 13	Pre-Euclidean geometry (4.1-4.3) Assignment #1 handed out. February 15 follows MONDAY schedule (so no class).
February 20, 22	Euclidean geometry (5.1-5.3)
February 27, March 1	Euclidean geometry (5.4, 5.5)
March 6, 8	Method of Exhaustion (5.9, 6.3)
March 13, 15	Diophantus (7.4) Invention of Algebra (9.1, 9.2) Assignment #2
March 20, 22	Medieval Europe (10.2, 11.3)
March 27, 29	Exam #1
April 12	Fermat and Descartes (12.1-12.2, 12.4, 12.5)
April 17, 19	Wallis and Barrow (13.1, 13.2) Assignment #3
April 24, 26	Newton and Leibniz (13.1, 13.4, 13.6)
May 1, 3	Probability (14.1-14.5)
May 8, 10	Euler and Analysis (15.1-15.2) Assignment #4
May 15, 17	Additional Topics