

Course information

- Course:

Mathematics 140B MWF 1:00–1:50 ET 202 WINTER 2007

Webpage for the course: www.math.uci.edu/~brusso (UNDER CONSTRUCTION)

- Catalog description:

140A-B Elementary Analysis (4-4). Lecture, three hours; discussion, two hours. Introduction to real analysis including: the real number system, convergence of sequences, infinite series, differentiation and integration, and sequences of functions. Students are expected to do proofs. Prerequisites: Mathematics 2D, 2J; Mathematics 13 is strongly recommended. 140A is prerequisite to 140B.

- Further description of Math 140AB:

Rigorous study of differentiation and integration of real-valued functions of one real variable. All of this can be found in the six chapters of the text for 140AB, namely, *Elementary Analysis: The Theory of the Calculus*, by Kenneth A. Ross. This includes the set of real numbers and the completeness axiom; sequences of real numbers, continuity, uniform continuity, sequences and series of functions, differentiation and integration up to the fundamental theorem of calculus.

- Instructor:

Bernard Russo MSTB 263 Office Hours MW 2:30-3:30 and by appointment (a good time for short questions is right after class just outside the classroom; appointments can be arranged by email—brusso@uci.edu)

- Discussion section: TuTh 1:00–1:50 ET 204

- Teaching Assistant: K. Lam

- Homework: There will be approximately 25 assignments with about one week's notice before the due date. Most of these assignments will be from the textbook (Ross).

- Grading: The midterm exams and the final are “closed book and notes.”

First midterm (in class)	February 2 (Friday of week 4)	20 percent
Second midterm (in class)	February 28 (Wednesday of week 8)	20 percent
Final Exam (in class)	March 21 (Wednesday of week 11)	40 percent
Homework	approximately 25 assignments	20 percent

- Holidays: January 15 and February 19

- Text: *Elementary Analysis: The Theory of the Calculus*, by Kenneth A. Ross.

- Material to be Covered (All from the text Ross).

Chapter 4: Sequences and series of functions §§23,24,25,26

Chapter 5: Differentiation Sections §§28,29,30,31

Chapter 6: Integration §§32,33,34