

Math 547, Introduction to Analysis
Autumn Quarter, 2011
Information

Instructor: Mike Davis

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Webpage: I plan to post this syllabus as well as the homework assignments on my homepage: <http://www.math.osu.edu/~mdavis/courses/547/Math%20547-11.html>

Office hours: MWF, 11:30 AM - 12:20 PM or by appointment.

Class: MWF, 10:30 - 11:18 AM, Central Classroom Bldg 0222.

Call number: 12085

Text: R. Bartle and D. Sherbert, *Introduction to Real Analysis* (fourth edition).

Chapters covered: We will cover Chapters 2, 3 and 9. Topics:

1. Properties of the real numbers.
2. Monotone functions. Monotone sequences.
3. Boundedness. Estimates.
4. Definition of the limit of a sequence. Limit rules. Standard examples.
5. Principle of nested intervals. The Bolzano-Weierstrass Theorem. The Cauchy Criterion. Supremum and infimum.
6. Infinite series. Comparison tests. Ratio and root tests. Integral test. Absolute convergence.

Tests: There will be 2 exams and a final. The exams will be scheduled about one week before they occur, when we know when we will finish the material covered in the exam.

Quizzes: There will frequent quizzes, approximately one per week. There will be no make-up quizzes, but your lowest quiz score will be discarded.

Homework: Homework will be collected and then graded about once a week.

Grading: The exams will be worth 100 points each, the final 200 points. I am guessing that the homework and quizzes combined will be worth about 120 points. Your grade will be determined by your total number of points.

email: Often I will communicate with you via e-mail concerning scheduling of tests and quizzes, homework assignments, etc. If your e-mail address does not appear on my roster you should send me a message, saying something like "547", so I can copy your address into an alias.

No classes on: Nov. 10 (Veteran's Day) and Nov. 24-25 (Thanksgiving).

Final exam on: Wednesday, Dec. 7, 9:30-11:18 AM.