

Math 316–001 (Advanced Calculus II)
Spring 2009

Instructor: David Walnut

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Course web page: Access from the page <http://math.gmu.edu/coursehomepages.htm>.

Office hours: MW 1:00–2:30pm and by appointment.

Text: William R. Wade, *An Introduction to Analysis* (third edition)

Topics: The course will cover portions of Chapters 6–8, 11–13 in the text.

General Comments:

This course is a continuation of Math 315. The aims and approach of this course are the same as for 315, stated in the previous syllabus as follows: *The goal of this course is to introduce the student to the arguments and techniques that are used in modern analysis, and in particular will help the student develop a facility with the limiting processes that occur regularly throughout mathematics. In addition the course reinforces the theory of differentiation and integration learned previously and places it on a firmer footing. Finally the course provides a mathematically rigorous foundation for solving problems in more advanced applied mathematics including numerical analysis, differential equations, and functional analysis.*

The prerequisite for this course is C or better in Math 315.

Grading:

Homework: Homework exercises from the text will be assigned regularly, collected and graded. Your homework grade will count for approximately 3/5 of your final grade.

Exams: A midterm exam will be given on Wednesday, March 4, and a final exam on Monday, May 11, 1:30pm–4:15pm in the same room where we have class. The final exam will not be cumulative. Each exam will count for approximately 1/5 of your final grade.