

Advanced Calculus I

The course

This is a rigorous, proof-oriented course in the calculus of functions of one real variable. The course covers the real number system, notions of convergence of sequences and series (both of real numbers and of functions), continuity, differentiability, and the Riemann integral.

Textbook The required textbook is *Introduction to Analysis*, by Arthur Mattuck, Prentice Hall, 1999, ISBN 0-13-081132-7. The course covers chapters 1–22. (Sections 501 and 503 are using a different textbook.)

Prerequisites The official prerequisites for this course are Math 220 and Math 221. The essential background you need is (a) some experience in formulating and understanding rigorous, logical mathematical arguments, and (b) some knowledge of elementary calculus.

Venue The course meets 10:20–11:10 A.M. on Monday, Wednesday, and Friday in room 164 of the Blocker building.

Web site The course web site, which will be updated regularly, is <http://www.math.tamu.edu/~harold.boas/courses/409-2004c/>.

The instructor

The instructor is Dr. Harold P. Boas. Office hours are in 202 Milner Hall, 9:00–10:00 A.M. on Monday, Wednesday, and Friday; also by appointment. The office telephone number is (979) 845-7269, and the email address is boas@tamu.edu.

Grading

There will be examinations during class on Friday, October 1; Monday, November 1; and Wednesday, December 1. The final examination will be held 8:00–10:00 A.M. on Tuesday, December 14. Each of these exams (including the final examination) will count for 20% of the course grade. The remaining 20% of the course grade will be based on homework, quizzes, etc. Final letter grades will be based on the standard scale: you need an average of 90% for an A, 80% for a B, 70% for a C, 60% for a D.

Advanced Calculus I

Other information

Americans with Disabilities Act Statement from the Department of Student Life

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the office of Services for Students with Disabilities at the Department of Student Life in Cain Hall (telephone 845-1637, web site <http://studentlife.tamu.edu/ssd/>).

Academic Integrity Statement

The university is a community of scholars, and intellectual honesty is the fundamental tenet of that community. The Aggie Honor Code states: “An Aggie does not lie, cheat or steal or tolerate those who do.” Consult the web site of the Aggie Honor System Office (AHSO) at <http://www.tamu.edu/aggiehonor/> for further information.