Syllabus–Math 401, Spring 2011
Advanced Calculus

General Information

Instructor: Matthew Blair
Email: blair@math.unm.edu
Course Website: www.math.unm.edu/~blair/math401.html
Office: SMLC 330
Office Hours: Tuesdays 2-4pm, and by appointment.


Meeting times/location: Tuesdays and Thursdays at 12:30-1:45pm in SMLC 356.

Recitation: Wednesdays at 12-12:50pm in SMLC 356.
Recitation leader: Jean Carlo Moraes (jmoraes@math.unm.edu).

Course Description

Rigorous treatment of calculus in one variable. Definition and topology of real numbers, sequences, limits, functions, continuity, differentiation and integration. Students will learn how to read, understand and construct mathematical proofs.

Grading Scheme

Homework: 30%, 2 Hour exams: 20% each exam, Final exam: 30%.

Exams

The largest portion of your total grade will be determined by your performance on two midterms and a final exam. The midterms will be held in class on Thursday, February 24, and Thursday, April 7. The final exam is scheduled for Thursday, May 12, 10-12am. Information regarding the content of the exams will be provided in class as the time approaches. If an exam is missed for a valid and documented reason (illness, family emergency, active participation in scholarly or athletic activities), then the missing score will be filled in by an average of the other two exam scores.

Homework

A strong commitment to solving problems outside the classroom is crucial for your success in this course. Homework problems will be assigned on a weekly basis. Assignments will be posted on the course website. Late homework will not be accepted, though the two lowest scores will be dropped at the end of the semester. You may discuss homework problems with others, however each assignment must be written up in your own words.

One of the main goals of the course is to develop your proof writing skills. Therefore, your homework will be graded on the clarity and cogency of your mathematical reasoning. Please take care to hand in a neat, legible assignment and staple the pages together in the corner.

You are also expected to read the textbook outside of class. Reading sections in the book before they are discussed in class will help you to get the most out of class time and to stay on top of the material.
Recitation

The weekly recitations are an essential part of the course. The purpose of these sections is to discuss material related to the lectures and go over additional examples. You will also have an opportunity to discuss homework problems.

Academic Integrity

Academic dishonesty will not be tolerated. Any violations of academic ethics will be investigated thoroughly and penalized accordingly. Academic dishonesty as defined by the student code of conduct includes but is not limited to “dishonesty in quizzes, tests or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.”

In particular, you may discuss homework problems with others, but collected assignments must be written up on your own and in your own words.

Special Arrangements

Accommodations will be made for students with documented disabilities. Students requiring such accommodations must inform the instructor within the first two weeks of the semester.