Syllabus–Math 402, Spring 2012
Advanced Calculus II

General Information

Instructor: Matthew Blair
Email: blair@math.unm.edu
Office: SMLC 330
Office Hours: Wednesdays 3-5pm, and by appointment.
Course Website: `www.math.unm.edu/~blair/math402.html`

Text: *An Introduction to Analysis*, Fourth Edition, by William Wade.

Meeting times/location: Monday, Wednesday, and Friday at 12:00-12:50pm in SMLC 356.

Course Description

From the catalog: Generalization of 401/501 to several variables and metric spaces: sequences, limits, compactness and continuity on metric spaces; interchange of limit operations; series, power series; partial derivatives; fixed point, implicit and inverse function theorems; multiple integrals.

Grading Scheme

Homework: 30%, 3 Hour Exams (weighted equally): 70%.

Exams

The largest portion of your total grade will be determined by your performance on three hour exams. The hour exams will be held in class on the following **Fridays**: **February 17**, **March 30**, and **May 4** (last day of class). 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 most weeks in the semester. Some of these problems you will hand in for a grade and others that you should work out on your own. **All of these problems are considered crucial parts of the course, even the ones you do not hand in.** 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 continue 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. Since class time is short, there will be theorems and examples that you will need to read on your own. 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.

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. You may not collaborate on exams in any manner.

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.