

## MATH 403: Classical Analysis I, Fall 2003

MWF, 11:15-12:05, 116 Osmond

**Instructor:** Aissa Wade

**Office:** 202 McAllister,

**Phone:** 865 7311

**Email:** wade@math.psu.edu

**Webpage:** <http://www.math.psu.edu/wade>

**Office Hours:** M 1:30-3:30 pm and by appointment.

**Textbook:** *Real Analysis with Real applications*, by K. Davidson and A. Donsig, Prentice-Hall.

Broadly speaking, analysis is the study of *limits*. Besides providing a rigorous foundation for calculus, analysis is used in many branches of pure and applied mathematics. The main themes of this course are: topology of  $\mathbb{R}^n$ , compactness, cardinality, continuity of functions, and uniform convergence.

**Topics covered:** Chapters 2-5, 7.1-7.2, Chapter 8, 9.1-9.4, 10.1-10.3

**Homework:** Homework assignments will be collected in class weekly, usually on Wednesday. Late homework are not accepted. You are encouraged to work with others on the homework, but must write up solutions individually and list on your paper students with whom you worked. Correct answers without supporting work will not receive credit. The lowest homework score will be dropped.

**Examinations:** There will be two mid-term exams (week six and eleven of the term) and a final exam. The midterm exams will be scheduled in the evening from 6:30 to 8:20 pm. Makeup exams will be given only for students with a valid documented excuse (for example, official University conflict or illness). The final exam will be comprehensive with an emphasis on the material covered since the second test. Calculators are not allowed on exams.

**Grading Policy:** Grades will be assigned on the basis of 450 points distributed as follows:

- 150 points homework
- 100 points midterm examination I
- 100 points midterm examination II
- 100 points final examination

**Academic Integrity:** All Penn State Policies regarding ethics and honorable behavior apply to this course. For details, see <http://www.psu.edu/ufs/policies/>