

MA 536 REAL ANALYSIS II Spring 2008

MW 4:30-5:45 p.m. in ILB 350

**Instructor:** Dr. Victoria Sadovskaya. You may call me Victoria  
**E-mail:** sadovska@jaguar1.usouthal.edu  
**Office:** ILB 316  
**Office phone:** 460-6264 ext. 2622  
**Office hours:** MW 2-4 p.m., or by appointment  
**Course homepage:** [www.southalabama.edu/mathstat/personal\\_pages/sadovska/536/536.html](http://www.southalabama.edu/mathstat/personal_pages/sadovska/536/536.html)

**Text:** Walter Rudin, *Principles of Mathematical Analysis* (3rd ed.), McGraw-Hill.

**Course description:** This is the second part of a two-course sequence in Real Analysis for graduate students. Topics covered include sequences and series of functions, functions of several variables, an introduction to differential forms, and Lebesgue measure and integral.  
Prerequisite: MA 535.

**Objectives:** The course is intended to provide the students with a rigorous understanding and working knowledge of the main concepts, theorems and techniques. Students will also gain experience in solving problems and communicating mathematical ideas effectively.

**Attendance:** You are expected to attend every class and participate in discussions. Please notify me in advance if you have to miss a class. You are responsible for finding out what you missed on the days when you were unable to attend.

**Homework:** A homework assignment will be given each Wednesday, and it will be due the following Wednesday. *No late homework will be accepted* unless you were unable to finish an assignment on time because of an illness or a family emergency. Some of the Hw problems will be challenging, and if you are stuck you should talk to me before the Hw is due.

**Standards of written work:** The solutions must be neatly and clearly written and logically structured. You may use without justification statements established in class, results of previous homework assignments, and statements from the book (only from the sections already covered).

**Quizzes:** There will be a short quiz at the beginning of almost every class. You will be asked to give definitions, state theorems, and/or answer true/false questions on the material covered during the previous lecture(s). There will be no make-up quizzes, but the lowest two scores will be dropped.

**Exams:** There will be midterm exam and a cumulative final exam. The date of the midterm will be announced in class and posted on the course homepage at least one week in advance. The final exam will be on Monday, April 28, 6:00 p.m. - 8:00 p.m.

**Final grade computation:** Your final score and your letter grade will be calculated as follows:

Homework:	50%	A:	at least 85%
Quizzes:	10%	B:	at least 75%
Midterm Exam:	15%	C:	at least 65%
Final Exam:	25%	D:	at least 55%

**Academic accommodations:** If you have a specific disability that qualifies you for academic accommodations, please notify me and provide certification from the Office of Special Student Services. It is located in the Student Center, Room 270, Phone 460-7212.

**Note:** *The requirements and the policies may be modified as circumstances dictate. Such changes will be announced in class and posted on the course homepage.*