

MA 335 ADVANCED CALCULUS II Spring 2009

MW 4:30-5:45 p.m. ILB 465

Instructor: Dr. Boris Kalinin
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Office hours: MW 1:30 - 3:00 p.m., or by appointment
Course homepage: www.southalabama.edu/mathstat/personal_pages/kalinin/335/335.html

Prerequisite: MA 334.

Text: *Fundamental Ideas of Analysis* by M. Reed.

Coverage: We will focus on Chapters 4, 5, 6, and 9 of the text. The topics include Taylor's Theorem, inverse functions, functions of two variables, sequences of functions, pointwise and uniform convergence, metric spaces, series of numbers and of functions, and Fourier series.

Objectives: This is the second part of a two course sequence designed to provide students with an understanding of the fundamental ideas and theoretical aspects of Calculus. Students will gain a rigorous understanding and working knowledge of the main concepts, theorems and techniques. Mathematical exposition will be emphasized, and students will be expected to understand and produce proofs.

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. *Class attendance and participation will be considered in determining borderline grades.*

Homework: A homework assignment will be given each Wednesday, it will be due the following Wednesday. *No late homework will be accepted.*

Standards of written work: The solutions must be neatly and clearly written and logically structured. You may use without justification the statements established in class, the results of previous homework assignments, and the statements in the book (only from the sections already covered). You may discuss homework problems with me and with other students, but the final write-up must be your own.

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 two in-class midterms and a two-hour cumulative final exam. The dates of the midterms will be announced in class and posted on the course homepage at least one week in advance. The final exam will be on Monday, May 4, 6 - 8 p.m. If you are unable to attend an exam you should notify me promptly: before the exam if possible, and otherwise before the next class. If there is a compelling reason for absence, such as illness or a family emergency, you will be allowed to a make-up exam. Otherwise, the score for the missed test will be recorded as zero.

Note: Books, notes, and calculators are not allowed during quizzes and exams.

Final grade computation: Your final score will be calculated as follows:

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| Homework: | 35% |
| Quizzes: | 10% |
| Exam 1: | 15% |
| Exam 2: | 15% |
| Final Exam: | 25% |

Your letter grade will be determined according to the following scale:

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|------------|--------------|
| A : | at least 85% |
| B : | at least 75% |
| C : | at least 65% |
| D : | at least 55% |
| F : | below 55% |

Notification of course grades: Final grades will be available on PAWS when posted.

Dropping: The last day to withdraw from a course is Friday, March 27. Please speak with me before making a final decision to drop the class.

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 (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.*