

## **Syllabus for Math 135, Sections 54-56 Fall 2010**

**Prerequisite:** Placement into calculus, Rutgers Math 112 or Math 115, or equivalent.

**Text:** *CALCULUS and Its Applications*, Custom Edition for Rutgers University  
Published by Pearson Custom Publishing. Copyright 2004 and earlier.

**Course Web Page:**

<http://www.math.rutgers.edu/courses/135/>

**WeBWork Web Page:**

<http://www.math.rutgers.edu/courses/135/webwork.html>

**Meeting times:** Lectures meet TTH 2:15-3:35 PM in FS AUD, Cook/Douglas Campus.  
Recitations meet Wednesdays as follows: Section 54, 11:10-12:05 PM, RAB 104;  
Section 55, 12:50-1:45 PM, HCK 211; Section 56, 2:30-3:25 PM, HCK 216.

**Final Exam:** Thursday, December 16, 2010 from 4 to 7 PM.

**Lecturer:**

Name:	Jerry Berkowitz
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Messages:	732-445-2390
Email:	berk@math.rutgers.edu

**Office hours:** Regular office hours will be announced in class at the beginning of the second week of the term. Appointments to see the lecturer can be made in person, by telephone, or by email. The recitation instructor will announce separate office hours.

**Calculator:** Graphing calculators are not required but most students should find them to be quite useful in this course. The recommended calculator is the TI-83 Plus which may be used on portions of the exams in the course.

Computers and calculators with typewriter keyboards or built-in computer algebra systems, such as the TI-89 and TI-92, will not be permitted on exams.

No calculators will be allowed on the final exam.

**Course purpose:** This course is intended to provide an introduction to calculus for students in the biological sciences, business, economics, and pharmacy. Math 136 and Math 138 are continuations of this course. There is another calculus sequence, Math 151, 152, and 251, intended for students in mathematical and physical sciences, engineering, and computer science. Taking Math 152 after Math 135 is permitted but is quite difficult. Math 136 and Math 138 are **not** prerequisites for Math 251. Students for whom taking either Math 152 or Math 251 is a serious possibility are strongly encouraged to start calculus with Math 151, not Math 135.

**Course topics:** The course will cover the bulk of the material in Chapters 1-5 of the text. The planned content of each lecture is described at the end of this syllabus.

**Grading:** The term grade will be based on the results of the examinations, on the scores on quizzes in recitation, and on the performance on the WeBWorK assignments.

**Exams:** There will be two hour (actually 80 minutes) exams and a cumulative final. The hour exams will count 100 points each and the final will count 250 points. Exams will be closed book and student-prepared formula sheets will not be permitted. An official formula sheet will be provided with each exam. The dates of the hour exams listed in the lecture schedule are tentative. The actual dates will be announced in class. The hour exams are written by the lecturer. The final is written by the course coordinator and is the same for all students in Math 135.

**Recitation quizzes:** Homework problems are assigned for each lecture. Students are expected to work on the problems for a particular lecture prior to the recitation class devoted to that material. Homework will not be collected. However, students are encouraged to ask questions in recitation about problems with which they had difficulty. At the end of the recitation class there will be a short quiz consisting of one or two problems similar to the homework problems. Together the quizzes will count 75 points toward the term grade.

**WeBWorK:** The Mathematics Department provides a Web-based system called WeBWorK that allows students to work on selected problems and to submit answers until they get the problem right. Each student gets a different version of the problems to solve. The WeBWorK grade counts 75 points toward the term grade and is determined by how many problems the student eventually gets right, not on the number of tries needed to get the correct answer.

In summary, here are the components of the term grade with their maximum possible points:

Component	Points
Hour Exams	200
Final Exam	250
Recitation Quizzes	75
WebWork Problems	75
Total	600

If a student's total score falls at the border between two grades, the final exam will be given extra weight in determining the term grade.

**Grading standards:** The meanings of the grades in Math 135 are related to the probable success of the student in Math 136. Grades of A or B indicates that the student is well-prepared for Math 136. A grade of C indicates that the student can probably succeed in Math 136, but that they will have to work harder in Math 136 than they did in Math 135. A grade of D suggests that although the student is allowed to take Math 136, the chances of success are quite small.

### Math 135, Sections 54-56, Lectures, Fall 2010

Thurs	9/2	Meet the lecturer, review course syllabus, and discuss topics in section 1.1
Tues	9/7	Sections 1.2 and 1.3
Thurs	9/9	Section 2.1 and 2.2
Tues	9/14	Section 2.2 continued
Thurs	9/16	Section 2.3
Tues	9/21	Section 2.4
Thurs	9/23	Section 3.1
Tues	9/28	Sections 3.2 and 3.3
Thurs	9/30	Section 3.4
Tues	10/5	Section 3.5
Thurs	10/7	Review
Tues	10/12	Hour Exam 1, Sections 1.1 to 3.5
Thurs	10/14	Section 3.6
Tues	10/19	Section 3.7
Thurs	10/21	Section 3.8
Tues	10/26	Section 4.1
Thurs	10/28	Sections 4.2 and 4.3
Tues	11/2	Section 4.3 continued
Thurs	11/4	Sections 4.4 and 4.5
Tues	11/9	Section 4.6
Thurs	11/11	Review
Tues	11/16	Hour Exam 2, Sections 3.6 to 4.6
Thurs	11/18	Section 4.7
Tues	11/23	Section 5.1
Tues	11/30	Sections 5.2 and 5.3
Thurs	12/2	Section 5.4
Tues	12/7	Section 5.5
Thurs	12/9	Review