

Syllabus for Math 235, *Calculus I*, Fall 2005

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Office Hours: M,W 2:15-3:15pm, T 1:45-2:45pm and by appointment.

COURSE DESCRIPTION: This is a one semester course of calculus covering limits, derivatives, integration and applications. We will cover Chapters 2-6 of the text. Prerequisites are a strong background in algebra, functions and trigonometry. Chapter 1 of the text is a review of these prerequisites.

TEXT: *Calculus, One and Several Variables*, Salas et. al. Ninth edition

CALCULATORS: For quizzes and exams, you may use a simple scientific calculator that is not programable and does not store formulas. You may use any calculator or computer to assist you in understanding the material and doing the homework.

GRADING: The grading will be assigned on a 600 point scale:

A: 540-600

B: 480-539

C: 420-479

D: 360-419

F below 360

There will be no curves and no extra credit. I will assign +/- on an individual basis. Points are assigned as follows:

Quizzes (10) - 100 points

Projects (5) - 50 points

Midterm exams (3) - 100 points each

Final exam - 150 points

QUIZZES: There will be a 10 point quiz at the beginning of class each Thursday. This quiz will cover material through Tuesday's class. Quiz questions will be similar (but certainly not limited) to homework questions. The 10 best quiz scores will be kept, and the rest will be dropped. There will be no make up quizzes given.

PROJECTS: In each chapter of the text, there are one or two projects outlined. You will be assigned 5 of these projects during the semester. They may involve some graphing device such as a calculator or computer. You will need to write up the answers to the projects using correct English and whole sentences (as well as correct mathematics!) You are encouraged to work together on the projects. However, when turning in the project, you must write up the work yourself. If you turn in work that is not your own, you must have the author's name on it as well. Not crediting the work correctly is a violation of the honor code. Projects will be collected and graded. No late projects will be accepted.

HOMEWORK: Homework will be assigned, but not collected. Homework, however, is of the utmost importance! You must keep up with the homework, and do it everyday. Here is a homework strategy that I recommend:

- Before class, read the section that we will go over.
- That evening, read the section again, paying particular attention to the example problems.
- Try each homework problem.
- If you can't get started, look for a similar example problem in the text.
- After getting a solution, check the answer in the back of the book.
- If you are correct, go on.
- If not, put a star by the problem, and try it again.
- If you still cannot solve the problem, even knowing the answer, then put two stars next to it, and ask about it in class.
- The next day, try all of the problems with one and 2 stars again. Be sure that you can do them without looking at the answer.
- When reviewing for quizzes and exams, pay particular attention to the starred problems.

There will be opportunities to ask questions about the homework problems at the beginning of each class. However, there may not be time to answer everyone's questions, or go over every homework problem. You are encouraged to work together in groups on the homework problems. See below for "additional help".

MIDTERMS and FINAL: There will be three midterms during the semester worth 100 points each and a final exam worth 150 points. If you cannot make it to a scheduled exam, you **MUST** contact the instructor **BEFORE** the exam if at all possible, or if an emergency, **WITHIN 24 HOURS** after the exam if you need to schedule a make up exam. Make up exams will only be given for extreme excuses. A doctor's note or some other physical excuse is required. Dates for exams:

Midterm I - Thursday September 22
Midterm II - Tuesday October 25
Midterm III - Tuesday November 22
Final Exam - Wednesday December 14
Section 07 10:30-12:30
Section 10 1:30-3:30

ADDITIONAL HELP: Calculus is a notoriously difficult class. Expect to put a lot of time and effort into the class and homework. Do **NOT** allow yourself to fall behind! This class moves very quickly, and there is not time to catch up. If you feel yourself falling behind, come to my office hours to discuss how keep up. If you need extra help, try to find a study group of other students enrolled in 235. Go to the math help center in 102 Wilson Hall. <http://www.math.jmu.edu/tutoring-center/> You are welcome to e-mail questions to me, but please include the entire question, because I may not have access to a book when I answer your e-mail.

HONOR CODE You are to abide by the JMU honor code at all times. Ignorance of the law is no excuse. Cheating will not be tolerated and will be prosecuted to the fullest extent.

235 Fall 2005 tentative outline

- Week 1 **Aug. 29 - Sept. 1** Sections 1.1-1.5, 2.1
Homework: Section 1.2: 1-69, every other odd, 74, 78
Section 1.3: 21-47 odd
Section 1.4: 1-43 every other odd, 45-53 odd
Section 1.5: 1-77, every other odd
Section 2.1: 1-11 odd, 1-49 every other odd
- Week 2 **Sept. 5-8** Sections 2.2-2.4, 1.7
Homework:
- Week 3 **Sept. 12-15** Sections 1.6, 2.5, 3.1-3.2
Homework:
- Week 4 **Sept. 19-22** Sections 3.3
Thursday Sept. 22 **MIDTERM I** Sections 2.1-3.3
Homework:
- Week 5 **Sept. 26-29** Sections 3.4, 3.5, 3.6
Homework:
- Week 6 **Oct. 3-6** Sections 3.7, 3.8, 3.9
Homework:
- Week 7 **Oct. 10-13** Sections 4.1, 4.2
Homework:
- Week 8 **Oct. 17-20** Sections 4.3-4.4
Homework:
- Week 9 **Oct. 24-27** Sections 4.5
Tuesday Oct. 25 **MIDTERM II** 3.5-4.4
Homework:
- Week 10 **Oct. 31-Nov. 3** Sections 4.6, 4.7, 4.8
Homework:
- Week 11 **Nov. 7-10** Sections 5.2, 5.3, 5.4
Homework:
- Week 12 **Nov. 14-17** Sections 5.4, 5.5, 5.6
Homework:
- Week 13 **Nov. 21-22**
Tuesday November 22 **MIDTERM III**
Wednesday November 23 - Thanksgiving break
- Week 14 **Nov. 28-Dec. 1** Sections 5.7, 5.8, 5.9, 6.1
Homework:
- Week 15 **Dec. 5-8** Sections 6.2, 6.3, 6.4
Homework:

Final Exam Wednesday Dec. 14. Section 7 - 10:30-12:30, Section 10 - 1:30-3:30