

SYLLABUS

MATHEMATICS 141.012

Calculus I

Spring 2006

MWF 12:20-1:10 Jessie Harris Building 114
R 12:20-1:10 Ayres 216

Contact Information	
Instructor:	George Butler
Office:	Ayres 107F
Email:	gbutler@math.utk.edu
Office Hours:	M 2:30- 3:30
	T 11:00-12:00
	R 2:30- 3:30

Grading Scale	
A	900-1000
B+	870- 899
B	800- 869
C+	770- 799
C	700- 769
D	600- 699
F	0- 599

Point Distribution	
Homework (15 at 10 pts. each)	150
In-Class Exams (4 at 150 pts. each)	600
Comprehensive Final	250
Total	1000

Course Materials: The required text for 141 is *Calculus: Concepts and Contexts 3* by James Stewart, ISBN 9-780534-410032. You may also purchase the student solution manual (ISBN 9-780534-379230), which provides detailed solutions to odd-numbered exercises. A graphing calculator such as the TI-83+ or TI-84+ is recommended but not required. Calculators should be used to complete arithmetic computations and check your work, but you will always be required to work all problems by hand and show all your work. Use of calculators with symbolic algebraic capability such as the TI-89 or TI-92 is considered cheating (see below).

Method of Teaching: During class I will be presenting the theoretical justification for the methods of differential calculus, demonstrating solutions to problems using these methods, and answering questions. At times I may ask you to participate by going to the board. If you need additional help, you may see me during office hours, or you may go to the Math Tutorial Center in Ayres 322 (hours TBA).

Homework: Even-numbered homework problems will be assigned at the end of each day's lecture as they become accessible. Homework will be collected every week; you should hand in all problems assigned before the due date and after the last homework was collected. Your grade for each homework assignment will be determined by your performance on five or more randomly selected homework problems from the week's assignment. You may **discuss** (c.f. cheating) your homework with me during my office hours, with the staff at the math tutorial center, and with each other. However, next to each problem that you have not solved entirely on your own you must write a note providing credit to whomever assisted you with your solution. No late homework will be accepted, but you may hand in homework early by leaving it in my mailbox or my office any time before the lecture on the due date.

Exams: Each exam will consist of five to ten problems. The in-class exams will primarily cover material presented since the last exam, but you should expect to see problems that combine the new material

with methods presented earlier in the course. There will be no new material on the final. Most exam problems will be similar to the homework, but each exam will have one or two harder problems designed to test your understanding of why the standard techniques are correct. In order to ensure that these harder problems are accessible, you should make sure you understand the justifications provided in class and in the text for each of the rules you learn. Additionally, I will give at least one example per week of questions similar to what I would write as a more difficult exam problem.

Board Problems: You may make up any number of points lost on homework or exams by completing problems on the board in class or during office hours. You will receive five points for each of the first ten problems you complete, and two points per problem for any additional problems. I will help you complete any problems you have difficulty with on the board, but in order to receive credit you must remain at the board until I have checked your work and you have corrected any mistakes you may have made. You may not refer to any previously completed solutions when working problems on the board.

Attendance Policy: Attendance is highly recommended. Everyone is allowed an unlimited number of free makeup exams, including the final. I will try to schedule my office hours at times that are convenient for everyone; please try to arrange for makeup exams during my office hours.

Cheating: Using solution manuals for assigned homework problems (which would require you to acquire the instructor's solution manual not available in the bookstore) or copying homework answers from any source is prohibited and will result in a homework grade of zero for the entire term. Using your book, notes, or any other external assistance during an exam will result in an exam grade of zero for the first offense and a course grade of 'F' for any subsequent offense.

Course Outline			
Monday	Wednesday	Thursday	Friday
	1/11: 1.7	1/12: 2.1	1/13: 2.2
1/16: MLK Holiday	1/18: 2.2	1/19: Appendix D	1/20: 2.3
1/23: 2.3	1/25: 2.4	1/26: 2.4	1/27: 2.5
1/30: 2.5	2/ 1: Review	2/ 2: Review	2/ 3: First Exam
2/ 6: 2.6	2/ 8: 2.6	2/ 9: 2.7	2/10: 2.8
2/13: 2.8	2/15: 2.9	2/16: 3.1	2/17: 3.1
2/20: 3.2	2/22: 3.3	2/23: 3.4	2/24: Review
2/27: Review	3/ 1: Second Exam	3/ 2: 3.5	3/ 3: 3.5
3/ 6: Appendix H.1	3/ 8: Appendix H.1	3/ 9: 3.6	3/10: 3.6
3/13: 3.7	3/15: 3.8	3/16: 4.1	3/17: 4.1
3/20: Spring Break	3/22: Spring Break	3/23: Spring Break	3/24: Spring Break
3/27: 4.2	3/29: 4.2	3/30: Review	3/31: Review
4/ 3: Third Exam	4/ 5: 4.3	4/ 6: 4.3	4/ 7: 4.4
4/10: 4.5	4/12: 4.5	4/13: 4.6	4/14: Spring Recess
4/17: 4.6	4/19: 4.6	4/20: 4.8	4/21: Review
4/24: Fourth Exam	4/26: Review	4/27: Review	4/28: Review