

SYLLABUS

MATHEMATICS 125.005

Basic Calculus

Second Summer Session 2007

MTWRF 11:45-1:15, Ayres 129

Instructor:	George Butler
Office:	Ayres 107F
Email:	gbutler@math.utk.edu
Office Hours:	TBA

Course Description (from the departmental syllabus): For students not planning to major in the physical sciences, engineering, mathematics, or computer science. Calculus of algebraic, exponential, and logarithmic functions, with applications.

Prereq: satisfactory placement test score, or 119 or 130. No student who has received credit for 141 or 152 with a grade of C or better may subsequently receive credit for 125. Students who receive a grade of C or better in Math 125 may not subsequently receive credit for 119. (QR) 3 credit hours.

Textbook: **Finite Mathematics and Applied Calculus**, 2nd Edition, by Berresford and Rockett. **A Graphing Calculator is required.**

Calculator: The TI-83+ or TI-84+ is highly recommended; the math department does not provide support for other calculators. Calculators capable of symbolic algebra (such as the TI-89 and -92) and cell phone calculators are not permitted for use on exams. Any students caught violating this policy will receive an F in the course.

Method of Teaching: During class I will be introducing new topics, presenting examples, demonstrating problem-solving techniques 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 (open Tuesday and Wednesday from 9:00-1:00).

Grading scale:		Grade composition:	
900-1000	A	Three exam grades (200 pts each)	600
870- 899	B+	Comprehensive final	350
800- 869	B	Class participation (board problems)	50
770- 799	C+	Total	1000
700- 769	C		
600- 699	D		
0- 599	F		

Board Problems: Each week during class or office hours, you may work problems from that week's material on the board. You will be awarded points for board problems as follows:

First five problems (each week):	5 points per problem
Second five problems (each week):	2 points per problem
Any additional problems (each week):	1 point per problem

Any points beyond the 50 required for class participation will be added to your final grade as extra

credit.

Attendance Policy: Attendance is highly recommended. Everyone is allowed one free makeup exam. For any additional makeup exams, I will need to see an accident report, doctor's note, obituary notice, or a signed note on departmental letterhead for any University-sponsored field trips. 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.

Disability Accommodations: Students who have a disability that require accommodation(s) should make an appointment with the Office of Disability Services (974-6087) to discuss their specific needs as well as schedule an appointment with me during my office hours.

Academic Standards of Conduct: All students are expected to abide by the University Honor Statement. In mathematics classes, violations of the honor statement include copying another person's work on any graded assignment or test, collaborating on a graded assignment without the instructor's approval, using unauthorized "cheat sheets" or technical devices such as calculators, cell phones or computers for graded tests or assignments, or other infractions listed in "Hilltopics". These violations are serious offenses, subject to disciplinary action that may include failure in a course and/or dismissal from the University. The instructor has full authority to suspend a student from his/her class, to assign an "F" in an exercise or examination, or to assign an "F" in the course. See "Hilltopics" for more complete information. A report of all offenses will be sent to appropriate deans and the Office Student Judicial Affairs for possible further action.

Date	Section	Topic	Recommended Problems
July 9	8.1	Limits & Continuity	13-39 odd, 61-77 odd
July 10	8.2	Rates of Change & Derivatives	1-7 odd, 13, 17-35 odd, 39-43 odd, 49-59 odd
July 11	8.3	Differentiation Formulas	1-29 odd, 33-39 odd, 43, 44, 47-53 odd, 57
July 12	8.4	Product & Quotient Rules	1-35 odd, 47, 49, 55, 57
July 13	8.5	Higher Order Derivatives	1-25 odd, 29, 30, 33-43 odd
July 16	8.6	Chain Rule	1-39 odd, 40, 41, 45, 47, 51, 53, 56, 58
July 17	Review	Review chapter 8	
July 18	Exam 1	Exam Chapter 8	
July 19	10.2	Exponential & Log Rules	1-43 odd, 55-67 odd
July 20	9.1	Graphing Using 1st Derivative	5-27 odd, 41-51 odd (show asymptotes)
July 23	9.2	Graphing using 1st & 2nd Derivative	1-25 odd, 37-45 odd (by hand)
July 24	9.3	Optimization	1-15 odd, 17, 18, 19, 31-36
July 25	9.6	Implicit Differentiation	1-11 odd, 21, 23, 29, 31, 35, 37, 39
July 26	Review	Review 10.2, chapter 9.1-9.3	
July 27	Exam 2	Exam Chapters 9 & 10	
July 30	11.1	Antiderivatives	1-35 odd, 36, 37, 39, 41, 45
July 31	11.2	Integration of Exponentials & Logs	1-25 odd, 29, 33, 36
August 1	11.3	Definite Integrals	1-11 odd, 19-39 odd, 47-65 odd, 79-89 odd
August 2	11.4	Area Between Curves	1-19 odd, 23, 29, 33-47 odd, 53, 57
August 3	11.5	Consumer & Producer Surplus	1-5 odd, 9, 11, 13-17, 33-38
August 6	11.6	Integration by Substitution	1-49 odd, 51-59 odd
August 7	Review	Review Chapter 11	
August 8	Exam 3	Exam Chapter 11	
August 9	Review	Review for Comprehensive Final	
August 10	Final	Comprehensive Final	