Math 125 Basic Calculus

Departmental Syllabus Spring 2007

Monday – Wednesday - Friday Schedule

Section: , Time: , Location:

Instructor:
Office/Phone:
Office Hours:
Email:
Webpage:

Course Description: 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.

Text: *Finite Mathematics and Applied Calculus*, by Berresford and Rockett, Second Edition, Houghton Mifflin Publishers.

Optional Textbook Companion Website: www.eduspace.com. Use the "passkey" that came with your new textbook and the course code provided by your instructor to access online resources (including free online tutoring called "Smartthinking") to accompany your text.

Calculator: A graphing calculator is recommended for this course. The Math Department highly recommends and provides support for the TI-83+ and TI-84+ models. While other calculators may be used with your instructor's permission, instructors and tutorial center staff may not be able to provide help on how to use them. Use of cell phone calculators and calculators with advanced alpha-numeric capabilities, such as the TI-89, is forbidden in this course.

Grades: Grades will be determined using the grading scale below. Your letter grade is a measure of your mastery of course material and your fulfillment of course objectives. You should keep all of your graded work until final grades are posted. The "other" category will consist of

Grading Scale:

Exam 1	16%	$90\% \le A \le 100\%$
Exam 2	16%	$85\% \le B+ < 90\%$
Exam 3	16%	$80\% \le B < 85\%$
Exam 4	16%	$75\% \le C+ < 80\%$
Other/Quizzes	16%	$70\% \le C < 75\%$
Final Exam	20%	$60\% \le D < 70\%$
Total possible	100%	$F < 60\%$

Final Exam: The comprehensive final exam date and time:

All students are required to take the final exam. Students who miss the final without securing permission ahead of time will fail the course.

Attendance & Make-up Policy:

Math 109 (Algebra Workshop) is a self-paced tutorial center for students who need additional help (as determined by placement exams, assessment exams or classroom performance). Students practice algebraic skills needed (but not necessarily taught) to master the material covered in Math 125. This one-credit course meets at a time selected by the student and compatible with his/her schedule. Interested students should register for the section whose time best fits their schedule. Once registered, they can check the announcements at http://online.utk.edu under Algebra Workshop for more information. S/NC grading. Students successfully completing Math109 have the option of having their final exam grade replace a low test score.

Disability Services: If you need course adaptations or accommodations because of a documented disability or if you have emergency information to share, please contact the Office of Disability Services at 2227 Dunford Hall at 974-6087.

Math Tutorial Center: The Math Tutorial Center is in Ayres Hall room 322. It provides **free tutoring**. Hours of operation are posted at http://www.math.utk.edu/MTC/. Please make use of this free service.

Important Dates:	
Add/drop without W deadline	January 19, 2007
Exam 1	January 31, 2007
Exam 2	February 16, 2007
Drop with W deadline	February 20, 2007
Exam 3	March 9, 2007
Drop with WP/WF deadline	April 3, 2007
Exam 4	April 23, 2007
Final Exam	

Classroom Etiquette: Please be considerate of the instructor and those around you. Come to class on time and stay the entire period. Turn off cell phones and beepers during class. Do not talk to classmates at inappropriate times. Refrain from reading newspapers or working on other coursework during class. For information on Classroom Behavior Expectations and consequences of non-compliance please see the following link: http://www.math.utk.edu/Undergraduate/undergrad/Expectations.pdf

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.

> **The Honor Statement**
> *An essential feature of the University of Tennessee is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the University, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.*

The following schedule is tentative. Each instructor has the option to vary dates and assignments as they see fit.

Date	Section	Topic & Recommended Homework Problems
Jan. 10		Introduction and Optional Algebra Assessment Test
Jan. 12, 17	8.1	Limits & Continuity: 13 – 39 odd, 61 – 77 odd
Jan. 19, 22	8.2	Rates of Change & Derivatives: 1 – 7 odd, 13, 17 – 35 odd, 39 – 43 odd, 49 – 59 odd
Jan. 24, 26	8.3	Differentiation Formulas: 1-29 odd, 33-39 odd, 43, 44, 47 – 53 odd, 57
Jan. 29	Review	Review Sections 8.1, 8.2, & 8.3 Review homework, do even problems as needed for clarity
Jan. 31	**Exam 1**	Exam Sections 8.1, 8.2, & 8.3
Feb. 2, 5	8.4	Product & Quotient Rules: 1 – 35 odd, 47, 49, 55, 57
Feb. 7	8.5	Higher Order Derivatives: 1 – 25 odd, 29, 30, 33 – 43 odd
Feb. 9, 12	8.6	Chain Rule: 1 – 39 odd, 40, 41, 45, 47, 51, 53, 56, 58
Feb. 14	Review	Review Sections 8.4, 8.5, & 8.6: Review homework, do even problems as needed for clarity
Feb. 16	**Exam 2**	Exam Sections 8.4, 8.5, & 8.6
Feb. 19	10.2	Differentiation of Exponential & Log Functions:1 – 43 odd, 55 – 67 odd
Feb. 21, 23	9.1	Graphing Using 1st Derivative: 5 – 27 odd, 41 – 51 odd (show asymptotes)
Feb. 26, 28	9.2	Graphing using 1st & 2nd Derivative: 1 – 25 odd, 37 – 45 odd (by hand)
Mar. 2, 5	9.3	Optimization: 1 – 15 odd, 17, 18, 19, 31 – 36
Mar. 7	Review	Review 10.2, chapter 9.1 – 9.3
Optional	9.6	Implicit Differentiation and Related Rates
Mar. 9	**Exam 3**	Exam Sections 9.1, 9.2, 9.3 & 10.2: Review homework, do even problems as needed for clarity
Mar. 19, 21	11.1	Antiderivatives: 1 – 35 odd, 36, 37, 39, 41, 45
Mar. 23, 26	11.2	Integration of Log & Exponential Functions: 1-25 odd, 29, 33, 36
Mar. 28, 30	11.3	Definite Integrals: 1-11 odd, 19 – 39 odd, 47 – 65 odd, 79 – 89 odd
Apr. 2, 4, 9	11.4	Area Between Curves: 1 – 19 odd, 23, 29, 33 – 47 odd, 53, 57
Apr. 11, 13	11.5	Consumer's & Producers Surplus: 1 – 5 odd, 9, 11, 13 – 17, 33 – 38
Apr. 16, 18	11.6	Substitution: 1 – 49 odd, 51 – 59 odd
Apr. 20	Review	Review Chapter 11 Review homework, do even problems as needed for clarity
Apr. 23	**Exam 4**	Exam Chapter 11
Apr. 25, 27	Review	Review for Comprehensive Final
	Final Exam	**Mandatory Comprehensive Final**