

MATH 1325-001, SPRING 2005
MWF 9:00-9:50AM, GR 3.420

Instructor: Dr. Bentley Garrett
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Office hours: MW 10:00-11:00 PM

Text: *Calculus with Applications*, 8th Edition, Lial, Greenwell and Miller
(Student Solutions Manual is recommended)

Topics covered in this course:

Quadratic functions: Translation and Reflection
Exponential Functions
Logarithmic Functions
Limits
Continuity, Rates of Change
Definition of the Derivative
Graphical Differentiation
Techniques of Finding Derivatives
Derivatives of Products and Quotients
The Chain Rule
Derivatives of Exponential Functions
Derivatives of Logarithmic Functions
Increasing and Decreasing Functions
Relative Extrema
Higher Derivatives, Concavity, and the Second Derivative Test
Curve Sketching
Absolute Extrema
Applications of Extrema
Further Business Applications
Implicit Differentiation
Related Rates
Differentials: Linear Approximation
Antiderivatives
Substitution

Text sections covered: 2.2-2.6, 3.1-3.5, 4.1-4.5, 5.1-5.4, 6.1-6.6

Grading:	Exam/Quiz Average (see *)	70%
	Final Exam (comprehensive)	30%

*There will be three (3) Midterm Exams as well as weekly Quizzes. For your final course grade, I will take your Quiz average and your 3 Exam grades and drop the lowest of these 4 grades. This average will then account for 70% of your final grade. I will drop the lowest one fourth of the quiz grades given before computing your Quiz Average.

Example grades: Quizzes: 66, 70, 50, 100, 90, 80, 75, 75 (if eight quizzes given)
 Exam1: 75, Exam 2: 86, Exam3: 70, Final: 88
 Quiz Average: $(100 + 90 + 80 + 75 + 75 + 70)/6 = 81.7$ (drop two)
 Final grade: $.7*(75 + 86 + 81.7)/3 + .3*88 = 83.0$ (drop Exam3)

Grade Scale:	A+	96.5-100	C+	76.5-79.4
	A	92.5-96.4	C	72.5-76.4
	A-	89.5-92.4	C-	69.5-72.4
	B+	86.5-89.4	D+	66.5-69.4
	B	82.5-86.4	D	62.5-66.4
	B-	79.5-82.4	D-	59.5-62.4
			F	below 59.5

Class policies:

- Exams must be taken in pencil. It is preferable that quizzes be taken in pencil as well.
- No make-up exams are given except under extraordinary circumstances. Solutions will be available on WebCT. (see end of syllabus)
- **There will be short weekly quizzes based on the assigned homework. These will be given each Friday and will cover the previous week's homework. (No quizzes will be given during exam weeks.)** The number of quizzes given in the semester is dependent on the time factor. Solutions will be available on WebCT. (see end of syllabus)
- Homework will be assigned but not graded. However, it is essential that you work all problems thoroughly in order to succeed in this class. It is okay to discuss the problems with classmates, but make sure you can work them by yourself after you discuss.
- I am always looking for a solution – not the answer. In other words, I want to see all steps leading to the answer. Answers without any logical support will receive very little, if any, credit.
- It is essential that you attend all lectures to be successful in this class.
- All phones and pagers must be turned off during class.

Calculators: No graphing calculators are allowed – only scientific calculators, where appropriate. If you don't have a scientific calculator, borrow one for the semester or buy one – they are inexpensive.

Exam dates: Exam1 – February 11, 2005
 Exam2 – March 18, 2005
 Exam3 – April 15, 2005
 Final Exam – Wednesday, April 27, 8:00-10:45am
 Last drop day without a W - Jan. 28
 Withdrawal period with WF/WP: Feb.14 - March 14
 (Note: Exam dates are fixed, except under unusual circumstances.)

Tentative schedule:

Week	Monday		Wednesday		Friday	
1	1/10	Syllabus, Pretest	1/12	Sec: 2.2	1/14	Sec: 2.4
2	1/17	MLK Day	1/19	Sec: 2.5	1/21	Sec: 3.1
3	1/24	Sec: 3.1	1/26	Sec: 3.2	1/28	Sec: 3.3
4	1/31	Sec: 3.3	2/2	Sec: 3.4	2/4	Sec: 3.4
5	2/7	Sec: 3.5	2/9	Sec: 4.1	2/11	Exam 1
6	2/14	Sec: 4.1	2/16	Sec: 4.2	2/18	Sec: 4.2
7	2/21	Sec: 4.3	2/23	Sec: 4.3	2/25	Sec: 4.4
8	2/28	Sec: 4.5	3/2	Sec: 5.1	3/4	Sec 5.2
9	3/7	Spring Break	3/9	Spring Break	3/11	Spring Break
10	3/14	Sec: 5.3	3/16	Sec: 5.3	3/18	Exam 2
11	3/21	Sec 5.4	3/23	Sec: 5.4	3/25	Sec: 6.1
12	3/28	Sec: 6.2	3/30	Sec: 6.2	4/1	Sec: 6.3
13	4/4	Sec: 6.3	4/6	Sec: 6.4	4/8	Sec: 6.5
14	4/11	Sec: 6.6	4/13	Sec: 7.1	4/15	Exam 3
15	4/18	Sec: 7.1	4/20	Sec: 7.2	4/22	Sec: 7.2
16	4/25	Review	4/27	Final Exam 8:00-10:45 am		

Additional help:

UTD Math Lab: located in McDermott Library in Room 2.412 (phone: 972-883-6707)
The hours are 10am until 8pm, Monday through Thursday. On Friday the hours are 10am until 2pm. The Math Lab provides free walk-in tutoring for students.

Disability Services: contact Kerry Tate at 972-883-2098.

Online resources:

WebCT: <http://webct.utdallas.edu> You must also enter your NETID username and password. Here, you will find the syllabus, problem sets, quiz solutions, and test solutions.