Course Syllabus

Calculus I   Spring 2007

12464   Math 2417.001   MWF   12:30 -1:20pm   GR 3.420

Instructor Information

Instructor: Dr. Bentley Garrett
Office: ECSN 2.510
Phone: 972-883-4236
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Snailmailbox: EC 3.214 (Amanda's office)
Office hours: MW 4:00-5:30 PM

Course Pre-requisites, Co-requisites, and/or Other Restrictions

Pre-requisite: A SAT II Mathematics Level IC Test score of 630, a Level II Test score of 630, or a grade of at least C- in MATH 2312 or an equivalent course.

Co-requisites: You must be enrolled in one of the following problem sections.

12424	2017.301	T	11:30am -1:20pm	GR 3.302
12426	2017.303	F	2:30-4:20 pm	CB 1.104
12428	2017.305	R	2:30-4:20 pm	GR 3.302

During these sessions, the TA will review class material, review relevant material from pre-requisite courses, discuss the quizzes and exams, work problems, or have students work problems. **You will also take the quizzes at this time.** If you have questions, this is the time to ask them.

Course Description

Functions, limits, continuity, differentiation; integration of functions of one variable; logarithmic, exponential, and inverse trigonometric functions; techniques of integration, and applications.

Student Learning Objectives/Outcomes

(1) Students will be able to formulate real world problems into mathematical statements.
- Given a narrative description of a problem that lends itself to mathematical analysis, the student will clearly define any variable quantities introduced and provide an appropriate equation, function, or formula relating those variables.

(2) Students will be able to develop solutions to mathematical problems at the level appropriate to each course.
- Given a limit statement of indeterminate form, the student will be able to apply appropriate algebraic or calculus based techniques to compute the limit.
- Given a function, the student will be able to compute a first or second order derivative and, if instructed, evaluate the derivative at a point in its domain.

- The student will be able to evaluate an indefinite or definite integral of a continuous function.

(3) Students will be able to describe or demonstrate mathematical solutions either numerically or graphically.
- Students shall provide a qualitative, planar sketch which clearly indicates prescribed attributes.

Required Textbooks and Materials

Text: *Calculus,* 8th Edition, Larson, Hostetler, and Edwards

Suggested Course Materials

Solutions manual: The Student Solutions Manual is recommended and available in the bookstore Calculators: A scientific calculator is recommended. Graphing calculators, programmable calculators, or calculators with non-numeric displays are NOT ALLOWED on quizzes or exams.

*Online resources: WebCT: http://webct.utdallas.edu You must enter your NETID username and password to logon to WebCT. Here, you will find the syllabus, problem sets, handouts, etc., as well as a record of your grades. Any messages/e-mails concerning the class will also appear on WebCT. This is also where you should contact me; just click the Mail link/icon, click Compose Message, click Browse, and select the top name (which is mine.)

Additional Resources:

The UTD Math Lab is located in McDermott Library in Room 2.412 (phone: 972-883-6707) The hours are 10am until 8pm, Monday through Thursday; Friday and Saturday 10am until 2pm. The Math Lab provides free walk-in tutoring for students. In addition to the help available during normal operating hours, each registered student is entitled to a free, one-hour, individual tutorial per week. Individual tutorials require an appointment which are arranged via learning center personnel.

SWE-Society of Women Engineers,   http://swe.utdallas.edu/

NSBE-National Society of Black Engineers,   http://www.utdallas.edu/orgs/nsbe/nsbehome.htm

ECS Mentorship Program, contact: Souzan Arashvand, office: ES 2.502, email: sxa018210@utdallas.edu, phone: 972-883-4277

Academic Calendar (subject to change)

Week	Monday		Wednesday		Friday		
1	1/8	Introduction, Syllabus, Sec 1.2	1/10	Sec: 1.2/1.3	1/12	Sec: 1.3	
2	1/15	MLK Day	1/17	Sec: 1.4	1/19	Sec: 1.5	Qz 1
3	1/22	Sec: 2.1	1/24	Sec: 2.2	1/26	Sec: 2.3	Qz 2
4	1/29	Sec: 2.4	1/31	Sec: 2.5	2/2	Sec: 2.6	Qz 3
5	2/5	Sec: 3.1	2/7	Sec: 3.2	2/9	**EXAM 1** CN 1.112	
6	2/12	Sec: 3.3	2/14	Sec: 3.4	2/16	Sec: 3.5	Qz 4
7	2/19	Sec 3.7	2/21	Sec: 3.9	2/23	Sec: 4.1	Qz 5
8	2/26	Sec: 4.2/4.3	2/28	Sec: 4.4	3/2	Sec: 4.5	Qz 6
	3/5	**SPRING**	3/7	**BREAK**	3/9	**VACATION**	
9	3/12	Sec: 5.1	3/14	Sec: 5.2	3/16	**EXAM 2** CN 1.112	
10	3/19	Sec: 5.3/5.4	3/21	Sec: 5.4/5.5	3/23	Sec: 5.6	Qz 7
11	3/26	Sec: 5.7	3/28	Sec: 5.7/8.1	3/30	Sec: 8.2	Qz 8
12	4/2	Sec: 8.3	4/4	Sec: 8.3/8.4	4/6	Sec: 8.4	Qz 9
13	4/9	Sec: 8.5	4/11	Sec: 8.5	4/13	**EXAM 3** CN 1.112	
14	4/16	Sec: 8.7	4/18	Sec: 7.1	4/20	Sec: 7.2/7.3	QZ 10
15	4/23	Sec 7.3 Course Evaluations	4/25	**Final Exam** 11 - 1:45 am CN 1.112			

1/8 - 1/24	Students may withdraw from a class without record.
1/25 - 2/4	Students may withdraw from a class with signatures and receive a W.
2/5 - 3/21	Students may withdraw from a class with signatures of instructor and advisor receiving a WP(if passing) or WF(if failing).
3/22 - EOT	Students may withdraw from a class for non-academic reasons only.

Assignments

8th ed	Larson, Hostetler, & Edwards July 6, 2005
Sec 1.1	Read
Sec 1.2	1-25 odd ,29,31,33,35,37,39,41,43,45,47,59,63,65,67
Sec 1.3	5-61 odd,67,69,71,73,75,77,78,83,84,85,86,87,101,103,113,115,117,120
Sec 1.4	1-19 odd,25,29-51 odd,57,59,61,63,69,71,75,77,83,85,87,91,93,105
Sec 1.5	1-47 odd, 53,55,57,59,61,63,69done
Sec 2.1	1,2,3,4,5-23odd,25a,27a,29a,31a,33,35,37,38,39,40,41,43,45, 47,57, 71-85odd, 91,93,95,99,101
Sec 2.2	1-29odd,39,41,43,45,47,49,51,53a,55a,57,59,61,63,65,67,69,71,75,83-99odd,103,113
Sec 2.3	1-53 odd ,59,61,63a,65a,67a,69,71,75,79-89odd,93-103odd,109
Sec 2.4	1-31 odd,41-65odd,67a,69a,71a,73a,81-91odd101,103,111,113
Sec 2.5	1-49 odd,53,55,57,65,67,77
Sec 2.6	1,3,5,7,9,13-35odd,39,41,43,45,47
Sec 3.1	1-43odd,53,55,57
Sec 3.2	1-23odd,29,31,33,35,37a,b,c,39,41,43,45,51,53,55
Sec 3.3	1-15odd,17-37odd,a,b,c,39-45odd,a,b,53-71odd,85,87
Sec 3.4	1-39 odd,49,51,61,67
Sec 3.5	1,3,5,7,15-33odd,39,41,43,45,51,85,87
Sec 3.6	1,3,5,6,7,9,11,13,15,17,19,21,23,25,27,29,31,33,47,49,51,53
Sec 3.7	3,5,7,9,11,13,15,19,20,21,23,25ac,27,29,30,33,34,39,41,45,49
Sec 3.9	1,3,5,7,9,11,13,15,17,19,27,29,31,33,35,37,39,41,43,45,47
Sec 4.1	1-41odd,47,55-85odd
Sec 4.2	31,33
Sec 4.3	13-43odd,47d
Sec 4.4	5-59odd,63,67,69,71,75-91odd,97,99
Sec 4.5	1-37odd,43-91odd
Sec 5.1	7-33odd,37,41-69odd,71a,73a,75a,77-87odd,93,95,97,103
Sec 5.2	1-41odd,47,49,51,53,61,63,67,69,71,73,79,83,85,87,89,91
Sec 5.3	1,3,5,7,9,11,13,15,23,25,27,29,31,33,35,43,47,49,51,59,61,63,65
Sec 5.4	1-17odd,21,23,25,27,31-73odd,85-109odd,113,115
Sec 5.5	1-29odd,37-47odd,53,55,61-71odd
Sec 5.6	3,4,5-27odd,31,33,35,41-59odd,61,63,71,73,75,77,89,91,99
Sec 5.7	1-49odd,53,63,65,67,69,75,77,79,81
Sec 7.1	1-13odd,17-31odd,43-51odd,61,63
Sec 7.2	1,3,5,7,9,11ab,13a,23,25,27,29,31
Sec 7.3	1,3,5,7,9,11,13,15,17,19,21ab,25
Sec 7.4	1,3,5,7,9,11,13
Sec 8.1	1,2,3,4,5-49odd,57,69,71,73,79,81,83,85,97
Sec 8.2	1-10,11-41odd,47,69odd,71,73,75,83,85,89-101odd,103a,b,c
Sec 8.3	1-4,5-41odd,55-63(integrate)65,67,69,71,79,81a,85a,87,89,91,95,97,99,101
Sec 8.4	1-53odd,59,61,63,65,73,85 (NOTE: 21,33,35,49 try Alg sub as well as Trig sub)
Sec 8.5	1-31odd,41-49odd,53,55,57
Sec 8.7	1-35odd,37ab-53ab,odd,59,65,67,71,73,75,77,79ab,83,,91,93,97,99,109

Grading Policy

Grade: The course grade is determined from the following:

> Three Major Exams: 100 pts each, see schedule for dates
> 10 Quizzes: 25 pts each, one per week during non-exam weeks
> Comprehensive Final Exam: 200 pts
> ## Wed Apr 25, 11am-1:45am CN 1.112

Grade calculation: The course grade is a percentage of 500 possible points. The final exam contributes 200 points, or, 40% of the grade. The remaining 300 points are derived from the three major exams and the quiz total. Your quiz total is the best 8 quiz scores, (the lowest 2 quiz scores are dropped) plus the attendance quiz (cannot be dropped). The best 3 scores from the quiz total (scaled to a percent) and 3 major exams comprise the remaining 60% of the course grade.

Example: Ex1=89, Ex2=75, Ex3=82, (QzTot)/2=94, Final=168. Ex2 score is dropped.
        Course percent =(168+89+82+94)/5=86.6, letter grade B^+

Example: Ex1=75, Ex2=85, Ex3=68, (QzTot)/2=38, Final=168. QzTot score is dropped.   Course percent =(168+85+68+75)/5=79.2, letter grade C+

Grade Scale		
[96.6,100]…A+	[93.3,96.6).….A	[90,93.3).….A-
[86.6,90).….B+	[83.3,86.6).….B	[80,83.3).….B-
[76.6,80).….C+	[73.3,76.6).….C	[70,73.3),.….C-
[66.6,70).….D+	[63.3,66.6).….D	[60,63.3).….D-
[0 ,60)…...F		

Course & Instructor Policies

Students that are at risk (those receiving less than 50% on the first two quizzes and those that are retaking Calculus I), may be required to attend a supplemental SI course.

Attendance: Attendance may be taken, if so, it will comprise a quiz score that cannot be dropped.

Citizenship: Any action that disturbs your classmates or interrupts the lecture is unacceptable. Examples of such actions are:
(a) Entering the classroom late - be as punctual as possible.
(b) Leaving the classroom before break or before the end of lecture.
(c) Cell phones, ringers, buzzers, beepers, alarms, raspberries, blackberries - turn them off!
      unless you are a member of an emergency response team.
An apology is expected from anyone creating such a disturbance.

Student participation in class is desired, however, please raise your hand to speak and avoid having side conversations with your classmates.

There will be **no** extra credit

Make-up exams/quizzes:
(a) There will be no make-up quizzes.
(b) There will be no make-up exams unless the circumstances are extraordinary.
(c) Exams and quizzes are closed book, without notes, and without graphing calculators.
(d) SHOW ALL WORK on quizzes and exams. Unsupported answers are considered miracles and, while inspirational, will receive little or no credit. Graded quizzes and major exams will be returned to you as soon as possible. Any document not picked up by the end of finals week will be destroyed.
(e) Final exams are not returned to the student but are held for review for one year.

General University policies on Academic Integrity, Incomplete Grades, and other important topics, form part of this Syllabus, and are to be found in the version of the Syllabus posted on the Web.