Math 2419-021 SUMMER 2005

CALCULUS II GREEN 3.420 12:00 -01:50 M.W.

INSTRUCTOR: F.R. ALLUM (972)883-6342 (fallum@utdallas.edu)

Text: CALCULUS by LARSON, HOSTETLER & EDWARDS, 7TH EDITION
STUDENT SOLUTION MANUAL AVAILABLE IN BOOKSTORE

You must be enrolled in problem section Math 2419-321 or 323.

Help is available. If difficulties arise, the following suggestions may help you:
(I) Ask questions in your problem section
(ii) Contact the problem section instructor during office hours
(iii)Visit the MATH LAB (MC2.408; (972)883-6707)
(iv) You may be eligible for assistance through Special Services
(v) Contact the lecturer during office hours

Calculators. It is assumed that you will use a scientific calculator in this class. Calculators with either graphing or non-numeric displays are forbidden for all quizzes and exams.

Assignment Problems Assignments will be selected odd numbered problems and possibly problems from the Chapter Review. Answers to these problems are given at the back of your text book. Complete solutions to many of these problems may be found in the Solutions Manual which is available in the book store. You should work several problems of each type. Don't slavishly copy the solutions from the manual. Try to work them without reference to the solutions manual. When you have finished the problem or when you have exhausted all possibilities, then you should refer to the solutions manual to verify your answer or to obtain a hint in order to complete the solution. These problems will be discussed in the problem sections.

Problem Sections There are 10 problem sessions this semester. At 8 of these meetings, a quiz will be given, lasting about 20 minutes. Only 6 of these quiz grades will be used in the calculation of your final grade. The T.A. conducting each section will answer questions on the assignments, supply additional background material, discuss the previous quiz, comment on your examinations and may ask you to work problems. Occasionally, the problem section
may be used to remind you of material covered in previous courses and deemed essential to the present course. At all times feel free to ask questions during these problem sections.

Note: Quizzes will be given in the problem solving sections; examinations in the class meetings.

Examinations All students are expected to take the examinations at the announced time. Cheating will NOT be tolerated. Students are required to inform the lecturer of suspected honor code violations. On all problems, you must show your work. No work, no credit. In general, there will be no make up exams or quizzes (see below).

Grade: Each quiz will be worth 25 points. A list of calculus 1 questions is attached to this syllabus and is also available on my home page. Use these questions to review your Math2417 material.
The best 6 out of the 8 quizzes (expressed as a percentage)will be used for your quiz grade.
The mid term exam will be worth 200 points and the comprehensive final will be worth 200 points.
The average of your quiz grades, mid term examination grade plus the comprehensive final will be used
to calculate your final grade. The final exam must be taken.

Example: Student J.T.M. has the following results:
Quiz grades 20, 0,15, 25, 5, 19, 25,19

Quiz grade (123/150)100 = 82 (drop 0,5)
Examination 1 150
Comprehensive final 171

Average = (82+150+171) / 5 = 80.6 ...(a grade of B-)

Grade Scale

96.7 - 100	A+	76.7 - 79.9	C+
93.4 - 96.6	A	73.4 - 76.6	C
90.0 - 93.3	A-	70.0 - 73.3	C-
86.7 - 89.9	B+	66.7 - 69.9	D+
83.4 - 86.6	B	63.4 - 66.6	D
80.0 - 83.3	B-	60.0 - 63.3	D-
0.0 - 59.9	F		

Important Dates

MAY 16	First class day
MAY 30	University Holiday
JUNE 27	Examination I (subject to change)
JULY 11	**See Instructions in Summer 2005 schedule regarding drop procedures after this date**
JULY 25	Last day of classes
JULY 27 (WEDNESDAY)	Comprehensive Final Exam at noon

Note: The comprehensive final examination will be given at noon WEDNESDAY JULY 27 , 2005

Note: Due to the holiday on May 30th, Quiz 2, for both sections , will be given on JUNE 01

Note: Due to the holiday on July 04 th , Quiz 6, for both sections , will be given on July 06

Grade of Incomplete "A grade of incomplete (X) may be assigned when a student's work has been satisfactory, but due to circumstances beyond the student's control, some part of the required work has not been completed. An X may not be assigned in lieu of an F or W. Allowing a student to "retake" an entire course during a subsequent semester, disregarding previous course performance, does not constitute an appropriate use of the grade of incomplete." In this course, an incomplete will only be considered if the student has a serious documentable, non-academic reason for missing more than one exam and not taking a make-up (e.g. illness in finals week).

Problem Solving Classes (subject to change)

CLASS #	DATE: WEEK BEGINNING	DESCRIPTION
1	16 May	NO QUIZ THIS WEEK
2	23 May	Quiz 1
3	30 May	Quiz 2: Wednesday 01 June
4	06June	Quiz 3
5	13 June	Quiz 4
6	20 June	Quiz 5
7	27 June	NO QUIZ THIS WEEK
8	04 July	Quiz 6 : Wednesday 06 July
9	11 July	Quiz 7
10	18 July	Quiz 8

Note: The mid-term examination will be given in GR 3.420 at regular class time, Noon, June 27th 2005

The final examination will be given in GR 3.420 at regular class time, Noon. Wednesday ,July 27th,2005

MATH LAB HOURS

Monday-Thursday.....10:00 a.m. - 8:00 p.m.
Friday/Saturday.....10:00 a.m. - 2:00 p.m. Or by appointment (Ext. - 6707)

INTERESTING INTERNET ADDRESSES

(1) http://www-groups.dcs.st-and.ac.uk/~history/Curves/Curves.html
(2) http://www.sisweb.com/math/tables.htm
(3) http://www.geocities.com/CapCanaveral/Launchpad/2426
(4) http://www.Ecalculus.org/
(5) http://www.math.temple.edu/~cow/
(6) http://archives.math.utk.edu/utk.calculus/141toc.html
(7) http://archives.math.utk.edu/visual.calculus/index.html
(8)http:mathmit.edu/18.01/
(9)http://www.math.umn.edu/~rogness/quadrics/

HOME PAGE ADDRESS http://www.utdallas.edu/~fallum/

Note: Turn off cell phones and pagers during lectures and exams.

MATH 2419 CALCULUS SYLLABUS
(Larson/Hostetler/Edwards)7th Edition

7. Integration Techniques, L'Hôspital's Rule, and Improper Integration

7.8 Improper Integrals

8. Infinite Series

8.1 Sequences
8.2 Series and Convergence
8.3 The Integral Test and P- Series
8.4 Comparisons of Series
8.5 Alternating Series
8.6 The Ratio and Root Tests
8.7 Taylor Polynomials and Approximations
8.8 Power Series
8.9 Representation of Functions by Power Series
8.10 Taylor and Maclaurin Series

9. Conics, Parametric Equations, and Polar Coordinates

9.2 Plane Curves and Parametric Equations
9.3 Parametric Equations and Calculus
9.4 Polar Coordinates and Polar Graphs
9.5 Area and Arc Length in Polar Coordinates

10. Vectors and the Geometry of Space

10.1 Vectors in the Plane
10.2 Space Coordinates and Vectors in Space
10.3 The Dot Product of TwoVectors
10.4 The Cross Product of TwoVectors in Space
10.5 Lines and Planes in Space
10.6 Surfaces in Space
10.7 Cylindrical and Spherical Coordinates

11. Vector-Valued Functions

11.1 Vector Valued Functions
11.2 Differentiation and Integration of Vector- Valued Functions
11.3 Velocity and Acceleration
11.4 Tangent Vectors and Normal Vectors
11.5 Arc Length and Curvature

12. Functions of Several Variables

12.1 Introduction to Functions of Several Variables.
12.2 Limits and Continuity
12.3 Partial Derivative
12.4 Differentials
12.5 Chain Rules for Functions of Several Variables
12.6 Directional Derivatives andGradients
12.7 Tangent Planes and Normal Lines

12.8 Extrema of Functions of Two Variables
12.9 Applications of Extrema of Functions of Two Variables
12.10 Lagrange Multipliers

13. Multiple Integration

13.1 Iterated Integrals and Area in the Plane
13.2 Double Integrals and Volume
13.3 Change of Variables: Polar Coordinates
13.6 Triple Integrals and Applications

Appendix B Proofs of Selected Theorems
Appendix C Integration Tables

ASSIGNMENTS MATH 2419 SUMMER 2005

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