

MATH 1326.502
SPRING 2005
INSTRUCTOR:
OFFICE:
OFFICE HOURS:

APPLIED CALCULUS II
JO 3.516 TH 7:00 - 9:45 P.M.
KEN ZAMBERLAN
EC 3.106
TH 6:00 - 7:00 P.M.
(972)883-2161 (Math Office)

EMAIL: <mailto:zamber@earthlink.net>; kenzam@utdallas.edu (UTD)

TEXT: Calculus with Applications, Seventh Edition, by Lial, Greenwell and Ritchey

SYLLABUS: The course will include material selected from the list shown below, although changes in the content may be made at the discretion of the instructor. Homework will be assigned but not collected or graded. Additional material from sources other than the text will be included as appropriate.

Problem Assignment:

Problems will be assigned on a regular basis. Answers to most of these problems are given at the back of the textbook. Complete solutions to many of these problems may be found in the Solutions Manual which may be available in the bookstore. You should work several problems of each type, and working more than the class assignments is strongly encouraged. Do not use the solutions at the back of the textbook before you have exhausted all possibilities (including asking the T.A. and the instructor).

Attendance and Drop: Regular attendance is expected. If you find it necessary to drop the course, it is your responsibility to follow the university procedures to do so.

Examinations:

There will be three regular exams. The two best regular exams are worth 25% each, the lowest regular exam grade will be dropped. The final is worth 25%. **NO MAKE-UPS.** Exams can be rescheduled **IN ADVANCE** on an as-needed basis. Missed exams are a zero.

Quizzes:

There will be a total of five quizzes, the lowest of which will be dropped. Quizzes are worth 25%.

Incompletes:

There will be no incomplete except in the most dire of situations.

Calculation of Grade

Quizzes 25%

Exam 1 25%

Exam 2 25%

Exam 3 25%

Final 25%

(One regular exam grade will be dropped)

Grade Scale:

[97, 100] A+

[93, 97) A

[90, 93) A-

[87, 90) B+

[83, 87) B

[80, 83) B-

[77, 80) C+

[73, 77) C

[70, 73) C-

[65, 70) D+

[60, 65) D

[55, 60) D-

[0, 55) F

Exam I February 8 (Tuesday)

Exam II March 15 (Tuesday)

Exam III April 12 (Tuesday)

Course Outline (Subject to Change)

Chapter 7: Integration

7.1 Antidifferentiation: The Indefinite Integral

7.2 Integration by Substitution

7.3 Area and the Definite Integral

7.4 The Fundamental Theorem of Calculus

7.5 The Area Between Two Curves

EXAM I February 8, 2005 (Tuesday)*

Chapter 8: Further Techniques and Applications of Integration

- 8.1 Integration by Parts
- 8.2 Volume and Average Value
- 8.3 Continuous Money Flow
- 8.4 Improper Integrals

Chapter 9: Multivariate Calculus

- 9.1 Functions of Several Variables
 - 9.2 Partial Derivatives
 - 9.3 Maxima and Minima
 - 9.4 Lagrange Multipliers
 - 9.5 Total Differentials and Approximations
 - 9.6 Double Integrals
- EXAM II March 15, 2005 (Tuesday)*

Chapter 10: Differential Equation

- 10.1 Solutions of Elementary and Separable Differential Equation
- 10.2 Linear First – Order Differential Equations
- 10.3 Applications of Differential Equation

Chapter 11: Probability and Calculus

- 11.1 Continuous Probability Models
 - 11.2 Expected Value and Variance of Continuous Random Variables
 - 11.3 Special Probability Density Functions
- EXAM III April 19, 2005 (Tuesday)*

***Tentative Dates for exams - subject to change**