

SUMMER 2005
Call 10970

MATH 1326.021
APPLIED CALCULUS II

TR 2:00 - 3:50 pm
JO 3.516

INSTRUCTOR: Dr. Ed Stone, EC 3.202, 883-2637.

HOURS: **TWR 12:30 - 1:15 pm**, and by appointment.

TEXT: Lial, Greenwell, Ritchey: *Calculus with Applications*, Eighth Edition, Addison-Wesley. A number of handouts will be provided to supplement or replace sections of the text or to cover topics not in the text.

OBJECTIVE: To provide an understanding and motivation of the fundamental ideas of integral calculus and multivariable calculus, skill in using the techniques, and facility in applying the calculus to economic and business analysis and modeling problems. Applications will include: consumers' and producers' surplus; valuation of income streams with interest or variability assumptions; survival-renewal models, differential equation models of appreciation and depreciation; learning curves in market penetration; optimal allocation of resources; Cobb-Douglas models; and the use of average and centroid in probability models. Students will be expected to relate the problems and their language to the mathematics and apply it correctly.

READINESS: Credit for Math 1325 or equivalent, OR Advanced Placement Calculus Exam AB 4, or BC 3. A self-test for assessing preparation will be given in the first class meeting. This is a challenging course and good algebra skills and proper preparation are essential for success. Attend class and do the assigned reading, work homework after every class, prepare thoroughly for quizzes and exams, and get help promptly when you encounter difficulty.

HOMEWORK: Selected odd numbered problems (answers in the back of the book) are assigned and other problems recommended (a student solution manual is available in the bookstore). A list of assigned homework problems can be downloaded from WebCT; these are automatically assigned when discussion of each section is concluded.

QUIZZES: There will be 7 quizzes, given Tuesdays except on exam weeks. These will count 25 points each. **MAKEUPS WILL NOT BE GIVEN.** The two lowest scores or missed quizzes will be dropped. The average of the five highest scores will contribute to the final grade.

EXAMS: There will be 2 major exams. These will be Thursday in the first hour of class on June 09 and June 30. Each raw score will receive an adjustment that can be interpreted according to the letter grade scale below. **MAKEUPS WILL NOT BE GIVEN.** An option on the final will produce a score to replace an exam missed for an acceptable reason.

CALCULATOR: Calculators are permitted, but not necessary, on exams and quizzes; however, calculators having graphic or alphabetic displays are **NOT** permitted on any exam or quiz. A scientific calculator is recommended for other work.

CONDUCT: Homework is not collected, but is important preparation. You are advised to get help on homework if you encounter problems you cannot manage by consulting the notes or text.

On exams and quizzes, only a pen or pencil and a simple scientific calculator are permitted. ALL other material is to be stowed on the floor, including book, notes, phones, pagers and WATCHES. A photo ID should be displayed on your desk.

You are responsible for observing these conditions. You are to avoid observation of another's paper and avoid displaying your own. Any violation is an academic integrity infraction and will be punished severely.

RECORDS: Course records will be kept on the WebCT internet environment at <http://webct.utdallas.edu/>. To access this you will need your UTD Unix account name and password (which should have been provided to you at your first registration). Using this you can keep track of your grades and average, receive emergency email notices from your instructor, and download the syllabus and handouts. To get the handouts you will need Adobe Acrobat Reader, available free and present on UTD computer lab equipment. If you have any trouble, get in touch with me at once.

FINAL EXAM: A comprehensive final is **REQUIRED**. It will be given **TUESDAY July 26**, from 2:00 to 4:45 pm in this room. The final exam will have three sections, covering the material tested on Exams I and II and material not yet tested. All sections are required. Credit from an appropriate section will provide exam scores approved for makeup.

GRADES: The EXAM scores and QUIZ average will be equally weighted, and the FINAL will count one-third of the grade. The term average will be converted into letter grades by the rule: A 90 - 100; B 80 - 89; C 70 - 79; D 60 - 69, with the top third of each range marked plus, the bottom third minus.

HELP: It is essential that you attend class, work assignments promptly, and seek help immediately when you encounter difficulty. Help is available from me after class, during my office hours, and by appointment. A TA assigned to this course will hold office hours throughout the week. The Math Lab in MC 2.402 is an excellent source of walk-in. Summer hours will be announced. Some appointments are available by phoning 883-6707.

