Fall 2009. MATH1351. Section 026.

Calculus I

Instructor: Luan Thach Hoang
Office: MA 234. Phone: (806) 742-2580 Ext 232. Fax: (806) 742-1112
Email address: *luan.hoang@ttu.edu*
Homepage: *http://www.math.ttu.edu/~lhoang/*
Office hours: T Th 2:00 pm - 3:00 pm, W 11:00 am - 12:00 pm

Classroom and Time: MA 112, T Th 8:00 am - 9:20 am.

Recitation Sessions:

- Section 765, W 8:00 am, X. Zhang, Room MATH115
- Section 766, W 2:00 pm, X. Zhang, Room HOLDEN039

Course website: *http://www.math.ttu.edu/~lhoang/2009Fall-M1351/*
Updates about the course and other related announcements will be posted on this webpage.

Prerequisite: C in MATH 1350 or 1550 or 7 on MPE or C in 1321 with 5 on MPE or 660 on SATM or 29 on ACTM.

Text: *Calculus,* 5th edition, by Strauss, Bradley, and Smith; published by Pearson.

Course Description: The goal here is developing the student's geometric insight into the concepts of differentiation and integration, and applying these concepts to problem solving and "real world application".

Course Outline:

- Chapter 1 – Functions and Graphs
- Chapter 2 – Limits and Continuity
- Chapter 3 – Differentiation
- Chapter 4 – Additional Applications of Derivatives
- Chapter 5 – Integrations

Expected Learning Outcomes: Students will become proficient in techniques of differentiation, understand the concept of rate of change and how to use it to solve real world problems, the concept of definite and indefinite integral and their relations to area and rate of change. In particular, the students will

- Be able to explain the concept of continuous functions
- Compute instantaneous rate of change
- Compute derivatives of polynomial and transcendental functions
- Differentiation to solve related rate and optimization problems
- Compute definite and indefinite integrals

Methods of Assessment of Learning Outcomes: Assessment of the learning outcomes will be achieved through homework assignments, three midterm exams, and a final exam.

Grading policy: Homework will be assigned weekly and will count for 25% of the grade. The lowest homework score will be dropped. There will be three midterm exams in class, each will count for 15% of the grade. The final exam will

count for 30% of the grade. All in-class exams are closed-book. No make-up exams are given unless legitimate documents for excuses are presented to the instructor at least a week in advance.
Grading Scale: A: 90%-100%, B: 80%-89%, C: 70%-79%, D: 60%-69%, F: below 60%

Homework assignments: These consist of online problems assigned though Webwork and problems assigned and collected in class. Due dates are indicated on each assignment. For Webwork, students will receive the instructor's message for login information. Students should spend very first week to get familiar with the system.

Calculators: Only scientific calculators are allowed in exams. These calculators can calculate the values of the standard algebraic, trigonometric, exponential and logarithmic functions. Graphing calculators and calculators that can do symbolic manipulations are not allowed. (The calculator policy for the common final will be addressed later.)

Examination Schedule:

- Midterm 1: Tuesday, September 22.
- Midterm 2: Thursday, October 22.
- Midterm 3: Thursday, November 19.
- FINAL EXAM: Friday, December 11, 10:30 am – 1:00 pm, rooms will be assigned.

Critical Dates:

- Aug. 27: Classes begin.
- Sep. 7: Labor Day. Holiday.
- Oct. 12-13: Student Holiday; does not apply to School of Law.
- Nov. 2: Last day to drop a course.
- Nov. 25-29: Thanksgiving Holiday.
- Dec. 9: Last day of classes.

Academic Misconduct: Academic dishonesty is intolerable and will be punished to the full extent allowed by the University policy.

Civility in the Classroom: Students are expected to assist in maintaining a classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from engaging in any other form of distraction. Inappropriate behavior in the classroom shall result, minimally, in a request to leave class.

Students with Disabilities: Any student who because of a disability may require special arrangements in order to meet course requirements should contact the instructor as soon as possible.

Advice: Come to class and recitation sessions regularly, work on homework problems. Ask questions in class and get help from the instructor and TA during the office hours. Master the material quickly and *do not* wait too late until the midterms or the final exam. Students are encouraged to give feedbacks to the instructor during the semester using the form posted online.

NOTE: The instructor will communicate with the students via their TTU email addresses. At the beginning of the semester, the instructor will send out a message to confirm the students' email addresses and to inform about Webwork. If a student does not receive any messages by the time of the second class (Tuesday, Sep. 1), he/she must contact the instructor immediately.