

Fall 2013. MATH1451. Section H01.

Calculus I With Applications - Honors

Instructor: Luan Thach Hoang

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Office hours: MWF 3:00 pm - 4:00 pm

Classroom and Time: M 9:00 am - 9:50 am, ENGP HL 110, MWF 10:00 am - 10:50 am, ENGP HL 400.

Course website: <http://www.math.ttu.edu/~lhoang/2013Fall-M1451H01/>

Updates about the course and other related announcements will be posted on this webpage.

Prerequisite: MATH 1350 or 1550 with a grade of A or better

Text: *Calculus*, 6th National Edition, by K. Smith, M. Strauss and M. Toda, published by Kendall Hunt.

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 (8 hours)
- Chapter 2 – Limits and Continuity (9 hours)
- Chapter 3 – Differentiation (11 hours)
- Chapter 4 – Additional Applications of Derivatives (10 hours)
- Chapter 5 – Integrations (14 hours)
- Applications, Review and Testing (14 hours)

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.

Homework Assignments: Written homework will be assigned weekly and will be collected in class.

Grading Policy: Homework will count for 25% of the grade. The lowest score of the homework 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%

Calculators: Calculators are NOT allowed in the exams.

Attendance Policy: Students must go to lectures and attendance will be taken. If you miss no more than four lectures, a bonus of three points will be added to your final grade.

Examination Schedule:

- Midterm 1: Friday, September 20, 2013
- Midterm 2: Wednesday, October 16, 2013
- Midterm 3: Wednesday, November 13, 2013
- FINAL EXAM: 4:30 pm - 7:00 pm, Saturday, December 7, 2013. Room: ENGP400.

Critical Dates:

- Aug. 26: Classes begin.
- Sep. 2: Labor Day. University holiday.
- Sep. 11: Last day to drop a course without penalty.
- Oct. 28: Last day for student-initiated drop on MyTech with penalty.
- Nov. 26 - Dec. 5: No exams.
- Nov. 27 - Dec. 1: Thanksgiving Holiday.
- Dec. 4: 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: Texas Tech University endeavor to foster a classroom climate of mutual respect among students and between students and teacher. Students are expected to maintain 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. Students must attend class on time and are not allowed to leave the class before the end of the hour without authorization. During class time students are not allowed to eat, smoke, drink alcohol, text, chat, sleep, play games, read newspapers, wear earphones, play with smart phones or tablets, etc. Please put silent mode to all your electronic devices. 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. *"I would appreciate hearing from anyone who has a disability that may require special accommodations. I am sure we can work out whatever arrangements are necessary. Please see me during my office hours."* Student Disability Services office is in 335 West Hall (phone: 806-742-2405).

Advice: Come to class regularly, work on homework problems. Ask questions in class and get help from the Tutoring Center (information will be provided) or from the instructor during the office hours. Since a lot of material will be covered, students have to master them 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.

NOTE: When needed, the instructor will communicate with the students using their TTU email addresses. At the beginning of the semester, the instructor will send out an email message to confirm the students' email addresses. If a student does not receive this message by Wednesday Aug. 28, he/she must contact the instructor immediately.