MATH-2413-03E Calculus I

COURSE SYLLABUS: Fall 2024

INSTRUCTOR INFORMATION

Instructor: **Zhaoting (George) Wei**
Office Location: **BINB321 (Binnion Hall 3rd Floor)**
Office Hours: **MTWThF 9:00am-10:00am, BINB321, or by appointment**
Office Phone: No office phone yet. It will be provided later, Office Fax: **903-886-5945**
University Email Address: zhaoting.wei@tamuc.edu
Preferred Form of Communication: **Email**
Communication Response Time: **With 24 hours on weekdays**
Class Meeting Time: **MTWThF 11:00am-11:50am**
Class Location: **BINB326**
GA: **TBA** GA's email: TBA

COURSE INFORMATION

Textbook Required: James Stewart's Calculus, 9th Edition, with ISBN-13 978-1337624183. Tentatively, we will cover Sections 1.4-1.8, Chapters 2, 3, and 4, followed by Chapter 6's 6.1, 6.2, 6.3, and 6.4.

Website & Internet: A Brightspace course website is created for the course which may be accessed from student myLeo accounts. All files and documents that the instructor shares with students will be posted on the course website. All material posted or shared at the course website is copyrighted ©. You can retain one copy of each file for your personal use, but the files should not be distributed in any form without instructor's written consent.

Calculators: Using a graphing calculator with at least the capabilities of the TI-83 will be helpful throughout the course. TI-89 is highly recommended. A computer algebra system will be used for some problem exploration, enhanced conceptual understanding, and to engage students as active participants in the learning process.

AI use policy: Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the

capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty
13.99.99.R0.10 Graduate Student Academic Dishonesty

Tentative Exam Schedules:
Test 1: 20% **Friday October 11, 2024, 11:00am-11:50am**, in class
Test 2: 20% **Tuesday November 26, 2024, 11:00am-11:50am**, in class
Final: 30% **Wednesday December 11, 2024, 10:30am-12:30pm**, location to be announced.

No make-up test will be given without an official, written, university accepted excuse. The student is expected to contact the instructor the next working day and present the documented excuse to make up a test.

Midterm exam retake policy: If you get less than 60% in any of the midterm exams, you may take the midterm for a second time at the academic testing center:
- If you get more than 60% in the retaken exam, then you will get **60%** as your midterm grade.
- If you get less than or equal to 60% in the retaken exam, then the grade of the retaken exam will be the grade of your midterm exam.

Quizzes: 15%, You will have 10 quizzes in class quizzes during the semester, generally once a week.

Homework: 15%, Homework will be assigned in **each lecture** four times a week on a regular basis. All assignments of the week will be due in Monday's class in the following week. The course website keeps a log of the course material that you visit or download. Student name and homework number should be included in the filename for each week. Selected assignments and problems will be graded, but all problems should be worked out for full **homework score**. You may work in groups unless otherwise instructed, however the work you turn in must be your own. **Late work** might not be accepted unless legitimate reasons are presented.

Grading: At the end of this course, the final grade will be determined by:

Homework (15%) + Midterms (40%) + Final (30%) + Quizzes (15%)

A = 90%-100%

B = 80%-90%

C = 70%-80%

D = 60%-70%

F < 60%

Tentative Course Schedule: See the end of the syllabus.

Math Tutor: The Math Skills Center (Binnion 328) will be open its (new) normal hours, MTWR 10am – 6pm, and F 10am – 2pm, beginning the SECOND week of school.

Course Description

Course topics: This course examines differential and integral calculus of functions of one variable, as follows. Topics include limits; continuity; derivatives; curve sketching; applications of the derivative; the definite integral; derivatives and integrals of trigonometric functions; and use of computer technology.

Prerequisites: Two years of high school algebra and trigonometry or Math 2312.

Attendance: Attendance is required. You are responsible for all announcements and materials presented in the class.

Time for this course: It is said that education is an investment. In addition to the tuition, a student invests the time for education. The time for study is essential for the success of your education or investment. How much time do you need for this class? A thumb of rules in education is that you need to spend the number of hours equal to at least three times of the credit hours per week in a regular semester, which means that a fulltime student is to take at least 12 credit hours, spending 12x3=36 hours per week, a fulltime job. This is a four-credit hour class. So, you need to spend at least 12 hours per week. For 12 hours per week, you will spend four hours in the classroom and eight hours outside the classroom. After each class, you would need two hours to review lecture notes and do homework. If one has a weaker math background or rusty on the prerequisite, or wants to learn well for a better grade, more time is necessary.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:
1. Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.

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2. Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point.
3. Determine whether a function is continuous and/or differentiable at a point using limits.
4. Use differentiation rules to differentiate algebraic and transcendental functions. The syllabus and schedule are subject to change.
5. Identify appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.
6. Evaluate definite integrals using the Fundamental Theorem of Calculus.
7. Articulate the relationship between derivatives and integrals using the Fundamental Theorem of Calculus.

Core Objectives:
- *Critical Thinking:* Students will be able to analyze, evaluate, or solve problems when given a set of circumstances or data. This common core learning objective will be assessed on the final exam using key questions that will fulfill these objectives.
- *Communications:* In written, oral, and/or visual communication, Texas A&M University - Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure. This common core learning objective will be assessed using class activities or projects which involve class discussion.
- *Empirical and Quantitative Skills:* Students will be able to understand and utilize mathematical functions and empirical principles and processes. This common core learning objective will be assessed using in class discussion and projects, homework, and final exams.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:
https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.PDF

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03
Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.PDF

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.PDF

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.PDF

Regarding the University's Pandemic Response

A&M-Commerce requires the use of face-coverings in all instructional and research classrooms/laboratories. Exceptions may be made by faculty where warranted. Faculty have management over their classrooms. Students not using face-coverings can be required to leave class. Repetitive refusal to comply can be reported to the Office of Students' Rights and Responsibilities as a violation of the student Code of Conduct.

Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel.

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Velma K. Waters Library Rm 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.PDF

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

Tentative Course Schedule:

Week 1 (August. 26 – 30): Syllabus, 1.4, 1.5, 1.6
Week 2 (Sep. 2 – 6): Labor Day, 1.7, 1.8, 2.1
Week 3 (Sep. 9 – 13): 2.2, 2.3
Week 4 (Sep. 16 – 20): Appendix D, 2.4, 2.5
Week 5 (Sep. 23 – 27): 2.6, 2.7
Week 6 (Sep. 30 – Oct. 4): 2.8, 2.9
Week 7 (Oct. 7 – 11): 3.1, 3.2, Review, **Exam 1 Friday Oct. 11, 11:00am-11:50am**
Week 8 (Oct. 14 – 18): 3.3, 3.4, 3.5
Week 9 (Oct. 21 – 25): 3.6, 3.7
Week 10 (Oct. 28 – Nov. 1): 3.8, 3.9
Week 11 (Nov. 4 – 8): 4.1, 4.2, 4.3
Week 12 (Nov. 11 – 15): 4.3, 4.4, 4.5
Week 13 (Nov. 18 – 22): 6.2, 6.3
Week 14 (Nov. 25 – 29): Review, **Exam 2 Tuesday Nov. 26, 11:00am-11:50am,** Thanksgiving Break
Week 15 (Dec. 2 – 6): 6.4, Review for Final Exam
Week 18 (Dec. 9 – 13) **Final Exam, Wednesday, December 11, 10:30am-12:30pm**