



Math 2312.91E: Calculus I

COURSE SYLLABUS: Spring 2022 (Jan. 12 through May 13)

INSTRUCTOR INFORMATION

Instructor: **Adam Bowden**

Office Location: **Binnion B-317**

Office Hours: **Mon, Wed, Fri 8:20am – 9:20am & Tue, Thur 3:30pm until 5:00pm, or by appointment.**

In person at my office (Binnion B-317) or via Zoom (<https://zoom.us/j/3829563118>)

Office Phone: **903-886-5953** (*only available during TAMUC office hours*).

Office Fax: **903-886-5945**

University Email Address: adam.bowden@tamuc.edu

Preferred Form of Communication: **Email**

Communication Response Time: **Within 24 hours on weekdays, 48 hours over weekends and holidays.**

COURSE INFORMATION

Textbook: *Calculus, 9th Edition, by James Stewart (ISBN: 978-1337624183).*

Homework assignments will be posted online for all students. A textbook is not required (for optional reference only).

Course Description

Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.

Student Learning Outcomes

Upon successful completion of this course, students will:

1. Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.
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.
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, data, texts, or art. This common core learning objective will be assessed on the final exam using key questions that will fulfill these objectives.
- **Communication.** In written, oral, and/or visual communication, A&M-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 interpret, test and demonstrate principles revealed in empirical data and/or observable facts. This common core learning objective will be assessed using in class discussion and projects, homework, and final exams.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

1. **Students will need to check their campus email and MyLeo Online (D2L) regularly to stay informed of class announcements.** Accessing MyLeo Online (D2L) each week is also mandatory to access assignments.
2. **A cell phone camera or document scanner is required in order to submit digital copies of assignments.**
3. **Please keep a binder and plenty of paper and pencils available for assignments and exams.**
4. Use of a **graphing calculator** (equivalent to a TI-84 or below) is *not* required, but is recommended. **At minimum, a scientific calculator with trigonometric functions (such as sine, cosine, and tangent) is required.**

Instructional Methods

Instruction will be delivered in class and on D2L through lectures, videos, demonstration and models, and some group work, based on time available.

Student Responsibilities or Tips for Success in the Course

Attendance and Participation

Attendance will be taken promptly at the start of each class. Thus, students will be expected to be seated and ready when class begins. Furthermore, students must be actively participating to receive credit for attendance that day. **If you are part of an athletic, scholastic, or other group and must miss class, you may be excused only if the absence is listed as an excused absence by the university. Please contact me ASAP about any such absences.** Logging into D2L and completing assignments will also be used to determine part of your attendance. Students need to actively participate in class and/or online to receive credit.

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 **with appropriate documentation of illness**.

Study Time per Week

A general rule of thumb for how much time to spend each week for a class is two to three times the credit hours for the class. Hence, for a four-credit hour class, a good suggestion is to spend 8 to 12 hours each week working on assignments or studying the material.

GRADING

Final grades in this course will be based on the following scale:

A = 90% - 100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = 59% or Below

Assessments

Please pay close attention to announcements on email and D2L and follow the instructions included with each assignment. Failure to do so may result in missed credit for assignments.

HOMEWORK: Homework will be assigned each week on D2L and must be submitted as a digital document into the proper place on D2L given in the instructions. Students will be expected to turn in their own work for the assigned problems. No credit will be received unless work or explanation is shown for each question. **Completing homework and turning it in on time is a must for success. No late homework is accepted except at your instructor's discretion and with a permitted excuse.**

QUIZZES: Weekly quizzes will be on D2L, and occasionally in class, going over the week's material. In general, NO makeup quizzes will be given unless by excused absence.

PROJECTS: Projects will be assigned in class and on D2L to go further in depth with some of the materials.

EXAMS: There will be **four** exams and a comprehensive final. **All exams will be given during class time, in person, closed notes, and on paper.**

No outside materials or disallowed electronic devices (such as cell phones) are permitted during exams. The only devices allowed are an approved graphing or scientific calculator.

No make-up exams may be given without prior notice of a university excused absence.

At the end of the semester, I will drop the lowest exam grade and replace with the final exam grade, provided the final exam grade is higher.


FINAL EXAM: For this semester, the final exam will be optional. **After the fourth exam, students may choose to opt out and not take the final if:**

- 1. The student has a passing grade after exam 4 and is happy with the final grade, AND**
- 2. The student has completed the last assignment of final exam practice questions on D2L.**
- 3. The student has clearly informed the instructor that they opt out of the final exam before the final day.**

The final exam is comprehensive and will be given on the last day of class. The final follows the university finals schedule and is (tentatively) scheduled for Wednesday, May 11th, from 8:00am – 10:00am (*or at a time available at the school*).

Please see the schedule on the last page for tentative testing days.

GRADES:	Homework:	15%
	Daily Grade (Quizzes, Projects, Activities, and Attendance):	10%
	Average of Four Exams and (optional) Final:	75%

Each student's average for the course will be posted on D2L. To access the course, you will go into MyLeo and the "Apps" and look for the app for "MyLeo Online (D2L Brightspace)". You should see directions to choose your course from the course grid that looks like: . Once you have chosen the correct course, you will be able to see your "grades" option.

TECHNOLOGY REQUIREMENTS

CALCULATORS AND HOMEWORK

Use of a **graphing calculator** (equivalent to a TI-84 or below) is *not* required, but is recommended.

The use of a cell phone camera or document scanner is required in order to submit digital copies of some assignments.

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online (also called D2L) 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.

The syllabus/schedule are subject to change.

COMMUNICATION AND SUPPORT

Tutoring

Students can choose to attend tutoring in the Math Skills Center, TRIO, Supplemental Instruction tutoring sessions, and other on campus tutoring services.

The **Math Skills Center**, located in Binnion 328, is open for students and is staffed with tutors. In addition, the **Academic Success Center** also offers supplemental instruction/tutoring for students. The hours for these services can be found on the university web site (www.tamuc.edu) and the Math Department website (www.tamuc.edu/math).

The **Mach III/TRIO Program** is available for students who qualify for additional resources, such as private tutoring. In order to qualify, students must meet certain conditions, such as being a first-generation college student. For more information, contact TRIO at 903-886-5833 or in the Halladay Student Services building, Room 300.

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>

Interaction with Instructor Statement

Students are expected to check their campus email regularly. Any questions or concerns may be addressed to the instructor's campus email. A response will be provided within 24 hours on weekdays. Emails over the weekend may take longer for responses.

It is vital that students be engaged and participating in class. Everyone is welcome to ask questions during class to further understanding of the concepts. Furthermore, I welcome any questions you may have after class.

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>

Appropriate classroom behavior is required from those who attend this class. For the online format, this means treating classmates with respect in any online discussions or communication. If someone is not treating others in the class appropriately, they will be asked to change this behavior and can lose points for any related assignments. Serial disruptors will be asked to withdraw from the class.

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

In order to ensure fairness and high academic standards, any actions which violate the principles of academic integrity through dishonesty or cheating are given serious consideration.

In order to understand what constitutes a violation of academic integrity and the consequences of such behavior, the university's policies may be reviewed at:

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

In particular, awareness of the following definitions is essential in order to know what represents academic dishonesty (pages 6 – 7):

- **“Cheating:** Intentionally using or attempting to use unauthorized materials, information, notes, study aids or other devices or materials in any academic exercise. Unauthorized materials may include anything or anyone that gives a student assistance, and has not been specifically approved in advance by the instructor.”
- **“Complicity:** Intentionally or knowingly helping, or attempting to help, another to commit an act of academic dishonesty.”
- **“Plagiarism:** The appropriation of another person's ideas, processes, results, or words without giving appropriate credit.”

Any form of academic dishonesty which is observed will be noted. The student will be informed of why their behavior falls under this category and cannot be allowed. The event will then be reported under the guidance of university procedure. The university's policies regarding these matters are outlined at the link above. Depending on the severity of the circumstances, disciplinary action may be taken.

Please be aware that while your instructor does not suspect every student of attempting to engage in dishonest behavior or cheating, certain measures may be taken during the semester to encourage integrity, honesty, and learning. Some of these measures may include asking for calculators to be cleared and for all electronic devices (except for those approved) to be put away.

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

Gee Library- Room 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/)

<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.

The syllabus/schedule are subject to change.

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

<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.

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

TENTATIVE COURSE OUTLINE / CALENDAR

Week 1 (Jan 12 – 14)

Syllabus, 1.4

Week 6 (Feb 14 – 18)

2.5, 2.6

Week 11 (Mar 21 – 25)

3.5, 3.7, 3.8

Week 16 (Apr 25 – 29)

6.2, 6.4, Review, **Exam 4**

Week 2 (Jan 17 – 21)

1.5, 1.6

Week 7 (Feb 21 – 25)

2.6, 2.8, Review

Week 12 (Mar 28 – Apr 1)

Review, **Exam 3**, 3.9

Week 17 (Mat 2 – 6)

Final Exam Review

Week 3 (Jan 24 – 28)

1.7, 1.8

Week 8 (Feb 28 – Mar 4)

Exam 2, 3.1, 3.2

Week 13 (Apr 4 – 8)

Sigma Notation, 4.1, 4.2

Week 18 (May 9 - 13)

Final Exam Week

Week 4 (Jan 31 – Feb 4)

2.1, 2.2, Review

Week 9 (Mar 7 - 11)

RCHS Spring Break

Week 14 (Apr 11 – 15)

4.3, 4.4

Tentative Final Exam Day: Wed., May 11th, 8:00am – 10:00am (or at a time available at the school).

Week 5 (Feb 7 – 11)

Exam 1, 2.3, 2.4

Week 10 (Mar 14 – 18)

3.3, 3.4, 3.5

Week 15 (Apr 18 – 22)

4.5, 6.1, 6.2

Given during a two-hour period.
The final exam will be optional.

By Remaining Enrolled In This Course, All Students Agree To Abide By The Policies Of This Class, As Stated In The Syllabus.