

MATH 2413 002 Calculus I

COURSE SYLLABUS: Spring 2020

INSTRUCTOR INFORMATION

Instructor: Dr. Thomas R. Boucher Office Location: Binnion 310 Office Hours: MW 10-12, TR 3:30-4:30, or by appointment Office Phone: x5947 Office Fax: x5945 University Email Address: Thomas.Boucher@tamuc.edu Preferred Form of Communication: email Communication Response Time: within 1 business day

COURSE INFORMATION

Textbook(s) Required: Calculus, Stewart, 8th Edition.

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. Prerequisites: MATH 2312 Pre-Calculus with grade of "C" or higher.

Student Learning Outcomes

- 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.

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

Grading: on a standard 100% scale:

- HW: 15%
- EXAMS: 4 @ 15% each
- FINAL: 25%

Disputed grades will only be changed if graded assignments are produced which indicate the recorded grade is erroneous.

Exams: There are 4 exams and a cumulative final. There will be no makeup exams. With proper documentation of a valid excuse for missing an exam, the % of your grade due to that exam will be rolled over into the cumulative final; absent such documentation a missed exam counts as a zero. If you know beforehand that you will be missing an exam, speak to me and we can arrange for you to take the exam BEFOREHAND.

Exam schedule:

- Exams #1-#4 will be given on Mondays of the indicated weeks
- Final --- Monday, May 4th 10:30-12:30

Homework: will be assigned in class and is due as indicated, unless announced otherwise. No late homework will be accepted. You are free (encouraged, in fact) to work with others; however, each student must submit his/her own set of solutions. Occasionally, in-class projects/quizzes will be assigned and will count as a HW grade. I will drop the two lowest grades before computing your average.

COURSE OUTLINE / CALENDAR

Tentative Class Schedule:

Week #	Topics
1	1.4, 1.5
2	1.6, 1.7
3	1.8, 2.1, 2.2, Review
4	Exam # 1, 2.3
5	Appendix D, 2.4, 2.5
6	2.6, 2.7, 2.8
7	2.9, 3.1, 3.2, Review
8	Exam #2, 3.3, 3.4
9	Spring Break
10	3.5, 3.6, 3.7
11	3.8, 3.9, Review
12	Exam #3, 4.3, 4.4
13	4.1, 4.2, 4.3, 4.4
14	4.5, 6.2
15	6.3, 6.4
16	Exam #4, Review for Final
17	Finals Week

Note: Chapters and sections refer to the 8th edition of Stewart.

Final Exam: Monday, May 4th 10:30-12:30

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_suppo rt.htm

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

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 <u>helpdesk@tamuc.edu</u>.

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 <u>Student Guidebook</u>.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as px

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 <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>. <u>http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx</u>

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

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

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

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: <u>studentdisabilityservices@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u>

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 <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url: <u>http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf</u>

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.