Math 2413.001 – Calculus I

MTWRF 8:00-8:50 a.m. Binnion 301

COURSE SYLLABUS: Spring 2018

Instructor: Stuart Anderson
Office Location: Binnion-321
Office Hours: MTRW: 3:00-4:30 p.m.
Others, by appointment.
If you need to see me, do not hesitate to schedule an appointment. If you are having difficulty in the course, please seek help early. I would be glad to help you any time I am available. Occasionally, I will be out of my office for meetings or other obligations during scheduled office hours. I will try to let you know of these times early or will leave a note of explanation. Otherwise, you are welcome in my office.
Office Phone: 903-886-5957
Office Fax: 903-886-5945
University Email Address: stuart.anderson@tamuc.edu

COURSE INFORMATION

Textbook:

CALCULUS, 7th Edition, by James Stewart. ISBN 9780538497817. Parts or all of chapters 1 through 4 and chapter 6 will be covered. We may occasionally cover enrichment activities not in the text.
It is recommended to have a TI 83/84 or equivalent calculator for this course. Use of the calculator may be restricted during tests.

Course Description

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. Prerequisite Two years of high school algebra and trigonometry or Math 142.

Student Learning Outcomes

The development of calculus reached a very usable form in the late sixteen hundreds. The resulting impact on civilization was relatively quick and far-reaching. Applications can be made in virtually any field of study and are essential in many areas (e.g., engineering, economics, medicine). In one sense, this course is a study of motion. Motion deals with a change in the

position of an object as time changes. For example, velocity is a change in distance divided by a change in time (miles per hour or meters per second). The idea can be generalized to any rate of change (a change in y divided by a change in x). This course aims to cause you to understand the theory behind this notion, to become proficient in the mechanics of using basic calculus, and to perform and appreciate a variety of applications of calculus.

CORE OBJECTIVES:
1) ***Students will be able to analyze, evaluate, or solve problems when given a set of circumstances or data***. This common core objective will be assessed in the tests and final exam.

2) 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 objective will be assessed using class activities with class discussion of derivatives, integrals, and application problems.

3) ***Students will be able understand and utilize mathematical functions and empirical principles and processes.*** This common core objective will be assessed using class activities, homework problems, tests and a final exam.

GRADING

Tests: There will be four tests. Each test will be announced at least one week prior to the time it is given. Be careful to invest ample time daily in the course so that you will be prepared for each examination. Tests will count approximately 60% of your final grade.

Homework: Homework will be assigned almost every day. It is expected that you try to solve all assigned problems. Homework is important since you can expect the tests to contain problems similar to those assigned as homework. You should always allow a reasonable amount of time to do each assignment. Save your papers to use when studying for tests. Selected problems will be collected and graded on some days. Occasionally, a short quiz may be given in class. The quiz will usually cover the assignment for that day.

The homework and quizzes may count approximately 6% of your final grade.

Final: The final exam will be given on Monday, May 7, 2018 at 8:00 a.m. The final exam will count at least 30% of your final grade.

Grading Scale:
A: 90-100
B: 80-89
C: 70-79
D: 60-69
F: Below 60

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

It is expected that you will be regular and punctual in attendance. Attendance will be noted daily.

No late tests will be given. If you miss a test, the final will be used to replace that score. No late homework will be graded and daily quizzes will not be repeated if missed. However, a percentage of the homework and quiz grades will be dropped to cover days when an absence is unavoidable.

Please make certain that any cell phone in your possession never rings in class and is never used during class; do not use any electronic device (other than a stand-alone scientific calculator) during any test; do not leave class early unless prior arrangements have been made with the instructor; do not excuse yourself from class and then return. Failure to comply with these policies can result in a lowering of your grade or expulsion from the course.

Cheating of any kind will result in an F in the course.

It is my hope that no one will want to drop this course. Please keep in mind that the total number of courses dropped for academic reasons during undergraduate studies is limited to six. However, if you decide to drop, please check the university calendar for applicable deadlines.

University Specific Procedures

ADA Statement

Students with Disabilities
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 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

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 (http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf) and/or consult your event organizer). 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.

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook).*

COURSE OUTLINE / CALENDAR

Week 1 – Sections 1.4, 1.5, 1.6.
Week 2 – Sections 1.7, 1.8, and 2.1.
Week 3 – Sections 2.2, 2.3, 2.4.
Week 4 – Test 1, Section 2.5, and 2.6
Week 5 – Sections 2.7, 2.8, and 2.9.
Week 6 – Sections 3.1, 3.2, and 3.3.
Week 7 – Sections 3.4 and 3.5, Test 2.
Week 8 – Sections 3.6 and 3.7.
Week 9 – Sections 3.8 and 3.9.
Week 10 – Sections 4.1, 4.2 and Test 3.
Week 11 – Sections 4.3 and 4.4.
Week 12 – Section 4.5
Week 13 – Review and Test 4.
Week 14 – Sections 6.1, 6.2, and 6.3.
Week 15 – Section 6.4 and review.
Final Exam – May 7. (It is possible that some revision of the above dates and material may occur as the semester progresses.)