Instructor: Mark Farris **e-mail:** mark.farris@msutexas.edu **Phone:** 940-642-3312 **Office:** BO118J

Office Hours: Mon, 9:30-11:30, 1:30-3:30, Tues 2:00-3:00, Wed 8:30-11:30, Thurs 2:00-3:00, Fri 9:30-11:30; or by appointment

Textbook: Calculus Early Transcendentals 8th edition by Stewart

Objectives: This course will be over chapters 2-5 of the textbook. Your primary objective will be to learn correct use of mathematical terminology and notation. You will also be learning problem solving skills from the point of view of a mathematician. A student who completes this course with a grade of C or better may take Calculus II.

Prerequisite: Math 1433 or Math 1534 with a grade of C or better.

Calculators: The instructor will use a TI-84 Graphing Calculator. Other models or brands of calculators are acceptable. Graphing calculators are available at discount stores (Wal-Mart, Target, etc.) and at the campus bookstores. Since calculator models vary widely in ability, much of the testing in this course will not allow calculators of any kind. Nevertheless, calculators are of essential use as a learning tool in a modern Calculus course.

Grading: Your grade will be based on bi-weekly quizzes, five in class exams, and a final exam. There will be between at least 20 quizzes but only your best 15 homework scores will count.

180 15 quizzes @ 12 points each
360 5 Exams @ 72 points each
180 Final exam
720

Grades will be computed on the usual basis, 90% for an A, 80% for a B, etc.

Expectations: I expect you to

- arrive on time and prepared for class
- use class time wisely
- ask specific, thoughtful questions
- put forth your best effort every day
- make at least a “C” in this class

Attendance: If you need to miss a quiz or exam, you should notify me before it is given. If you miss a quiz or exam due to an unforeseen situation, such as an accident, you should notify me as soon as possible. No allowances will be made for missed work unless an adequate reason is given in a timely fashion.

Recommended Homework Problems: Quizzes and Exams in this course will consist of problems similar to those found at the end of each section of the textbook. You should work as many problems from the textbook as you have time for. Since few students have the time to work every exercise in a textbook of this nature I have selected a modest number of recommended problems. Consider my recommendations as a minimum number of problems to work in order to succeed in the course. These recommendations will appear in my lecture outlines that I will distribute in class and post online.

Tentative Schedule

Dates	Sections
Week 1 Jan 14-18	2.1-2.3 Tangents, Velocity, Limits
Week 2 Jan 22-25	2.4-2.5 Precise Definition of Limit and Continuity
Week 3 Jan 28-Feb 1	2.6 Limits at infinity, Review, Exam 1

Exam 1 over Sections 2.2 through 2.6 will be on Friday, Feb 1

Week 4 Feb 4-8	2.7-3.1 Derivatives: Definition, Interpretation, Simple examples
Week 5 Feb 11-15	3.2-3.4 Product Rule, Quotient Rule, Trig Functions, Chain Rule.
Week 6 Feb 18-22	3.5 Implicit Derivatives, Review, Exam 2

Exam 2 over Sections 2.7 through 3.5 will be on Friday, Feb 22

Week 7 Feb 25-Mar 1	3.6-3.8 Logarithms and Exponential Functions
Week 8 Mar 4-8	3.9-3.10 Related Rates and Linear Approximation
Week 9 Mar 11-15	4.1 Extrama, Review, Exam 3

Exam 3 over Sections 3.6 through 4.1 will be on Friday, Mar 15

Spring Break

Week 10 Mar 25-29	4.2-4.4 Mean value Theorem, Derivatives and Graphing, l'Hospital's Rule
Week 11 Apr 1-5	4.5-4.7 Cuve Sketching and Optimization

Exam 4 over Sections 4.2 through 4.7 will be on Tuesday, Apr 9

Week 12 Apr 11-12	4.9-5.1 Antiderivatives and Area
Week 13 Apr 15-16	5.2-5.3 Definite Integrals and the Fundamental Theorem of Calculus
Week 14 Apr 22-26	5.4 Indefinite Integrals and Net Change, Review, Exam 4

Exam 5 over Sections 4.9 through 5.4 will be on Friday, Apr 26

Week 15 Apr 29-May 3 5.5 Substitution and Review for Comprehensive Final

A comprehensive **Final Exam** will be on Wed, May 8, 8:00AM-10AM

Standard Syllabus Information: Students should refer to the current MSU Student Handbook for university policies on academic dishonesty, class attendance, student rights and activities.

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's webpage Campus Carry Rules/Policies.