

Instructor: Mark Farris e-mail: mark.farris@msutexas.edu Ph: 940-642-3312 Off: BO118J

Office Hours: Mon through Thurs 2:00-4:00 Tues and Thurs 9:30-11:30, or by appointment

Textbook: You need a Calculus textbook. The course is designed for a student who has a copy of either Calculus, Early Transcendentals 8th edition by Stewart or Calculus, Early Transcendentals 2nd edition by Briggs, Cochran, and Gillett. You may obtain online access to Stewart using WebAssign for \$100. If you purchase that online access you can order a loose-leaf hard copy for a small extra fee. There is a two-week free access option for WebAssign. If you currently own a different Calculus book it might be suitable; in that case you should bring your book by for me to look at.

In addition to a Calculus book, there is an extensive supplement that will be distributed starting on the 1st day of class.

Objectives: This course is essentially a 4th semester of a standard 3-three semester Calculus sequence. Your Calculus book has two chapters devoted to differential equations and these two chapters are typically skipped in the Calculus sequence. We will cover that material as well as about 3 chapters worth of material on Systems of Differential Equations, Power Series methods for Differential Equations, and Laplace Transforms..

Prerequisite: Math 1734-Calculus II with a grade of C or better.

Technology: We will use several applets that are typically freely available online. We will use Excel in one small portion of the course; if you have no experience with spreadsheets the necessary instruction will be provided. If there is sufficient student interest me might have time to use MATLAB for some problems. 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.

Grading: Your grade will be based on weekly quizzes, 3 in class exams, and a final exam. There will be at least 12 quizzes but only your best 10 quiz scores will count.

200	10 quizzes @ 20 points each
300	3 Exams @ 100 points each
<u>200</u>	Final exam
700	

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: A collection of recommended homework problems will be distributed during the course or the semester. This material won't be collected, but quiz and exam problems will be similar to assigned homework problems.

Tentative Schedule

The course is in V parts with about 3 weeks spent on each one.

Part I First Order Scalar Equations-Aug 26-Sept 13

Part II First Order Systems-Sept 16-Oct 4

Part III Second Order Scalar Equations-Oct 7-Oct 25

Part IV Power Series Methods Oct 28-Nov 15

Part V Laplace Transforms-Nov 18-SDec 7

Exam 1 will be on **Friday, September 27**

Exam 2 will be on **Friday, October 1**

Exam 3 will be on **Monday, November 25**

A comprehensive **Final Exam** will be on **Wednesday, December 11 from 10:30AM-12:30PM**

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](#).