Course Objective: To learn the concepts and techniques of ordinary differential equations and linear algebra. Topics include qualitative methods, linear and nonlinear ODEs, and first and second order systems.

Text: Differential Equations and Linear Algebra, by Farlow, Hall, McDill, & West, 2nd edition. (Please note that the exercises are different from the first edition.)

Recitations: Recitations meet for 1 hour on Thursdays. The purpose of the recitation is only partly to help you with the homework. More importantly, the recitation is intended to further clarify the course concepts. Recitations do not meet the day after our midterm exams.

Office hours: Instructor and TA office hours and locations will be posted on the course webpage. Instructor office hours are usually held in their offices. TA office hours will normally occur in specially designated help rooms. Please check the course website for time and location details, as well as updates. During the weeks that the projects are due, TAs will hold office hours in ECCR 143.

Homework: To do well in this course, attend the lectures and do (and understand) the homework. Ask questions. Homework is due in recitation on Thursdays, except during exam weeks, when they are due the following Monday at 4 pm under your TAs office door. Late homework will not be accepted or graded. You must show all your work in your homework. Homework problems and due dates will be posted on the course webpage. The problems listed are those that are to be turned in for credit; however, it is your responsibility to do as many problems as necessary to understand the material. Graded work will be returned during the next recitation, and the solutions will be posted on the course webpage.

Exams: There are three midterm exams and a comprehensive final. The midterms are on Wednesdays (Sep 23, Oct 21, and Nov 18) from 7:00–8:30 PM. The final exam is Thursday, Dec 17, from 7:30 AM – 10:00 AM. There will be no early or make–up exams. If you are sick during a midterm, please bring a note from your doctor verifying your illness. Your course grade will then be determined by the rest of your course work. Please bring your CU ID to each exam. You will be allowed one single–sided crib sheet for the midterm exams and one double–sided crib sheet for the final exam. Electronic devices are not allowed during the exams. If you have any unavoidable schedule conflicts with the exams, including three or more final exams on the same day, you must notify your instructor and supply documentation by the Friday prior to the first scheduled midterm.

Computer projects: You will turn in three projects for APPM 2360. In these projects, you will investigate certain topics in differential equations in more detail, perform some of your analysis using a computer software package (Matlab is suggested), and turn in a written report of your results. Projects and due dates will be posted on the course web site, and you will submit a pdf copy to D2L by 11:59 PM on the due date. You may only work in groups of two or three people, and you can work with students in any section of this course. Only one pdf needs to be submitted for your group. All group members will receive the same grade, and neither the instructors nor TAs will arbitrate internal group disputes. Late projects will not be accepted or graded. These projects are required of all students registered in APPM 2360.

Regrades: If your exams or projects were misgraded, within one week of when the documents were returned to the class, submit a clear, detailed written explanation addressing the specific grading errors. A penalty will be assessed for frivolous or nebulous re–grade requests. Exam regrades should be submitted to your instructor, and project regrades should be submitted to one of the lab coordinators for APPM 2460.

APPM 2460: This is an optional, 1 credit Pass/Fail lab–based course in which one can learn more about the material associated with the projects, as well as Matlab. Students wanting such additional help are strongly encouraged to sign up for this lab.
**Grade determination:** There is a total of 1000 points for the course. The points are distributed over homework (100 points), recitation assignments (50 points), three projects (50 points each), three midterm exams (150 points each), and a cumulative final exam (250 points). You must earn a C- or better on your exams to earn a grade of C- or better in the course. After the final exam, if your exam scores average to something less than a C-, it is not possible to earn a C- or better in the class.

**Dropping the course:** Advice from the Dean’s office and your department advisor is recommended before dropping any course. After Oct 30, dropping the course is possible only with a petition approved by the Dean’s office.

**Course web page:** ([http://amath.colorado.edu/course-pages](http://amath.colorado.edu/course-pages)) It is your responsibility to check the course web page on a regular basis. There you will find detailed information about homework assignments and solutions, past exams, tutoring options, pre-exam review sessions, exam rooms and times, and office hours. In addition, these sites contain full policies on illness, academic honesty, and special accommodations for religious observances, documented special needs, classroom behavior, and so on. It is your responsibility to read these policies at the start of the semester.

**Blue books:** Each student is required to purchase five 8.5×11 blue books and give them to the TA by the second recitation (Sep 3). You will be awarded 5 bonus homework points for turning in your blue books on time. These will be used for the exams, so please do not write anything on the front of the books.

**Academic Honesty:** Students are encouraged to work in groups, however **all work turned in must be your own, and you are responsible and accountable for all group work associated with your name.** Violation of the CU Student Honor Code ([http://honorcode.colorado.edu](http://honorcode.colorado.edu)) or the College of Engineering’s Academic Honesty Advising Guidelines ([http://www.colorado.edu/engineering/academics/policies/honesty](http://www.colorado.edu/engineering/academics/policies/honesty)) will result in a final grade of F in this course, and possibly additional sanctions imposed by the University.