Course Objective: To learn the concepts and techniques of ordinary differential equations and linear algebra. Topics include qualitative methods, linear and nonlinear ODEs, Laplace transforms, 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 office hours are shown above. You can go to any instructor or TA's office hours. TA office hours will be held in ECCR 211.

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 (your TA will tell you how they want you to give this HW to them). 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 D2L. There are 11 homeworks. The homework with the lowest score will be dropped (this also accounts for a homework not submitted due to unexpected circumstances).

Exams: There are three midterm exams and a comprehensive final. The midterms are on Wednesdays Feb. 14, Mar. 14, and Apr. 18, 7:00 PM - 8:30 PM. The final exam is Saturday, May 5, 10:30 AM - 1:00 PM. 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 8.5”×11” crib sheet for the midterm exams and 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 Desire2Learn by 11:59 PM on the due date. You should only work in groups of 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 TA's 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. The request must specify why there was an error in the grading; requests such as “please regrade question 3”, “too many points were deducted” and “I feel I deserved more points” will not be accepted. A penalty may be assessed for frivolous or nebulous regrade 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 (150 points), three projects (50 points each), three midterm exams (150 points each), and a cumulative final exam (250 points).

Your total exam score (midterms and final) must be equal to or above the total exam score averaged over all sections minus 1.7 standard deviations (score “X”) in order to earn a D- or better in the course. After the final exam, if your total exam score is less than X, you will earn an F in the course regardless of your homework and lab scores. After the final exam, if your total exam score is X or better, then your homework and lab points will be factored in to determine your course grade using the approximate grade divisions 89% - 100% = A’s, 78% - 88% = B’s, 65% - 77% = C’s, 55% - 64% = D’s. These cutoffs might be lowered slightly, but will not be raised. (Note: it is possible to have a X total score or higher on the exams and still earn a D or F in the course if your homework and quiz scores are low.)

Dropping the course: Advice from the Dean’s office and your department advisor is recommended before dropping any course. January 31 is the last day to drop a class without tuition/fee charges and without a W grade. After March 23, dropping the course is possible only with a petition approved by the Dean’s office.

Course web page: (https://www.colorado.edu/amath/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, past exams, 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 (Jan. 25). You will be awarded 5 bonus homework points for turning in your blue books on time. These blue books 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. All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, resubmission, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code Council (honor@colorado.edu; 303-735-2273). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code Council as well as academic sanctions from the faculty member. Additional information regarding the academic integrity policy can be found at the Honor Code Office website, http://www.colorado.edu/honorcode/.

Accommodation for Disabilities: If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website (www.colorado.edu/disabilityservices/students). Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see Temporary Medical Conditions under the Students tab on the Disability Services website and discuss your needs with your professor.

Religious Holidays: Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please contact your instructor in advance if you need to observe a religious holiday.

Classroom Behavior: Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student’s legal name. They will gladly honor your request to address you by an alternate name or gender pronoun. Please advise your instructor of this preference early in the semester so that they may make appropriate changes to their records. For more information, see the policies on classroom behavior at http://www.colorado.edu/policies/student-classroom-and-course-related-behavior and the Student Code of Conduct at http://www.colorado.edu/osccr/.