Instructor: Taylor Martin  
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Class Webpage: www.math.rice.edu/~tc8/

This is the standard text used at Rice University. We will cover chapters 2, 4, 7, 8, 9, and additional sections if time permits. We will also use the applications found at: http://math.rice.edu/~dfield/dfpp.html

Grading: Course grades will be determined using the following guidelines: Homework assignments will be worth 25%. There will be two midterm examinations, each worth 20%. The final exam will be worth 25%. Finally, class participation will count for 10%.

Homework: Homework will be assigned at each class period and will be due at the start of the following class period. Assignments will be announced in class and posted on the course website. Students are welcome and encouraged to work together on homework; however, each student is responsible for writing up his or her own work. Late homework will not be accepted.

Written homework should be neat, well explained, and easy to follow. In order to receive full credit on a problem, students should

- State the problem.
- Include step-by-step work to convey full understanding of the process, with written explanation as necessary.
- Have a clearly marked solution.

Exams: There will be two timed, take-home midterms given on a Friday and due back at the start of the following class. There will be one cumulative, timed, take-home exam given on the last day of class and due on Tuesday, June 7. No books, notes, calculators, or any other aids will be permitted on exams.

Participation: Students will be expected to participate in class discussion and group activities. Additionally, Students will be required to present a minimum of 5 homework problems on the board and discuss the solution with the class.

Expectations: I expect students to attend every class and to arrive on time. Students will be responsible for all material and announcements given in class. Moreover, I expect all students to participate in class as a part of their final course grades. Students are expected to abide by the Honor Code.
Course Objectives: This course aims to introduce students to ordinary differential equations (solutions to separable and linear first-order equations and higher-order linear equations with constant coefficients, the properties of solutions to differential equations, and numerical solution methods) as well as linear algebra (vector spaces and solutions to algebraic linear equations, dimension, eigenvalues, and eigenvectors of a matrix) as well as the application of linear algebra to first-order systems of differential equations and the qualitative theory of nonlinear systems and phase portraits.

Disability Support: Any student with a documented disability seeking academic adjustments or accommodations is requested to speak with me during the first two days of class. All such discussions will remain confidential. Students with disabilities will need to also contact Disability Support Services in the Allen Center.