**Math 316 – Ordinary Differential Equations (Summer 2013)**

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*Course Description*:
This is an introduction to the theory and applications of ordinary differential equations. The topics to be covered include: elementary theory of linear ODEs, numerical methods, applications and modeling, introduction to nonlinear equations, systems of equations, and the Laplace transform.

*Texts*:

- (Required) "Differential Equations: An Introduction to Modern Methods and Applications," 2nd Edition, by Brannan and Boyce, Wiley.
- (Optional) "Ordinary Differential Equations using MATLAB," 3rd Edition, by Polking and Arnold, Pearson.
- (Recommended) "A First Course in Differential Equations," 5th Edition, by Dennis Zill, Brooks/Cole.

*Prerequisites*:
Math 163 (Calc II)

*Corequisites*:
CS 151 or CS 251 or Phys 290 or ECE 131

*Recommended*:
Math 314 or Math 321 (Linear Algebra), Math 264 (Calc III)

*Grading*:

- Weekly Homework - 30%
- Four Exams: 20% each (No calculators! The lowest grade will be dropped.)
- Two MATLAB assignments: 5% each

*Attendence*:
While attendence is not mandatory (*i.e.*, not a part of your grade), you are expected to come to every class on time! Note that I reserve the right to drop any student based on non-attendance (which may include persistent lateness). This policy applies regardless of the grading option you have chosen.

*Disability Services*:
Accessibility Services (Mesa Vista Hall 2021, 277-3506) provides academic support to students who have disabilities. If you think you need alternative accessible formats for undertaking and completing coursework, you should contact this service right away to assure your needs are met in a timely manner. If you need local assistance in contacting Accessibility Services, see the Bachelor and Graduate Programs office.

**NO CHEATING AND ABSOLUTELY NO CELL PHONES!** Laptops may be used for note-taking. Please don't abuse this privelege!