Instructor: Prof. Zachary Kilpatrick  
Email: zpkilpat@math.uh.edu  
Office: Phillip G. Hoffman Hall (PGH) 671  
Office Hours: Monday 11am-12pm, or by appointment  
Course Website: http://www.math.uh.edu/~zpkilpat/teaching/math3321.html

Contacting me: The best way to get in touch with me is by email. Since I receive many emails a day, you should include “MATH 3321” in the subject line. While you should not expect an immediate response, I will try to get in touch with you within 24 hours. Lengthy conversations concerning specific problems or course material should not be done via email. Such discussions are better left to my office hours or with a tutor at CASA (see below).

Courseware: Since exams and quizzes are given through the Courseware website, it is very important that you have a working Courseware account. For information about the Courseware website, see http://www.math.uh.edu/~jmorgan/webct/

Textbook: Available online at Courseware (https://www.casa.uh.edu/CourseWare/Login.aspx). You must obtain an access code at the bookstore for $47.35.

Course: This course introduces a variety of concepts concerning ordinary differential equations. In particular, we will study many methods for solving differential equations that arise in engineering applications. Topics include first order ordinary differential equations; initial value problems; higher order differential equations; vector spaces, matrices, determinants, eigenvectors and eigenvalues; applications to systems of first order equations; and Laplace transforms. As this is the honor’s version of engineering mathematics, your aptitude for the subject will be tested above and beyond that of the standard engineering mathematics course.

Homework: Homework problems will be assigned about every week. Write out all of the steps of your solutions, so that you can better understand the concepts of the course through practice. You will hand your completed homework in AT THE BEGINNING OF LECTURE, starting Wednesday September 5. Subsequent due dates will be posted on the course calendar below. Late homework will NOT be accepted. Your homework will not be returned.

In-class problems: Most lectures, I will give one or two short problems for you to solve. These may be discussed with your neighbor. At the end of class, you will hand in your solutions for them to be graded.

Online Quizzes: Regular online quizzes will be given through the CASA website http://www.casa.uh.edu every week or so. See the course calendar on the website for dates. On them you will be responsible for applying any and all concepts that have been taught prior
to the quiz date. You can attempt each quiz up to 19 times. The highest grade will then be used for your score.

**Exams:** Three midterms and a final exam are given during the semester in CASA (located on the second floor of Garrison). Access the scheduler for these exams by logging into CourseWare at http://www.casa.uh.edu/. Exam problems will be based upon material from lecture, homework, and online quizzes. Each exam will consist of both multiple choice and written questions. The multiple choice questions will be machine graded. The written questions will be graded by me and/or the grader. The timespans for them are Sept. 27-29 (Exam 1); Nov. 1-3 (Exam 2); Dec. 6-8 (Exam 3); and Dec. 17-19 (Final). **No make-up exams are given, save for extraordinary circumstances. You must provide verifiable and convincing evidence of that which prevents you from attending. Also, advanced warning of such an absence should be given.**

**Center for Academic Support and Assessment (CASA):** CASA was designed by the Department of Mathematics to provide academic support to its students. CASA offers two main services: that of tutoring and testing. CASA Tutoring center offers tutoring to all students enrolled in undergraduate mathematics courses. It is located in room 222 – Garrison Gym. Students can seek one-on-one tutoring for help with homework and exams preparation for their math classes. Students can also use the workstation with more than 35 computers to access course materials, watch streaming lectures, or take their weekly online quizzes. CASA Testing Center is located next door to the tutoring center in room 221. Hours are listed on the website: http://www.casa.uh.edu/casa/

**Grading:** Your final grade is based on the following:
- Three midterm exams: 45% total (15% each)
- Final exam: 15%
- Online Quizzes: 15%
- Homework: 15%
- In-class problems: 10%

**Academic Integrity:** Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Houston Policy on Academic Honesty will incur a minimum sanction of a score of zero for the assignment or exam in question. Additional sanctions may be imposed, depending on the severity of the infraction. More information is available at http://www.uh.edu/academics/catalog/policies/academ-reg/academic-honesty/.

**Students with Disabilities:** If you have a disability that requires special testing accommodations or other classroom modifications, you need to notify both the instructor and the Center for Students with Disabilities by the end of the first week of the term. You may be asked to provide documentation of your disability to determine the appropriateness of accommodations. For more information see their website: http://www.uh.edu/csd/

**Class Philosophy:** *In my experience, math is best learned through rigorous practice.* If you have any trouble with any of the concepts or problems encountered in the course, do not hesitate to come talk to me or a tutor at CASA. Since ideas will build on each other throughout the semester, it is best to seek help as soon as possible. I will do my best to help you learn and enjoy the material. The more effort you put into the class, the more you will learn, and the more you will enjoy it.