MATH 221: Applied Differential Equations (Honors)

- Course Information

  Class number: 33879
  Class meetings: Strong Hall 30, TR 9:30AM–10:45AM
  Grade: Homework (150), Quizzes (100), Project (50) and Exams (400)
  Office Hours: TR 11:00–12:00PM, or by appointment
  URL: http://www.math.ku.edu/∼moh/teaching/M221/M221.html

- Purpose: This course is an introduction to the most basic concepts and methods in solving ordinary differential equations. The emphasis of this course is on problem-solving.

- Required Textbook : *Elementary Differential Equations and Boundary Value Problems, 9th Edition, by Boyce and DiPrima. Published by John Wiley & Sons, Inc.*

- Homework: Homework problems are posted on the course website. I encourage you to solve all these problems. The homework is assigned to give you practice and to help you identify where you are having trouble so that you can ask for help. It will be collected every Thursday. Assignments due at the beginning of class. NO LATE ASSIGNMENTS ACCEPTED.

- Quizzes: There will be regular quizzes in class. The quizzes will cover the material presented in class up to the date. NO MAKE-UP QUIZZES.

- Exams: There will be two in-class **Midterm Exams**, on **Sept. 30** and **Nov. 18**. There will also be one **Final Exam** on **Dec. 17**. If you have a valid reason for missing the exam, you should discuss with me **before** the exam. There will be NO MAKE-UP EXAMS.

- How to succeed: You **should** check the course website regularly for homework problems, solutions and other information. You **should** read the covered materials in the book before you come to the class.

- Policy on attendance: Students are expected to attend every class. If it is necessary to miss a class, it is the student's responsibility to make-up the missed material.

- Contact Information

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- Topics to be covered include:
  Chapter 1 Introduction
  Chapter 2 First order differential equations
  Chapter 3 Second order linear equations
  Chapter 5 Series Solutions of Second Order Liner Equations
  Chapter 6 The Laplace transform
  Chapter 7 Systems of first order linear equations
  Chapter 9 Nonlinear Differential Equations and Stability