

Math 201 Mathematical Methods for Physical Sciences II
Section 11, Winter Quarter 2007
MWF 8:30 a.m. in E203

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Office Hours: Probably Monday 10-11 a.m. and Wednesday 5-6 p.m., or by appointment.

Reader: Octavia Biris, octaviab@uchicago.edu

Textbooks: *Elementary Differential Equations and Boundary Value Problems* by William E. Boyce and Richard DiPrima, ISBN # 0-471-43338-1

Complex Variables: Second Edition, by Stephen D. Fisher, ISBN # 0-486-40679-2.

General Policy: There will be a one hour test in class during the quarter and a final exam at the end. Since there will be only one midterm, I might give you some take home quiz(zes) to practice. Homework will be usually assigned on Wednesday (on the Chalk Website and the Course Webpage). The homework will be due the following Wednesday at the beginning of class. You are encouraged to work together on homework problems, but everyone has to write up the solutions independently. Please order the pages and staple them. Unreadable homework will not be corrected. No late homework.

Hour test: 30%, Final Exam: 40%, Homework: 30%

Important Dates:

Hour Test: Friday, February 2, (in class)

Final Exam: Monday, March 11, 8:00 – 10:00 a.m. in E203 **Attention, the weekend before this Monday the time is changed, so it might feel like 7:00 am to you!**

It is the policy of the Department of Mathematics that the following rules apply to final exams in all undergraduate mathematics courses:

1. The final exam must occur at the time and place designated on the College Final Exam Schedule. In particular, no final examinations may be given during the tenth week of the quarter, except in the case of graduating seniors.

2. Any student who wish to depart from the scheduled final exam time for the course must receive permission from Paul Sally (his office is Ry350, his phone is 773-702-7388, his email is sally@math.uchicago.edu). Instructors are not permitted to excuse students from the scheduled time of the final exam except in cases of an Incomplete.

Some remarks concerning the Syllabus: The course will deal with Differential Equations and some Complex Analysis. We will roughly discuss the first six chapters of Boyce and DiPrima and the first two chapters of Fisher in the following order:

1. Boyce - DiPrima, Chapter 1 and Chapter 2: Introduction and First Order Differential Equations.
2. Boyce - DiPrima, Chapter 3 and Chapter 4: Second Order Linear Equations and Higher Order Linear Equations.
3. Boyce - DiPrima, Chapter 5: Series of Solutions of Second Order Linear Equations.
4. Fisher, Chapter 1: The Complex Plane.
5. Fisher, Chapter 2: Basic Properties of Analytic Functions.
6. Boyce - DiPrima, Chapter 6: The Laplace Transform.