

Math 345A Course Syllabus

Instructor: Dr. Fred Park

1 Course Description

This is a semester long first course in the theory of first-and second-order ordinary differential equations including their series solutions, introduction to Laplace Transforms with applications, including the solutions of differential equations, systems of ordinary linear differential equations, introduction to Fourier Series and integrals with applications, difference equations, partial differential equations with applications, introduction to the boundary and initial value problems and their applications. Also other selected topics in ordinary and partial differential equations depending on the particular emphases of the students in the class.

2 Instructor Information

Instructor: Dr. Fred Park
email: fepark@whittier.edu
webpage: www.fredpark.com
Office: Science 105D
Phone: 562-907-4200, ext. 4880
OH's: MWF: 3:30-5pm or by appointment

3 Course Information

Times and Location: MWF 2:30-3:20 in SC 301
Textbook: "Differential Equations and Boundary Value Problems" 8th ed. by Zill and Wright

4 Course Breakdown

Scheme #1:

- HW 20%
- Class Presentation 10%
- MT 30%
- Final 40%

Scheme #2

(Emergencies Only!!):

- HW 20%
- Class Presentation 10%
- Final 70% ← high stress!

I highly recommend you taking both midterm exams since scheme #2 is only for emergencies. I will automatically take the higher of both schemes at the end of the course when determining your final grade.

5 Grading Scale

In this course, I will utilize an A-F scale with +/- grading. The percentage breakdowns based on the highest average from scheme #1 and #2 above are as follows:

- 90-100% A Range
- 80-89.9% B Range
- 68-79.9% C Range
- 58-67.9% D Range

The minimum grading guidelines in terms of percentage of the class are as follows:

- 20% of the class will be in the A Range
- 30% of the class will be in the B Range
- 35% of the class will be in the C Range

To obtain an “A” grade in my course, you will have to work very hard. In general, there are no easy “A’s” in my courses.

6 Exam Dates

The exam dates are set in stone and will not change. Please write these down in your scheduler ASAP.

- MT (Take Home): Distributed Weds March 11th 5pm. Due Fri March 13th by 5pm.
- Final: Monday May 11th from 10:30-12:30 in TBA

7 Homework

Class Presentation

You will need to present one problem to the class detailing how it is solved. More details from Instructor later in the semester.

Computer Labs

This course will involve some computer work with Matlab, a high level programming language and industry standard in science and engineering. The class will be a Bring Your Own Device (BYOD) in regard to computers. If you have a laptop with wifi, you will be able to access the software from any location on campus. If you do not have a laptop, you can borrow one from library. I will specify days for you to bring in your computer.

8 Study Time and Class Expectations

For every 1 hour of lecture you should be studying 3 hours outside of class. That is at least 9 hours a week outside of class of studying and HW. Math is a difficult and time consuming subject. Please keep up with the work and do not ‘Cram’ for any exams or HW deadlines since this usually results in very poor results. I recommend at least 15 hours a week of study outside the classroom for this course.

9 Cheating

Cheating will absolutely not be tolerated in any way, shape, or form in this course!! I have not had any issues in the past and do not plan on starting. Cheating in any form will be recorded and the student will be sent to the Dean. Cheating has far reaching consequences that can affect your future career path. Quite simply put: Don't Do It!

10 Group Work

I encourage group work and you may work together. But you must have your own write ups of your HW and only if you completely understand the problem being solved.

11 Active Learning

Will consist of both group work and individual presentations. Your presentation will be graded. The audience will also be graded on their ability to ask insightful questions and to find any errors in the presenters work.

12 Disruptive Behavior

Disruptive behavior will absolutely not be tolerated in any way, shape, or form in this class. This includes cell phone use (talking, texting, email, etc), computer use, talking, chatting, or any other general disruptions. If you are being disruptive in the class to the instructor and your fellow students, you will be asked to leave.