

**Spring 2020 Syllabus Addendum
Transitioning to Online Instruction**

Math 222 – all coordinated sections
Course Title: Differential Equations
Coordinator: Professor R. Goodman
Date: March 24, 2020

We are making several changes to the Math 222 syllabus to facilitate distance learning.

Course status: This course covers all or part of Chapters 1, 2, 3, 5, 6, 7, and 10 of the 11th edition of Boyce and DiPrima, as well as two short supplements to Chapter 10 that help to connect this material more tightly to the rest of the class. When the course was interrupted, the different sections of the course were supposed to be covering Chapter 5, sections 1 and 2. Some instructors had finished 5.2 while others had not yet started 5.1. Fortunately, these sections are fairly independent of the material in later sections. In particular, section 5.1 contains a review of infinite series and power series material the students would have learned in a second-semester calculus while 5.2 presents an application of power series methods. In order to get us all on the same page, we will start the distance learning session with section 6.1. Section 5.2 will be dropped for this semester. We will return to section 5.1 just before we cover Fourier series in Chapter 10.

The original syllabus contains two supplementary sections for Sections 10.1 & 10.4. These may have to be dropped depending on time.

Math 222 will switch to a flipped classroom. Video lectures are being prepared and will be uploaded to Canvas. Before each class, students will be assigned to watch and take notes on a video lecture and to try some specific problems that follow the pattern given in the demonstration. Class time will be spent in Webex meetings going over problems and addressing student misconceptions.

The class will add online homework via WileyPLUS and access to an electronic edition of the textbook from VitalSource. WileyPLUS is integrated with Canvas and the students do not need to pay and should not need to enter a code.

A new canvas class combining all 11 sections of the class has been created. This will be used to distribute the lecture videos and to hold the common exams. Online homework is due at 11:45 pm the Sunday following the lecture.

Week	Book Chapters
March 23—27	Introduction to online learning, 6.1, 6.2, 6.3
March 30—April 3	6.4, 6.5, 6.6
April 6—10	7.1, 7.2, 7.3
April 13—17	7.4 (briefly), 7.5, 7.6, discussion of MATLAB assignment 2

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April 20—24	Common Exam 4/22, 5.1, maybe 10.1
April 27—May 1	10.1, 10.2, 10.4
May 4—May 6	Review for final

The addition of WileyPLUS assignments, as well as the trying circumstances under which Exam 2 was taken, have necessitated a change in the grading for the class:

Homework & Quizzes	10%
MATLAB	6%
Common Midterm Exam I	18%
Common Midterm Exam II	14%
Common Midterm Exam III	14%
WileyPLUS assignments	8%
Final Exam	30%