# Math 244 Syllabus, Spr 2021

INSTRUCTOR: Dr. Hundley
OFFICE HOURS: Online office hours will be announced and posted on Canvas.
EMAIL: hundledr@whitman.edu
CLASS WEBSITE: We have two websites, both will be updated as the course progesses. One website is on Canvas, and the other is open to the world on the regular web. Things like a daily log and links to course materials will be on the regular web (so you do not need extra passwords or accounts to access this). This site is below, which will also turn up using a Google search:

`http://people.whitman.edu/~hundledr/courses/M244.html`

- TEXT: Elementary Differential Equations (with or without Boundary Value Problems) $9^{\text{th}}$ Edition, by William Boyce and Richard DiPrima.

  At the end of this course, you will understand how differential equations are used to model some particular physical phenomena. You will understand what it means to *solve* a differential equation using algebraic methods and graphical methods, and what it means to analyze the behavior of said solutions.

  Generally, we will cover chapters 2, 3, 6 and topics from 5, 7 and 9 as time allows.

  Since this semester will be online, this course will mostly be asynchronous, meaning that you can work through the material when you are able. I will be asking to meet with each of you as we go along so that I can get to know you- Some of you are not in the Pacific time zone, so I'll try to work with you to find good times to meet.

  **A good idea:** Reserve MWF at 11 in your schedule for working through the material in this course. It would be good to actually schedule time every day, but this gets you started. The **key to success** in online learning is to stay up to date with the material!

- **Technology:**
  - All lectures will be freely available on YouTube, and the links will be provided as we go. There are a lot of free resources online, and I will try to point them out; some are better than others. My videos will be short- no more than about 10 minutes per video- so if we were in class, we would probably go through the equivalent of 3-4 of these videos per class session.
  - You'll need a device from which you can watch these lectures- It can be a laptop, a desktop computer, a phone or a tablet. All of these are (or will be) linked from YouTube.
  - You'll either need a smartphone or a good friend that has a smartphone in order to scan your work and upload it to Canvas. There is a sample video on both class websites that show a sample.
  - We will occasionally use software available online (for slope fields, for example). We may have some additional homework that utilizes online software (will be announced as we go).

- **Grading Criteria.**

1. HOMEWORK: Homework is assigned daily. The homework will include practice problems, and more complex problems. You will not turn in all the problems, only the problems marked with an asterisk. These will be turned in twice a week. You may drop the two lowest HW scores. The homework average will be worth 10 percent of your overall grade.

   **NOTE:** Late homework will be assigned a reduced grade. No late homework will be accepted after the exam for that material has been given.

2. GROUP QUIZZES: If quizzes work out, we'll have one quiz per week (starting Week 2) that you may work on as a group, although each member of the group should provide answers (in Canvas). In this case, the average of your group quizzes will be 10 percent of the overall course grade.

   **If we don't end up having group quizzes, then HW will be weighted as 20%.** In the past, there have been some technical difficulties setting this up.

3. EXAMS: There will be three exams and a final exam, and each is worth 20% (for a total of 80%) of the overall grade. More details will be provided about each exam as we go, but they will generally be "open notes" and "open book", but they will also be timed exams- the idea being that you will not have enough time to research every question in the textbook, so you'll still need to memorize a few things, and be familiar with the techniques we develop in class.

GRADING: Grading is done on a standard scale:

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| $A = 92 - 100$ | $A- = 90 - 91$ | $B+ = 88 - 89$ | $B = 82 - 87$ | $B- = 80 - 81$ |
| $C+ = 78 - 79$ | $C = 72 - 78$ | $C- = 70 - 71$ | $D = 60 - 69$ | $F = 59$ and below |

- **Assistance:** Since we're not meeting in person, it will be very important for you to stay in contact with me if you start to fall behind in class, or fall ill, or are just having trouble.

- **Learning Disabilities.** I can work with you if you have a learning disability, but please give me enough advance notice. Some learning disabilities may require assistance from the Academic Resource Center, so please leave us time to work you if needed.

- **Academic Honesty.** Academic standards will be *strictly* adhered to as outlined in your student handbook. However, if you work through the text over the semester and give the material your best effort, you really should not find yourself needing to cheat. If you are going into any of the sciences, there will be material from this class that you'll need to understand, so put the time in now.

- **Online Etiquette** Treat your fellow students as you would like to be treated. We will all experience some frustration at having to use technology like this for perhaps the first time, so your patience is especially appreciated. Please note that recording other students (or me, for that matter!) without their express permission is not allowed.