

Math 125 Syllabus, Fall 2020

INSTRUCTOR: Dr. Hundley

OFFICE HOURS: Online office hours will be announced and posted on Canvas.

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CLASS WEBSITE: We have two websites, both will be updated as the course progresses. 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/M125.html>

- **Info:** Calculus I, Math 125. Section C was originally scheduled for MWF at 10, and Section D was originally scheduled for MWF at 1. 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 10 or MWF at 1PM now 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!

- **Required Text:** Calculus, Early Transcendentals. By James Stewart, 7th Ed. (Please note- This is NOT the current edition) We will be covering a few topics in Chapter 1, but the bulk of the material is Chapters 2-5 this semester.

- **Technology:**

- Since this semester is online, we will allow use of a basic scientific calculator for homework and assessments. Your calculator should be able to compute an exponential like e^2 or a trigonometric expression like $\sin(2.1)$. A graphing calculator is not required.
- 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. For example, “Professor Leonard” has a full set of lectures online for Calculus, and they are using our textbook. His videos are widely watched- They go into some depth, but that also means that they get very long (between 1 and 3 hours each!). 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. If you are not able to access YouTube, please let me know.
- 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. We'll talk about this later and there will be a practice homework set to work on.

- **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:** Each week, I will assign you to a group of 3 to 4 students, and will provide you with a list of questions to answer. We'll set up a formal meeting time, but you can also email each other to set up your own meeting schedule. This "quiz" is mostly designed for you to get to know the other members of the class. You'll upload the results of the group quiz once a week (probably at the end of each week). The average of your group quizzes will be 10 percent of the overall course grade.
3. **EXAMS:** There will be three exams and a final exam, and each are worth 20% of the overall score. We'll have review questions in advance of the exams, and more details will be distributed before each exam.

GRADING: Grading is done on a standard scale:

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

Learning Goals

Calculus I satisfies the *Quantitative Analysis* part of the "distribution" so we have some learning outcomes that are part of this distribution. These are

- Perform computations associated with a model and make conclusions based on the results.
- Represent, communicate, and analyze ideas and data using symbols, graphs, or tables.
- Analyze and interpret data using statistical methods. (Not applicable for us)

We also have specific learning goals for the class. Really, if you want a list, I would like for you to become as fluent as possible with the three fundamental ideas of Calculus: The Limit, The Derivative, and the Integral. However, these ideas set the stage for a lot of other things- continuity, mathematical modeling, the four "value" theorems of Calculus, related rates, and so on. A full list would actually look a lot like the table of contents for Chapters 1-5, so I won't list them all here.

A few final thoughts...

Calculus represents a big step in your mathematics education. In geometry and algebra, things didn't move. Calculus was originally conceived as a way of analyzing things that move, and some 330 years later, we're still using those tools.