

MATH 150 Differential Calculus with Review

Spring 2019 Syllabus

Instructor:	Dr. Colin Starr (he/him/his)	Office Hours:	MWF 9:00-10:00
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Required Text: *Calculus I with Integrated Precalculus*, by Laura Taalman (ISBN 1-4292-4073-3).

Goals: This course is an introduction to differential calculus. Upon successful completion of Math 150 the student should be able to:

1. Justify and explain their steps in problem solving. In particular, students should be able to construct correct and detailed mathematical arguments to justify their claimed solutions to problems.
2. Explain the idea of a limit and evaluate the limit or estimate the limit using a calculator or from a graph.
3. Describe a derivative as the limit of an average rate of change and as the slope of a tangent line to a curve.
4. Understand and interpret the derivative as a rate of change, calculate derivatives, and apply derivatives to solve problems.
5. Understand and interpret the definition of the definite integral and the Fundamental Theorem of Calculus.

Assessment: Your grade will be computed as follows:

WeBWorK:	350 points
Homework:	50 points
Worksheets:	100 points
Midterm Exams:	3@ 100 points each
Final Exam:	200 points
Total:	1000 points

Grades must fall into the categories below to guarantee the corresponding letter grade. Plus and minus grades are at my discretion but generally correspond to trends in your performance.

Letter Grade	A	B	C	D	F
Minimum Percentage	90	80	70	60	
Minimum Points	900	800	700	600	

As a general rule, you should not expect any “curving.” The grades correspond to a level of achievement, not a relative ranking in the class. However, if you focus on learning what we study, the grades will take care of themselves. They should be among the least of your worries.

WeBWorK: This is an on-line homework system. The problems will be very much like those in the text, so the text problems can give you additional practice. Note that WeBWorK is worth 40% of your grade. In WeBWorK, you may keep trying problems you miss until you get them right. This means that **everyone** should get 100% on homework, so take advantage of the system by not giving up. At the same time, you should **not** just guess at answers until one works; this is a counterproductive waste of time. If you are struggling, **come see me!** The address for our WeBWorK site is <https://secure.willamette.edu/webwork2/Math249-Starr/> and there is a link on our course homepage. Please be sure to do more than just the WeBWorK. WeBWorK is the graded portion, but it is not sufficient by itself. WeBWorK assignments will become available before class time on the morning they are assigned. They are due at 11:59 PM on the due date, and answers will then be available. You are very welcome to come by my office with questions.

Homework: I will select a few WeBWorK problems each day for you to write up and hand in. WeBWorK only cares about whether the answer is correct. I, however, also care about how you get to the answer and how you communicate your work. At exam time, it will be important that you communicate your process

to me clearly, and the homework is a low-stakes chance to practice that. Ideally, you will carefully write out your work for all of your WeBWorK problems whether you hand them in or not, so this should not be much additional burden. Note that I **won't** be checking your answers on these – WeBWorK does that. I'll just be checking your general approach.

Please note: You should expect to spend at least three hours outside of class for every hour we have in class. Part of that time is homework/WeBWorK, and part is general studying.

Worksheets: We will have regular group worksheets to practice new ideas together. You will need to work **with a group**. We will have some time in class to start these, but you may need to spend time outside of class to finish them.

Exams: There are three midterm exams; the dates below **are subject to change** if necessary.

Exam I	Friday, September 20
Exam II	Wednesday, October 16
Exam III	Wednesday, November 13

The final exam is Friday, December 13, 8-11am in our classroom. You may not make up any missed exam. If an emergency arises, **contact me prior to the exam**.

Please note: Written responses to all questions must be in complete sentences. I expect correct use of grammar, spelling, and punctuation; your grade will reflect this! I also expect your work to be neat.

Special Needs: If you have special needs (e.g., for a documented disability), it is your responsibility to approach me at least a day in advance of the need for accommodation. To receive accommodation, you must be registered with Disability Services; this office is located in Bishop Health Center in Baxter Hall. (Phone: (503) 370-6471.)

Cheating: Cheating will not be tolerated. The minimum penalty for cheating is a 0 on the assignment and a formal notification to the dean. I encourage you to work together on your homework, but your final write-up **must** be your own. **NOTE:** It is your responsibility to avoid even the **appearance** of cheating. See the website below for the Willamette policy on cheating and plagiarism. http://www.willamette.edu/cla/catalog/resources/policies/categories/plagiarism_cheating.php

Classroom Comportment: We will all make mistakes, and these are an essential part of learning. The classroom environment must be tolerant and welcoming so that everyone feels free to contribute without fear of ridicule or harassment. Treat everyone with respect, and we can all learn from each other.

You are WELCOME! My door is usually open. The office hours above are the times I will definitely be in my office (or nearby), but you are welcome to come by at other times as well. Make sure you come see me whenever you have a question. Plus, that's where I keep the Red Vines.