

CALCULUS III: Math 126 C and D - Spring 2020

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IMPORTANT NOTE: Please understand that this syllabus is subject to change. Any changes will be announced through class email.

Office Hours: TBD, use discussion board for HW questions, email me with bigger questions, and there will be live-stream times to ask questions during class.

Texts: The only **required** material is a webassign access code which goes with the textbook, *Multivariable Calculus*, by James Stewart, 8th Edition. If you took Math 125 at UW and already purchased full access, then there is nothing new to purchase. If you are new to UW calculus, then you will need to purchase access. See my course website for links on the least expensive options (cheapest online option is here <https://math.washington.edu/webassign>)

Course Objectives: Math 126 covers a collection of somewhat diverse topics: vectors and vector functions, polar coordinates, calculus on vector functions, dot products and cross products, lines and planes, curvature, multi-variable functions, partial derivatives, optimization, tangent planes, double integrals, Taylor polynomials and Taylor series.

Grading: The weight for each part of the course is given below. An example to show you how to compute your grade is also given.

Category	Weight	example student percentages	
		Your Percentages	Your Scores
Participation/Quizzes	10	90%	= 9
Homework (Tues/Thurs)	10	95%	= 9.5
Exam 1 (THUR, April 16)	16	75%	= 12
Exam 2 (TUES, April 28)	16	88%	= 14.08
Exam 3 (TUES, May 12)	16	94%	= 15.04
Exam 4 (TUES, May 26)	16	72%	= 11.52
Exam 5 (SAT, June 6)	16	89%	= 14.24
Total	100		= 85.38

This example student would get a 85.38 out of 100 for the course which is approximately a 3.0 on my estimated grade scale (see the course website). The expected, and departmentally required, median grade for the class is 2.9, so if you want a grade better than 2.9, then you need to score higher than half of your classmates. A grade of 2.0 is needed to move on to other courses that require Math 126. Typically, you need to score above 70% on all your exams to get a grade above 2.0. If you score below 50% in the course, then you will get a grade of 0.0.

Participation: We will have several things that count for participation including:

- *Weekly Reading/Watching Quizzes* - These will ask you quick questions that you should be able to easily answer if you watched lecture.
- *Posting to Discussion Board* - I am requiring that you make at least one post per week (for a total of 10 for the quarter). If you answer someone else's question that counts as two weeks of posts! So get posting.
- *Other Quizzes* - We will have some intro questions and practice exam quizzes which will be graded on participation.

Exams: The exams will be 50 minutes long and will be online and will be given at your usual quiz section time with the exception of Exam 5 which will be on Saturday, June 6th from 5:00-6:00pm (it will only a 1-hour final during but with your normal final start time). You will have a time window to take it and a set time from the moment you open it. More details to come.

Quiz Sections: During quiz section time we will either have TA's on the discussion board answering questions or on a Zoom live session. Either way, use quiz section times to ask homework questions and old exam questions.

Homework: Homework assignments will be assigned and collected via Webassign. Please log into webassign this week and add yourself to the course roster via the link: <https://www.webassign.net/washington/login.html> Homework will generally close at 11:00 pm on Tuesdays and Thursdays (see the course calendar for specific due dates). Make sure to log onto Webassign as soon as possible and attempt the first several homework problems to make sure you understand how everything works. Please note:

- Assignments are typically visible 7-10 days before they are due. You should *plan to complete all assignments at least two days before they are officially due!* The due date is just the last time you can submit answer. A good student will always be done with the vast majority of the assignments well before the due dates.
- For all the reasons above, *I will NOT grant homework extensions for any reason.*
- In order to account for any small issues of you forgetting an assignment or incorrectly clicking on a multiple choice, at the end of the terms I will round up by 3% on everyone's homework grade (but no one gets a homework grade above 100%).

Respect Issues: As I tell my kids, treat others like you yourself would like to be treated. So please be polite and respectful when asking questions or sending emails. We should all be working together.

Make-Ups: *Late work will not be accepted for any reason.* If you miss an exam due to **unavoidable, compelling, and well-documented** circumstances, your other exams will be weighted more heavily. If something unusual happens I expect you to be prompt in letting me know.

Calculators and notes: A Ti-30x IIS Calculator (about \$15 at the bookstore) is the **ONLY** calculator that we allow on the exams! A single, **hand-written** 8.5 x 11 inch sheet of notes is allowed during exams. You may write on both sides.

Class Philosophy: There are two vital rules for success in my classroom.

1. THE HOMEWORK IS THE KEY: Mathematics is truly learned when **YOU** completely solve a problem yourself AND understand the underlying concepts and tools so as to be able to apply them to related problems. The lecture, tutorial sessions, and office hours are valuable tools in guiding you towards learning and discovery, but ultimately the concepts and solutions must be absorbed, understood, and applied by you alone. Treat each problem as an exam question and ask yourself, "Can I answer this question without any help and do I understand the underlying principles that this problem conveys?" If your answer is no to either of these question (or if you hesitate at all), then you need more studying and practice.

2. ASK FOR HELP: Most students will hit a wall at some point during the course. Some can't handle the large workload, while others find difficulty with specific concepts in the course. When these times arrive remember to ask for help. Come to your T.A., come to me, ask your classmates for help, visit the math study center and/or visit the student counseling center. If you are still stumped send me an email. Please, please, please find help earlier rather than later.

Resources:

- The class website can be found at: <http://www.math.washington.edu/~aloveles/> You will find homework assignments, review sheets, grade information, a calendar for the term, and various bits of other useful information there, including past exams and quizzes, TA information, etc.
- The Center for Learning and Undergraduate Enrichment (CLUE) holds drop-in tutoring sessions every weekday evening in Mary Gates Hall Commons. See <http://depts.washington.edu/clue/>.