CALCULUS III: Math 126 A, C and D - Fall 2020

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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 intergrals, 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, Oct. 15**)	16	75%	= 12
Exam 2 (**THUR, Oct. 29**)	16	88%	= 14.08
Exam 3 (**THUR, Nov. 12**)	16	94%	= 15.04
Exam 4 (**TUES, Dec. 1**)	16	72%	= 11.52
Exam 5 (**SAT, Dec. 12**)	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). I expect the median to be around 3.0. A grade of 2.0 is needed to move on to other courses that require Math 126. Typically, you need to average 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:
• *Quizzes* - Likely around 4 lecture quizzes spread out throughout the term. I will announce these ahead of time (usually a week ahead of time) and answers for these quizzes will come from lectures.
• *Posting to Discussion Board* - I am requiring that you make at least one post at some point between each exam (so 5 posts total). When you make a post, take a screenshot and submit that in the "Discussion" Assignment to get credit. This is worth a very, very small part of your participation, but I truly just want you to visit the discussion board regularly as I believe it will really help.
• *Worksheets* - We will have some worksheets and assignments in quiz sections.
• *Surveys* - There will be some surveys.

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, December 12th from 5:00-6:00pm (it will only a 1-hour final during but with your normal final start time). You will be expect to log onto your normal Zoom session during your exam (and have your chat set to private). This allows you to ask questions, privately in the chat window, during the test and it allows the TA to make announcements and deal with problems. If there is a technical problem during the test this gives you a way to immediately let your TA know. We will have a practice exam in week 2 to show you how it will work.

Quiz Sections: You are expected to attend all quiz sections. For most quiz sections we will have some form of participation.

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 hestitate 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/**.