

## CALCULUS III: Math 126 A and B - Winter 2016

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**Office Hours:** Mon, Wed 2:00 - 3:30 pm, and Fri 2:00-3:00pm all in my office. And I will typically be available Mondays, Wednesday and Fridays from 9:10-9:30am outside Johnson Hall 102 (my first lecture hall) and from 12:15-12:30pm outside Gould Hall 322 (my last lecture hall).

**Texts:** The only **required** material is a webassign access code which goes with the textbook, *Multivariable Calculus*, by James Stewart, 7th Edition. If you took Math 125 at UW and already purchased full access, then there is nothing new to purchase. If you didn't take Math 125 at UW, you will need to purchase webassign access and you should follow the instructions here:

<http://www.math.washington.edu/~m124/WebassignInstructions.pdf>

**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
Worksheets, Quizzes, Participation ( <b>Complete Tues/Thurs</b> )	2	90%	= 1.8
Homework ( <b>Due Tuesday and Thursdays</b> )	10	90%	= 9.0
Midterm 1 ( <b>TUES, Feb. 2</b> )	26	78%	= 20.28
Midterm 2 ( <b>TUES, Mar. 1</b> )	26	90%	= 23.4
Final Exam ( <b>SAT, Mar. 12</b> )	36	86%	= 30.96
Total	100		= 85.44

This example student would get a 85.44 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 75% 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.

**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 be due 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 8 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. After the due date, answers and full solutions become visible and you should definitely go back and review them.
- For all the reasons above, **I will NOT grant homework extensions for any reason.** If you have an emergency the day the homework is due (internet down, sickness, family emergency, etc), you will NOT get an extension. So let me reiterate, you **MUST** be done with the vast majority of the homework at least two days before it is due.
- 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 5% on everyone's homework grade (but no one gets a homework grade above 100%).

**Quiz Sections:** You will have quiz sections on Tuesday and Thursday with a teaching assistant (T.A.). Typically, one of the quiz sections your TA will be working extra examples or adding onto the content you saw in lecture. And typically the other day will be more devoted to homework questions. On some days, you will work on the problem with your TA and turn them in at the end of the quiz section. Your TA will give you a participation grade. You need to help and guide your TA by looking at the problems before quiz section and asking lots of questions.

**Respect Issues:** As in all your life, you should treat others like you yourself would like to be treated. If you have special circumstances where you need to arrive late or leave early, please contact me ahead of time and sit close to the door so that you do not distract your classmates when you enter or exit. If you want to listen to your iPod, text message your friends, or play around on your computer, then don't come to class. Such behavior is distracting to your classmates, so please put away and turn off your electronic devices before class. And please be polite and respectful when asking questions or sending emails. We should all be working together, not against one another.

**Exams:** The midterms will be 50 minutes long and will be given at your usual quiz section classroom. The Final Exam is cumulative and will be held on Saturday, March 12th, 5:00-7:50pm.

**Make-Ups:** *Late work will not be accepted for any reason.* You will be allowed to miss one worksheet without penalty to your grade. In case of observance of religious holidays or participation in university sponsored activities, arrangements must be made at least 2 days in advance for worksheets and 1 week in advance for exams. You will be required to provide documentation for your absence. *Make-up exams will not be given.* If you miss an exam due to **unavoidable, compelling, and well-documented** circumstances, your final exam will be weighted more heavily.

**Calculators and notes:** A Ti-30x IIS Calculator (\$14.95 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 Math Study Center (Communications B-014) is open to students in Math 126. The Center provides a comfortable place and a supportive atmosphere for students to come together and study, in groups or individually. The center is staffed by TAs and instructors.

See <http://www.math.washington.edu/msc> for more information.

- The Center for Learning and Undergraduate Enrichment (CLUE) holds drop-in tutoring sessions every week-day evening in Mary Gates Hall Commons. See <http://depts.washington.edu/clue/>.