CALCULUS III: Math 126 E - Summer 2011

**Lecturer:** Leslie Min Wu  
**Email:** wumin@u.washington.edu  
**Office:** Padelford C-8M  
**Web page:** www.math.washington.edu/~wumin/  
**Office Hours:** Monday&Wednesday 10:50am-11:50am

You are welcome to drop by my office without an appointment during any of these times. This lecture is my last class of the day, so you are also welcome to walk and chat with me after class on Monday, Wednesday or Friday. Even if you don’t have specific questions, I encourage you visit my office hours to chat from time to time. I am always willing to expand on a topic, give advice, tell you about myself, whatever, so please stop by so I can get to know you.

**Textbook:** *Multivariable Calculus*, by James Stewart (this is a custom text for UW – you may also use Calculus: Early Transcendental, 6th Edition, by Stewart)

**Other Required Materials:** During the last few weeks of the quarter, we will be using a set of notes on Taylor polynomials and Taylor series. You will be expected to download these notes from the course website. The direct link is:  
http://www.math.washington.edu/_m126/TaylorNotes.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.

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
<th>Your Percentages</th>
<th>Your Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worksheets and Participation</td>
<td>3</td>
<td>90%</td>
<td>= 2.7</td>
</tr>
<tr>
<td>(Complete Tues and Thurs)</td>
<td></td>
<td></td>
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<tr>
<td>Homework (Due Thursdays in sections)</td>
<td>25</td>
<td>85%</td>
<td>= 21.25</td>
</tr>
<tr>
<td>2 Midterms (THUR, July 14 and Aug 4)</td>
<td>30</td>
<td>78%</td>
<td>= 23.4</td>
</tr>
<tr>
<td>Quiz</td>
<td>10</td>
<td>90%</td>
<td>= 9</td>
</tr>
<tr>
<td>Final Exam (FRI, Aug 19)</td>
<td>32</td>
<td>87%</td>
<td>= 27.84</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
<td>= 84.19</td>
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</tbody>
</table>
This example student would get 84.19 out of 100 for the course which is approximately a 3.0 on the current grade scale (the standard grade scale can be found on my website and is subject to change at my discretion in order to fairly distribute the grades).

**Lecture:** Lecture is on Monday, Wednesday, and Friday. You will be held responsible for all information that is discussed during lecture.

**Quiz Sections:** You will have quiz sections on Tuesday and Thursday with a teaching assistant (T.A.). You will work on problems with your TA, who will check the attendances and give you a participation grade. On Tuesdays, your TA will have no prepared agenda and you, the students, will guide the discussion of the class by asking questions. PLEASE, PLEASE, PLEASE COME PREPARED TO ASK QUESTIONS!!! The TA may even completely work through some of the problems. You need to help and guide your TA by looking at the problems before quiz section and asking lots of questions. RESPECT YOUR TA!!! Your TA is a student as well. Many of them are taking hard classes, preparing for doctoral preliminary exams, and/or working on writing 100 page dissertations. In addition, they are paid a relatively meager wage. Before you criticize your TA, you should ask yourself what you would do in their position. The point is: Help them out by bringing good questions to quiz section and make sure to thank them for the time they are giving you.

**Respect Issues:** Disrespect will not be tolerated. As with all your life, you should treat others better than you yourself would like to be treated. Come to class on time (better never than late) and do not leave class early. If you can 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. Do not use electronic devices during class. If you want to listen to your iPod, text messages your friends, or plays around on your computer, then don’t come to class. This is completely disrespectful to me and your classmates so please put away and turn off your electronic devices before class. Finally, please show me respect when you have a question for me or when you send me an e-mail. You are well within your right to ask about homework and exam grading, but you will get nowhere if you are argumentative or rude. I will do everything I can to help you all succeed in this course. I put in a lot of extra time and effort to help each of you in any way that I can. And this effort along with the effort of your TAs deserves and demands your respect! We should all be working together, not against one another.

**Homework:** The homework for this course will be on WebAssign. Here is the link to the login page for WebAssign. Here is a jpg with instructions on how to log in. Please see that calendar and homework schedule on the website for more details.
Notice that **NO LATE HOMEWORK WILL BE ACCEPTED BY ANY REASON!**

**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 Friday, August 20th (the time and location will be announced later in the course). **We NEVER give exams earlier than the scheduled exam dates.**

**Make-Ups:** Late homework will not be accepted for any reason. You will be allowed to miss one homework assignment 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 quiz 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:** You will need a scientific calculator for Math 126. It must have trigonometric functions, like sin and cos, as well as logarithms and exponentials (ln and exp). **GRAPHING CALCULATORS ARE NOT ALLOWED** on quizzes and exams in Math 126. A graphing calculator is any device with a multiline display that has the ability to graph mathematical functions. See your TA before the first midterm if you are not certain if your calculator is acceptable. 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:** In mathematics, breakthroughs in learning rarely occur while reading the text or attending lecture. 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 still stumped send me an email. You are never more than a step away from getting help. These are just a few of...
your options. Please, please, please find help earlier rather than later. You are all smart enough to do well in this course; the question is whether or not you are determined enough.

**Resources:**

- A link to the class website can be found at: [http://www.math.washington.edu/~wumin/](http://www.math.washington.edu/~wumin/). 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/~perkins/MSC/](http://www.math.washington.edu/~perkins/MSC/) for more information.
- 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/](http://depts.washington.edu/clue/) for more details.
- The University of Washington is committed to providing access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodations contact the Disability Services Office at least ten days in advance at: 206-543-6450/V, 206-543-6452/TTY, 206-685-7264(FAX), or dso@u.washington.edu.
- The Student Counseling Center provides academic skills workshop on a variety of topics including stress management test anxiety and time management to help you succeed at the University of Washington. If any of these is an issue for you, check out the schedule of workshops at [http://depts.washington.edu/scc/studyskills.html](http://depts.washington.edu/scc/studyskills.html).