

Application of Calculus to Business and Economics: Math 112 - Winter 2019

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Office Hours: Mon and Fri 3:00 - 4:00 pm in the **math study center** and Mon, Wed, Fri 11:00-11:30 at the board outside ECE 105 on the lower level.

Text: *Applied Mathematics for Business (12th ed.)*, by Harshbarger/Reynolds.

Webassign: Every student must purchase an access code for Webassign in order to complete the homework. Webassign access includes an electronic copy of the text.

Other Required Materials (bring to each class):

- a clear plastic ruler
- a TI 30X IIS calculator

Math Study Center Information: The Math Study Center for Math 111/112 is located in Communications B-006 and is typically open Monday through Thursday afternoons (I will announce times in class). The MSC is staffed by TA's and instructors of Math 111/112 and is an ideal place to work on homework and study for exams. When you have a question, either raise your hand or put your name on the waiting list to receive help from one of our experts.

Course Objectives: Students will learn the concepts of differential and integral calculus with emphasis on applications to economics. Topics will include: rates of change, tangent lines, derivatives, accumulation, area, and integrals.

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

Category	Weight	Put your scores here	
		Your Percentage	Your Scores
Homework (Due Tuesdays and Thursdays)	15	92%	= 13.8
Participation (Activities and Test Preps)	5	90%	= 4.5
Midterm 1 (Thu, January 31)	22	76%	= 16.72
Midterm 2 (Tue, February 26)	22	84%	= 18.48
Final Exam (Saturday, March 16)	36	89%	= 32.04
Total	100		85.54

This example student would get a 85.54 out of 100 for the course which is approximately a 3.0 on my rough estimated grade scale which you can find online (the gradescale is subject to change in order so that the overall grade distribution meets departmental and university guidelines).

Various Grade Comments: I expect the median for the class to be 2.9. Typically, if you average above 75% on your exams, then you get a grade above 2.0. And if you average below 50%, then you get a 0.0. Those are just rough estimates based on experience. Ultimately, my grades will match, as close as possible, the guidelines set up for grade distributions in the UW Faculty Resource on which you can find here: <http://depts.washington.edu/grading/practices/guidelines.html>.

Homework: Homework will be administered by Webassign and will typically be due every Tuesday and Thursday night at 11 p.m. You will use a portion of each quiz section to ask your TA questions about the homework due that night. No extensions will be given to anyone for any reason.

Participation (Group Activities and Test Preps): A portion of most quiz sections will be dedicated to either working in groups on a problem-solving activity or practicing working old exam problems individually. The purpose of group activities is to get you to articulate your ideas and questions in small groups and have conversations about the material with your colleagues. The purpose of the individual test preparation problems is to give you the chance to practice working actual exam problems in a test-taking environment. For each group activity and test prep problem, you will receive a participation grade. Be on time, do the work, stay the duration, and you will earn the points for the day. You may miss two quiz sections without penalty to your grade. **There are no make-ups for any reason whatsoever (even if you have a doctor's note or a clear emergency).** Instead, don't miss any days and if you do get sick or if there is an emergency, then that can be one of your two miss days.

Exams: You will be allowed a **Ti-30x IIS Calculator (only this model)** and one 8.5 x 11 sheet (front and back) of **handwritten** notes for the exams. Other electronic devices will not be allowed. You may not share a calculator or a note sheet with another student on an exam.

Make-Ups: No extensions will be granted for homework to anyone for any reason whatsoever. No exceptions. Assignments are visible 7+ days in advance of their “closing” dates and we typically cover most the material needed to complete the assignment 2-5 days in advance. So there is no need to ever have an extension. You should just in your head pretend that the assignments are always closing two days before it actually says, then you will never come close to needing an extension (which I won’t give). You can only make up quiz sections activities if you are traveling for a UW affiliated event or if you are observing a religious holiday (in which case you must contact me via e-mail at least one week in advance). Otherwise, no absences are excused for quiz section activities and test preps. But remember you can miss two without penalty to your grade. Make-up exams will not be given. If you miss an exam due to unavoidable, compelling and well-documented circumstances (e.g., illness, transportation emergency), you should contact me right away. Once you provide documentation, your grade will be prorated, meaning your other exams and final will be weighted more heavily.

Respect Issues: Disrespect will not be tolerated. As with all your life, you should treat others as you yourself would like to be treated. Come to class on time (better never than late) and do not leave class early. 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. Do not use electronic devices during class (if you like to take notes on your laptop, then I ask that you sit toward the back or the side in order to not distract the students behind you). If you want to listen to your iPod, text message your friends, or play around on your computer, then don’t come to class. This is completely disrespectful to me and very distracting to 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 your respect. We should all be working together, not against one another.

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 lectures, quiz sections, 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/~aloveles/> You will find lecture handouts, all course materials, a schedule for the term, and various bits of other useful information there, including review sheets, 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/> 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 accommodation 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> .