

Calculus for Business and Econ: Math 112 - Spring 2023

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Office Hours: Mon, Wed from 1:45 - 3:15pm (CMU B-006 which is the room next to the Math Study Center). On Mondays, Math 126 students take priority. On Wednesdays, Math 112 students take priority. But you are welcome to come both days.

Text/Webassign: *Applied Mathematics for Business (12th ed.)*, by Harshbarger/Reynolds. 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 scientific calculus (no graphing calculators)

Course Objectives: You will study the use of graphs, rates, and algebra as they apply to fields for business and economics. This course will prepare you for a course in the application of calculus to business and economics.

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 (on Webassign)	16	92%	= 14.72
Test Preps (participation)	5	90%	= 4.5
Quizzes (one week before midterms)	10	85%	= 8.5
Midterm 1 (Thur, Apr 20)	22	76%	= 16.72
Midterm 2 (Thur, May 18)	22	84%	= 18.48
Final Exam (Sat, June 3)	25	89%	= 22.25
Total	100		85.07

This example student would get a 85.07 out of 100 for the course which is approximately a 3.1 on my rough gradescale from the last time I taught the course. The median for the class will be around 3.0. Typically, if you average above 70% on exams, then you get a grade above 2.0 which is required for some courses that follow this one.

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 close!** Most students get above 95% on homework and a good student also completes assignments at least 2-3 days before they close.
- In order to account for any small issues of you forgetting a problem or incorrectly clicking on a multiple choice, at the end of the terms I will round up everyone's homework grade by 5% (but no one gets a grade above 100%).
- You can also request extensions for past due assignments automatically within Webassign for up to 5 days past the closing date, but there is a 15% penalty on any problems completed in this 5 day window.
- There are NO other extensions for any other reason whatsoever. I will NOT drop the late penalty for any reason whatsoever. Again, the expectation is that you complete the vast majority of homework at least two days before it closes.

Test Preps: Test Preps are graded on participation only. They will consist of an old exam problem which you will attempt at the start of quiz section. You will be graded on participation and attendance, there will be a "code" (or numerical answer) that you will need to enter on Canvas for credit for the day. You **MUST** be in attendance to get this credit. You can miss up to 2 of these without penalty to your grade. (So if you are sick or have an emergency that that will be one of your 2 allowed misses). There are no make-ups for any reason whatsoever. You should be going to the Lab anyway, but now you get some credit for going so an added bonus!

Quizzes: These will consist of 1 page of questions similar to a problem from an old exam and homework. The TA's will hand out copies at the start of quiz section and you will have 20 minutes to complete the quiz, then you will hand it and it will be graded. You get one sheet of handwritten notes and a basic scientific calculator. No other resources are allowed. We will have two quizzes.

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, June 3rd, 5:00-7:50pm in ARC 147.

Calculators and notes: A basic scientific calculator is allowed on the exams and quizzes (no graphing calculators). I recommend a multi-line display calculator such as the Ti-30x IIS Calculator (about \$15 at the bookstore). You are allowed a single, **hand-written** 8.5 x 11 inch sheet of notes is allowed during exams and quizzes and you may write on both sides.

Make-Ups: For homework you can request an automatic extensions up to 5 days after an assignment closes, but problems completed after the closing are assessed a 15% penalty. For midterm exams, there are **NO** make-ups, but if you miss an exam due to an illness or emergency and you contact me, then your other exams will be weighted more heavily. The final exam does have a make-up, but you must petition the department if you want to take it, here is the <https://math.washington.edu/common-finals#alternatives>

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 questions (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 for Students with Disabilities: Your experience in this class is important to us. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

Religious Accommodations: "Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form."