

MATH 1100-060
QUANTITATIVE ANALYSIS
FALL 2009 SYLLABUS

- INSTRUCTOR:** John Nordstrom, Associate Instructor, Mathematics Department.
- TEXT:** *Mathematical Applications for the Management, Life, and Social Sciences, Volume 2* (Special Eighth Edition for the University of Utah), Harshbarger & Reynolds, Houghton Mifflin, 2007.
- TIME & PLACE:** M,W 7:30 PM – 9:00 PM, Room 109, [Murray Campus](#)
5282 South 320 West, Suite D-110, Murray, Utah 84107, 801-266-5341
- CONTACT INFORMATION:** Being adjunct faculty, I don't have a University office; not having an office, I don't have office hours. I generally try to be available both before and after class to answer any questions you have. I can also be reached by either of following methods (email is preferred):
Phone: 487-3581 (between 9:00 AM and 9:00 PM)
Email: john.nordstrom@utah.edu (anytime)
john_nordstrom@comcast.net (anytime)
- If you need to send me mail or contact my department, the address is:
[Mathematics Department](#)
155 South 1400 East Room 233
Salt Lake City, UT 84112-0090
Phone: 801-581-6851 Fax: 801-581-4148
- PREREQUISITES:** Math ACT score of at least 28 or a C or better in Math 1050 or 1090. A scientific calculator is recommended for this course, for those problems where you need to compute an approximate answer. Scientific calculators are available for under \$10 that will suffice for this course.
- COURSE OBJECTIVES:** Math 1100 is a brief introduction to calculus, with an emphasis on applying the principles of calculus to business and economic problems. Topics covered in Math 1100 include differentiation, maximization and minimization of functions, marginal analysis and the optimization of constrained functions, and integration.
- CLASS STRUCTURE:** The class schedule lists Math 1100 as being a lecture course, and that is true as far as it goes. But like any mathematics course this course will require your active participation to be effective. You will have to do much of the heavy lifting yourself, both in and out of class. You are expected to do the assigned homework, not for any points you might earn, but because:

You *learn* math by *doing* math.

This is a three credit-hour course. A rule of thumb is that you should spend between two and three times the number of credit hours *outside* of class every week studying the material. I expect you will spend up to nine hours each week working the homework, especially if the subject doesn't come easily to you.

We will spend the first part of every class going over questions from the homework; if you haven't done the homework you won't be able to ask questions about it. Please don't be afraid to ask questions, either in or out of class. If there is something you are not understanding you can be assured there are other students who are also lost and will appreciate your question.

**APPROXIMATE
GRADING:**

Chapter Quizzes	35 – 40%
Midterm	25 – 30%
Final	30 – 40%

Please note that this is the *approximate* weight given to each of the components you will be graded on. In particular, I usually give more weight to your final if you do particularly well on it.

I plan to have quizzes following most of the chapters, the exceptions being the chapters immediately preceding the midterm and final. The midterm and final are both comprehensive exams. Almost all of the questions on the quizzes and exams are open-ended questions that will require you to show your work.

Because I believe in second chances, I drop your low quiz score when computing your aggregate quiz score. Combined with the extra credit I add to the quizzes (see below) I find I typically don't have to curve my grading scale, which is:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
>93%	90-95%	87-90%	83-87%	80-83%	77-80%	73-77%	70-73%	67-70%	63-67%	60-63%	<60%

Note that circumstances may dictate that we deviate from either the planned number of quizzes and tests, or the grading and scoring guidelines as described. Any changes will be announced and discussed in class.

HOMEWORK:

I will be assigning homework, but not grading most of it. As mentioned above, I will occasionally assign some extra credit homework, but this is a small fraction of the total homework. A percentage of the points from it will be added to your aggregate quiz score.

Don't be lured by the temptation to only work the extra credit problems; they don't improve your grade that much and you will deny yourself the opportunity to *really* understand the material and do well on the quizzes (which will improve your grade). You need to attempt to work as many problems as possible, because:

You *learn* math by *doing* math.

GETTING HELP:

You may find that you need some extra help beyond what the class can provide. There are several tutoring services available. The math department has a free drop-in tutoring center located in the T. Benny Rushing Mathematics Center. Information about the center can be found at <http://www.math.utah.edu/ugrad/tutoring.html>. For more personalized attention, the ASUU Tutoring Center (www.sa.utah.edu/tutoring) provides both individual and group tutoring at reasonable rates.

RESPONSIBILITIES:

All students are expected to maintain adult and professional behavior in the classroom. Please respect your classmates by not engaging in idle chatter, using your cell phone, or otherwise creating distractions. More importantly, students are prohibited by the [Student Code](#) from cheating, as well as committing acts of fraud, vandalism, or theft.

Part of my responsibilities is maintaining a classroom conducive to learning and enforcing responsible classroom behavior. If I have to, I will take disciplinary actions, beginning with verbal warnings and ultimately progressing to dismissal from this class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

AMERICANS WITH DISABILITY ACT: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the [Center for Disability Services](#), 162 Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

All written information in the course can be made available in alternative format with prior notification to the Center for Disability Services.

OUTLINE OF CLASS

The following is an outline of the topics that will be covered in this class.

Derivatives	Chapter 9 (9.1 – 9.9)
Applications of Derivatives.....	Chapter 10 (10.1 – 10.5)
Derivatives Continued.....	Chapter 11 (11.1 – 11.5)
Midterm	
Indefinite Integrals	Chapter 12 (12.1 – 12.4)
Definite Integrals.....	Chapter 13 (13.1 – 13.4, 13.7)
Functions of Two or More Variables	Chapter 14 (14.1 – 14.2)
Final	

We *might* spend some time in Chapter 5 (Exponential and Logarithmic Functions) prior to beginning Chapter 11 if I determine this will be beneficial to most of the class. It's also possible, but unlikely, that we may study Section 12.5 (Differential Equations) towards the end of semester.

IMPORTANT DATES

Be sure to consult the official [Academic Calendar](#) for other important dates and to make sure there are no changes from these dates.

First class.....	August 24
Last day to drop class	September 2
Labor Day (no class)	September 7
Last day to add class.....	September 8
Fall Break (no class).....	October 12 – 17
Last day to withdraw	October 23
Last class	December 9
Final.....	December 16 (during regular class hours)