

Course Syllabus
Mathematics 1100, Section 02 Fall 2017
Business Calculus

Instructor: Weicong Su
Office: 121 JWB
E-mail: su@math.utah.edu

Class Time and Place: MWF, 9:40 AM - 10:30 AM, AEB 310

Office Hours: To be determined.

Text: Mathematical Applications for the Management, Life and Social Sciences, 8th Edition, by Harshbarger & Reynolds ISBN 13: 978-0-618-65421-5 ISBN 10: 0-618-65421-6 Note it is an older version of the book, not the latest version.

Course Information: Math1100, Quantitative Analysis (a.k.a. Business Calculus) is a 3-credit semester course.

Prerequisites: At least a C grade in Math1090 (Business Algebra) OR Math1050 (College Algebra) OR in Math1080 (Precalculus) OR Math1210 (Calculus 1) OR an Accuplacer score of 80 on the College Level Math (CLM) test OR at least an ACT Math score of 28 OR at least SAT Math score of 630.

- Students in this course should be familiar with the topics in Chapters 0,1,2,5 in the textbook. If not, it is not recommended for a student to register in this course. The course will start on Chapter 9 of the textbook. Please note the deadline to withdraw from this course. This information is given in the section of "Important Dates" of this syllabus or in relevant university webpages.

Course description: Differentiation, maximization and minimization of functions, marginal analysis and the optimization of constrained functions, integration and applications. Not for students who have completed more than one semester of calculus.

Expected Learning Outcomes: Upon successful completion of this course, a student should be able to:

1. Have a basic conceptual understanding of limits.
2. Know how to differentiate and integrate polynomial, rational, logarithmic, and exponential functions.
3. Use derivatives to gather information about the shape of the curve and use that information to graph the curve $y = f(x)$, for polynomial, logarithmic, exponential and simple rational functions.
4. Understand how to use differentiation to optimize functions for business applications, such as maximizing profit examples.
5. Use integration to find area under curves and for business examples such as average value.
6. Take partial derivatives of basic functions of two variables.

Tutoring Lab: T. Benny Rushing Mathematics Student Center (adjacent to JWB and LCB), Room 155
M - Th 8 a.m. - 8 p.m.

F 8 a.m. - 6 p.m.

(opens Wednesday) (closed Saturdays, Sundays and holidays)

They are also offering group tutoring sessions. If you're interested, inquire at the Tutoring Lab.

<http://www.math.utah.edu/ugrad/tutoring.html>

Private Tutoring: University Tutoring Services, 330 SSB (they offer inexpensive tutoring). There is also a list of tutors at the Math Department office in JWB233.

Computer Lab: Also in the T. Benny Rushing Mathematics Student Center, Room 155C.

M - Th 8 a.m. - 8 p.m.

F 8 a.m. - 6 p.m.

Link to computer lab is <http://www.math.utah.edu/ugrad/lab.html>

Grading: The grades will be calculated as follows:

Homework	25%
Midterm exams	40%
Final Exam	35%

Note: There will be three midterms. The lowest among the three midterm exam scores will be dropped. Each of the other two scores accounts for 20% of your final grade.

Homework: I will collect homework on Mondays (or the first day of class of the week) of each week, even if there is a scheduled midterm. I will post your homework assignments on Canvas(or bring hardcopies to the class in case of system breakdowns or any other unexpected events) and it is your responsibility to check Canvas for the homework set corresponding to each weekly assignment.

- Please notice that there is no way to get an A (or even B, C) in this course if you choose not to do any of the homework. On the other hand, turning in all of the homework can help your grade substantially.
- I will grade a few problems on each homework set to check for correctness but will not tell you ahead of time which problems will be graded for correctness. Problems not graded will not count towards the total grade for each homework assignment. Solutions will be given on Canvas(or in the form of handouts) after each homework assignment is graded. It is strongly recommended that you read the solutions especially for ungraded problems.
- Late homework will not be graded.
- Your lowest two homework scores will be dropped.
 - I will drop these two homework scores to allow for illness, oversleeping, hectic schedules, etc. Do not ask for special favors with regard to the homework policy. Also, it is not necessary nor recommended that you tell me why you did not turn in homework.

Midterm exams: You will have two midterm exams, which will take place in the usual classroom, in the usual class time and be 50 minutes long. The exam dates are the following:

- First midterm exam Fri, September 22, 2017
- Second midterm exam Mon October 23, 2017
- Third midterm exam Mon November 20, 2017

Final exam: The **final exam** will be comprehensive and will occur during the regularly scheduled final exam time, given by the University.

Tuesday, December 12, 2017
8:00 am 10:00 am
AEB 310

Important Dates:

- Classes begin Monday, August 21st
- Last day to add without a permission code Friday, August 25th
- Last day to add, drop (delete), elect CR/NC, or audit classes Friday, September 1st
- Last day to withdraw from classes Friday, October 20th
- Last day to reverse CR/NC option Friday, December 1st
- Classes end Thursday, December 7th
- Reading Day Friday, December 8th
- Labor Day Monday, September 4th
- Fall Break Sun-Sun, October 8-15

- Thanksgiving break Thurs-Sun, November 23-26

Online Grades: I will put your grades online on Canvas. I do my best to update the grades on a regular basis and keep everything accurate. However, I would advise you to check your grades often to make sure there were no data entry mistakes. I'm always happy to correct any mistakes I've made. You just need to let me know about them.

Grading scale: A (90-100), A- (87-89), B+ (84-86), B (80-83), B- (77-79), C+ (74-76), C (70-73), C- (67-69), D+ (64-66), D (60-63), D- (56-59), E (0-55). I do not intend to curve the grades which means you will be fully responsible for your final grade. You will get a good or undesirable grade only because of your own academic performance but not because somebody else is doing good or bad.

Calculators:

You will need a calculator for this course. A scientific calculator will be sufficient. **Graphing or programmable calculator will not be allowed on exams.** Please also take the following note as an advise.

- Calculators do not help improve mathematical skills. Use a calculator only when necessary.

ADA Statement: 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 Olpin Union Building, 581-5020 (V/TDD). CDA will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability and Access.

Cheating: Violation of academic integrity is strictly prohibited. Cheating on any homework or exam will result in a grade of zero for that work. Depending on the severity of the cheating, the instructor reserves the right to fail you from the class. In all cases, the incident will be reported to the Dean of Students, or to the International Students Office in the case of an international student.

Webpage: All information concerning this class will be posted on the Canvas webpage of the class. Any important information will be given in class and on the Canvas webpage. **You are responsible for checking the webpage on a regular basis** (you can have the communication from Canvas forwarded to your email address).

Additional policies:

- I do NOT allow the use of laptop computers or cell phones in my classroom, in order to minimize student distractions. At this point, it is almost impossible to take notes for a math class on a laptop in real time. Thus, it is unnecessary in class. If you are using a tablet or ipad or some similar device to take notes and the screen lies parallel to your desk, that is totally fine.
- There will be no retakes of exams, for any reason.
- You may take an alternate exam if you talk to me about it first and explain the emergent, extenuating circumstances that make it necessary. It is 100% your responsibility to communicate with me as soon as possible, **before** the exam occurs. Talking to me after the problem will be a sufficient reason for me to allow you to get a zero on that test. I reserve the right to make alternate exams more difficult than the scheduled exam.
- I will kindly demand respectful behavior in my classroom. Examples of disrespect include, but are not limited to, reading a newspaper or magazine in class, social chatting with your friend in class, use of your cell phone or cuddling with your girl/boyfriend in class. If you choose to be disrespectful with distracting behavior during our class, please keep in mind that you put me in a position of choosing between protecting/taking a stand for you OR for the other students or myself whom you are disrupting. I can guarantee I will choose to stand for the students who are there to learn without disruptions and I will thus take action to terminate your distracting behavior, and that action may not be desirable for you.
- There will be no cursing nor negative ranting (for example, "math sucks") on any written work turned in. The penalty for such things on your written work will be a zero score on that assignment or test.
- You need to have a valid email address registered with Campus Information System. I will regularly send emails to the class and will hold you accountable for receiving that information. If you have troubles receiving my weekly emails, you can (1) check to make sure your email address at Campus Information System is correct, (2) make sure my emails are not going directly to your junk mail folder, or (3) contact the webmaster at Campus Information System.

- If you have questions about any exam/homework grade, or you want to appeal the grading of the exam/homework, you must bring it to me within one week of the exam/homework. I'm happy to look over your appeal and/or questions and give my feedback in order to benefit your learning. But, it must be done in this timeframe of a week from when I hand back the exam/homework.
- I will offer an extra credit question on every midterm and final exam, to help make up for arithmetic mistakes. But, I will not offer any additional extra credit at the end of the semester or any other way for you to improve your grade at that time. No exceptions. Please respect this and do not ask for special favors or extra credit when you realize you don't like your grade. Most likely, I just won't respond to such emails or questions in person.

Disclaimer: The instructor reserves the right to explain and modify the content of the syllabus. I will let you know in class any modification to this syllabus and post the new syllabus on the Canvas webpage.