

**Course Syllabus**  
Mathematics 1100, Section 003, Fall 2016  
Business Calculus

**Instructor:** Sabine Lang  
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**Class Hours:** TH, 6:00 PM - 7:30 PM, LCB 215

**Office Hours:** Monday 1 PM - 2 PM, Thursday 4:30 PM - 5:30 PM, or by appointment

**Text:** We are using a free online book for this class, which is “Business Calculus” by Shana Calaway, Dale Hoffman and David Lippman. To get the book, you can use <https://www.myopenmath.com/course/course.php?folder=0&cid=922> with “guest” as a username and no password. You can also find the book here <http://www.opentextbookstore.com/buscalc/BusCalc.pdf>, which is just the book without all the supplementary materials.

**Prerequisites:** At least a C grade in Math1090 (Business Algebra) OR in Math1050 (College Algebra) OR in Math1080 (Precalculus) OR in 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.

**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.

**Homework:** There will be homework assigned for every week of the semester, due on Tuesdays. Half of the grade will be for completeness, and the other half for the correctness of a few randomly chosen exercises, **with all work shown**. Homework and due dates will be posted on Canvas, and communicated to you in class. No late homework will be accepted, you will get a score of zero for the homework that you do not turn in, but I will drop the three lowest homework. You can work with others on the homework, but **your final write-up must be your own**. You must write your name and student ID on each homework that you turn in, and each homework **must be stapled**. I will only collect homework during the five first minutes of class. **Late homework, unstapled homework or homework without a name will not be graded**. It is your responsibility to make sure you understand the problems and their solutions.

**Quizzes:** There will be quizzes every Thursday in class, covering the material seen during the previous lectures. Quizzes date will also be posted on Canvas and communicated to you in class. **No make-up quizzes will be given**, you will get a score of zero for the quizzes that you miss, but I will drop the three lowest quizzes. I reserve the right to give the quiz at any time during the lecture.

**Mid-term exams:** You will have two mid-term exams, which will take place in the usual classroom and be one hour and a half long. You must bring a valid ID to the exam. Absence from an exam will be excused only if you can provide verifiable and convincing evidence that you have a significant illness or serious family crisis that will prevent

you from attending. Except under extremely unusual circumstances, you must inform me in advance of the missed test. **It is your responsibility to promptly make arrangements with me to make up the test, I reserve the right to not give you a make-up exam if I think your excuse is not valid or if you contact me more than one week after the missed test.** I reserve the right to make alternate exams more difficult than the scheduled exam.

**Final:** The final exam will be comprehensive. There will be no early final, for any reason. If you cannot be here for the final (Tuesday, December 13, 6:00 PM - 8:00 PM), you should drop the class.

**Grading Policy:** Your grade will be based on:

Homework	15 %
Quizzes	15 %
Mid-term exams	40% (20% each)
Final Exam	30%

**Grades (Evaluation and criteria):** Final letter grades will be determined by overall percentage as follows:

A	93% – 100%	B-	80% – 82.9%	D+	67% – 69.9%
A-	90% – 92.9%	C+	77% – 79.9%	D	63% – 66.9%
B+	87% – 89.9%	C	73% – 76.9%	D-	60% – 62.9%
B	83% – 86.9%	C-	70% – 72.9%	E	0% – 59.9%

**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.**

**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). CDS 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 Services.

**Student Responsibilities:** All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. You have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, collusion, fraud, theft, etc. Students should read the Code carefully and know you are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

<http://regulations.utah.edu/academics/6-400.php>

**Tutoring:** The Rushing Math Center offers free drop-in tutoring, a computer lab, and study areas for undergraduates. The Rushing Student Center is adjacent to the LCB and JWB. The hours for the Summer semester are: 8 am – 8 pm Monday to Thursday and 8 am – 4 pm on Friday.

**Classroom Etiquette:** Please turn off your cell phones while you are in class. The use of laptops is not allowed in the classroom. I will expect respectful behavior in my classroom. If I think that your behavior is disrespectful or distracting, I will ask you to leave the class.

**Cheating:** If you cheat on any homework, quiz or exam, I will give you a grade of zero for that work. Depending on the severity of the cheating, I may decide to fail you from the class. In all cases, I will report the incident to the Dean of Students, and 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).

**Disclaimer:** This syllabus may change during the semester. If I do any modification to this syllabus, I will let you know in class and post the new syllabus on the Canvas webpage.

**Some important dates for this class:**

Monday, August 22	First day of class
Friday, September 2	Last day to drop (delete) class
Monday, September 5	Labour day
Tuesday, September 27	First mid-term exam (in class, 6:00 PM - 7:30 PM)
October 10 - October 14	Fall break
Friday, October 21	Last day to withdraw from class
Tuesday, November 8	Second mid-term exam (in class, 6:00 PM - 7:30 PM)
November 24 and 25	Thanksgiving
Thursday, December 8	Last day of class
Tuesday, December 13	Final exam (in class, 6:00 PM - 8:00 PM)