

Course Code: Math 1100

Instructor: Yiming Xu

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Office Hours: Monday 2:00-4:00 pm

Office: JWB 206

Class Time: MW 11:50-13:10 am

Class Room: BEH S 116

Textbook

Mathematical Applications for the Management, Life and Social Sciences, 8th Edition, by Harshbarger and Reynolds ISBN 13: 978-0-618-65421-5 ISBN 10: 0-618-65421-6

Course Information

Math 1100, Business Calculus, is a 3-credit semester course.

Course Description

Differentiation, unconstrained/constrained optimization, integration and basic ordinary differential equations. Not for students who have completed more than one semester of calculus.

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.

Expected Learning Outcomes

Upon successful completion of the course, students should:

1. Understand how to use arithmetic and chain rules to calculate the derivatives of functions composed of polynomials, exponential, logarithmic, trigonometric and simple rational functions.
2. Use derivatives (including higher order 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.
3. Understand how to use differentiation to optimize functions for business applications, such as maximizing profit examples.
4. Use integration to find area under curves and solve for simple ordinary differential equations.
5. Take partial derivatives of basic functions of two/three variables.

Grading

The final grade consists of three parts: 20% from the weekly quizzes; 50% from two midterm exams (of equal weight); 30% from the final exam.

Homework

Homework problem is given every week but will not be collected for grading. However, students should treat homework seriously since certain questions in the quiz will be based on it.

Midterm Exam

There will be two 80-minute midterm exams throughout the semester, one on *Monday February 11, 2019* and the other on *Monday, March 18, 2019*. They will be during normal class time, in our usual classroom. Calculator is allowed.

Final Exam

The final exam for this class is comprehensive and will be given on *Friday, April 26, 2019*, from 10 : 30 am to 12 : 30 pm in the same classroom as for the regular class. Please put this date in your calendar now, as there will be no opportunity for a later or make-up final exam. Calculator is allowed.

Grading Scale

The grade scale will be the usual: A (93-100), A- (90-92), B+ (87-89), B (83-86), B- (80-82), C+ (77-79), C (73-76), C- (70-72), D+ (67-69), D (63-66), D- (60-62), E (0-59). If grade-curving happens, your grade will be the maximum of your real grade and curved grade.

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 & Access (CDA), 162 Olpin Union Building, 581-5020 (V/TDD). CDA will work with you and me to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to CDA.

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>

Addressing Sexual Misconduct

Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veterans status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

Student Names and Personal Pronouns

Class rosters are provided to the instructor with the students legal name as well as Preferred first name (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected. If you need assistance getting your preferred name on your U-ID card, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

Wellness Statement

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801-581-7776.

Classroom Social Equity

I strive to be ethical, kind, fair, inclusive and respectful in my classroom and expect students to behave likewise. In this regard, I have these requests of you, my student:

1. Please do tell me, discreetly, if you have any sort of anxiety disorder, TBI, PTSD, C-PTSD, or any other challenge that would cause psychological harm to you by me calling on you in class. I want students to feel a little uncomfortable and stretched during class, while working on problems as a large group, but I definitely don't want to cause any human being harm. So, please just tell me if that is the case for you and I will confidentially accommodate your request.
2. If your preferred name is different than your legal first name (the preferred name you chose does indeed show up in CIS on my roll sheet, but not yet in Canvas), please log into Canvas and go to Account (on far left)→Settings and change your Display Name to be the name you prefer to be addressed by. This will help me greatly to know students' names, and to address you correctly when responding to Canvas quiz comments.
3. If there is ever a time that you feel this course or the curriculum is not equitable, please email me or meet with me to discuss your concerns so we have a chance to address that.