

# Mathematics 1100

Spring, 2019

- Instructor:** Dihan Dai
- Class Time and Place:** 9:10-10:30 a.m.  
Tuesdays and Thursdays  
in JTB130
- Office Hours:** Mondays 2:00-3:00 p.m., Wednesdays 2:00-3:00 p.m.  
or by appointment.
- Office Location:** JWB332
- E-mail address:** [dai@math.utah.edu](mailto:dai@math.utah.edu) (You can contact me either via email or Canvas message. And as long as your question(s) is/are course/math related, I will be happy to answer it/them.)
- Canvas:** We will use Canvas in place of class webpage.  
Weekly announcement and homework assignment will be posted **every Thursday**.  
The worksheets we use in class will also be posted on Canvas, but lecture notes won't be posted.  
You are encouraged to utilize Canvas to engage with your classmates in discussions.
- 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**  
(Please note that this is an older edition of the book, so it's not for sale at the campus store. You should be able to find it online for a cheap price or on sale from another student locally who took this class in the last year.)
- Course Information:** Math1100, Business Calculus, is a 3-credit semester course.
- Prerequisite:** 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.
- 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.

**Grading:** The grades will be calculated as follows:

Homework 10%

Quizzes 15%

Midterm 30%

Midterm 20%

Final Exam 25%

(Note: There will be 2 midterms. Your lowest midterm score will count for 20% of your grade and your top midterm score will each count for 30% of your final grade.)

**Homework:**

I will collect homework on Thursdays of each week. All of the homework assigned from sections covered in the previous few days is due at that time.

- Each section of homework will be worth ten points. For example, if you have three sections of homework assigned, then that homework set is worth a total of 30 (raw) points.
- You will get full credit if you DO every problem with at least some details. I will NOT be grading for correctness. **However**, if you copy all your answer from the book and don't write any details, you will get a 0. (Please notice that there is no way to get an A 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. And doing homework can help you understand the material better.)
- The homework is to be turned in according to the following instructions:
  1. **The homework set MUST be stapled together with the corresponding cover sheet as the first page.** A homework set turned in without being stapled together or without a cover sheet will not be counted!! Please do not come to class hoping that I or someone else will have a stapler. Be prepared when you arrive.
  2. **I will not accept late homework sections.** Because of this, I will

drop your 3 lowest homework scores.

**You are responsible for knowing these policies.**

**Weekly Quizzes:** There will be weekly in-class quizzes, every Tuesday, except for test weeks. I reserve the right to start the quiz at any time during the Tuesday class period. The quiz will cover the material covered in the previous week. Quiz questions will be taken from textbook examples, class examples, assigned problems or problems very much like those problems. Most quizzes will be group quizzes and I'll assign the groups in Canvas. But I may give solo quizzes before the midterms because you can't work in group during the exams. I will let you know if I decide to do that. There will be no make-up quizzes. No exceptions. If you're late to class or miss class and thus miss the quiz for any reason whatsoever, you will have to use that as one of your dropped quiz scores. There will be roughly 10 quizzes throughout the semester. Your lowest three quiz scores will be dropped.

**Midterms:** There will be two one-hour midterm exams throughout the semester. They will be during normal class time, in our usual classroom. The dates are:

**Midterm 1: Tuesday, February 12<sup>th</sup>, 2019**

**Midterm 2: Tuesday, April 2<sup>nd</sup>, 2019**

I will do a review session before each midterm.

**Final Exam:** The final exam for this class is comprehensive and will occur during the regularly scheduled final exam time, given by the University. For Spring 2019, the final exam is scheduled on **Monday, April 29<sup>th</sup>, from 8:00 to 10:00 am**. The location is probably our regular classroom. Please put this date in your calendar now, as there will be no opportunity for a later or make-up final exam.

**Online Grades:** I will put your grades online on Canvas. You can get there easily from the main University of Utah website [www.utah.edu](http://www.utah.edu). To log in, you use the same student id and password that you use for Campus Information System. 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.

**Calculators:** You may find it helpful to have a graphing calculator for your own personal use. However, if I allow calculators on exams or quizzes, I will only allow scientific calculators (**no graphing or programmable calculators will be allowed ever**).

**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).

**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>

**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](mailto: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](http://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.

**Additional Policies:**

1. Laptop is NOT allowed in class. At this point, it's 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.

2. There will be no retakes of exams, for any reason.
3. If you have emergent, extenuating circumstance that makes it necessary to take an alternate exam, it is your responsibility to discuss that with me, before the exam occurs, or as soon as possible. In general, I allow exams to be taken early, but not late.
4. If you have crisis-level extenuating circumstances which affect your class performance and you need guidance/advice/flexibility, please communicate with me as soon as possible so I can help you in some manner, which I am truly happy to do. The longer you wait to communicate with me, the less I can and am willing to do to help.
5. 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, text-messaging during class, excessive use of your cell phone, or cuddling someone else 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.
6. There shall 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.
7. If you have questions about any exam/assignment grade, or you want to appeal the grading of the exam/assignment, you must bring it to me within one week of the exam/assignment being turned back in class. 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 two weeks from when I hand back the exam/assignment.
8. If you cheat on any homework, project, quiz or exam, I will automatically give you a zero for that grade. Depending on the severity of the cheating, I may decide to fail you from the class. Please note that the use (or even just pulling it out of your pocket) of a cell phone or any other electronic device during any in-class quiz or exam is considered cheating and cause for receiving an automatic zero. Also, if you exhibit any other behaviors that are unethical, like offering me a bribe to give you a better grade (even if you later claim you were joking), I will report your behavior to the Dean of Students.
9. Please make sure you do your best throughout the semester, knowing the grading scheme and what's expected of you, and come talk to me if you need further study strategies. I will be happy to brainstorm ideas to help you maximize your study strategies and improve your mathematical understanding.
10. I will offer an extra credit opportunity on some quizzes, every midterm and final exam, to help make up for arithmetic or math grammar mistakes for which you lost points. 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 or some way to get a higher grade (however you want to word it) when you realize you don't like your grade. Your need to get into a certain program, or needing a specific grade for your work or scholarship or not wanting to upset whomever is paying for your college are all your own personal dilemmas that are truly separate from how I assign grades. If you email me at the end of the semester to suggest that you deserve a chance to get a higher grade, I will forward your email to the Dean of Students office so you can get properly counseled in how to behave professionally in an academic setting. The only way to "better

your grade" by the end of the semester is to retrieve your final exam and look to see if you have any grading appeals. I'm happy to look over those and possibly give points back, if it's warranted.

**I reserve the right to change my policies stated in this syllabus at some point in the semester. If I do make a change to a policy, I will announce it in class and send the change in email or post an Announcement on Canvas.**