

# Mathematics 1100

Fall, 2018

- Instructor:** Dawei (David) Wang
- Class Time and Place:** 9:10-10:30 a.m.  
Tuesdays and Thursdays  
in AEB 310
- Office Hours:** Tuesdays 10:40-11:40 a.m., Wednesdays 3:00-4:00 p.m  
or by appointment.
- Office Location:** JWB 118
- E-mail address:** David.Wang@utah.edu
- 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.
    1. Know how to differentiate and integrate polynomial, rational, logarithmic, and exponential functions.
    2. 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.
    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 for business

examples such as average value.

5. 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 10%  
Quizzes 15%  
Midterm 20%  
Midterm 20%  
Midterm 10%  
Final Exam 25%  
(Note: There will be 3 midterms. Your lowest midterm score will count for 10% of your grade and your top two midterm scores will each count for 20% of your final grade.)

**Homework:** I will collect homework on **Thursday** 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 half credit if you DO every problem. I will NOT be grading for correctness for this half of the grade, so it is your responsibility to make sure you understand the problems and their solutions. This is basically motivation for you to do the homework because that is the only way to survive a math class. (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.)
- The other half of the points for each homework set will be given for correct and neat solutions, with all work shown. The grader will grade a few problems on each homework set to check for correctness. We will not tell you ahead of time which problems will be graded for correctness.

- The homework is to be turned in according to the following instructions:
- **The homework set MUST be stapled together with the corresponding cover sheet as the first page.** (I will provide the cover sheets in class.) 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.
- **I will accept 10 late homework sections, up to two weeks late, throughout the semester for full credit.**

I will not accept homework more than two weeks late. I accept these late homework sections to allow for illness, oversleeping, hectic schedules, etc. Do not ask for special favors with regard to the homework policy, unless the circumstances are extraordinarily severe, because my response will not be in your favor. Also, it is not necessary nor recommended that you tell me why your homework is late. This policy is meant to be flexible enough to cover all reasons.

- **I only collect homework on Thursdays!** If you need to turn in homework late, you will have to do so on a Thursday in class (within two weeks from its due date). This is the only time and location that I will accept homework.

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

### **Weekly Quizzes:**

There will be weekly in-class quizzes, every Tuesday, except for the first week and test weeks. I reserve the right to start the quiz at any time during the Thursday 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. You are encouraged to discuss with others and work in group. 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 13 or 14 quizzes throughout the semester. Your lowest three quiz scores will be dropped.

### **Midterms:**

There will be two 80 minutes midterm exams throughout the semester on **September 20 and November 1,** both on Thursdays. They will be during normal class time, in our usual classroom.

### **Final Exam:**

The final exam for this class is comprehensive and is on **8:00—10:00 am, Friday, December 14, 2018** in our usual 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). Most of the time, you will not have use of a calculator on exams and quizzes. This will be discussed more in class with each quiz and test.

**Grading Scale:** Although I'm not philosophically opposed to curving grades, I find it's rarely necessary. 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 I do need to curve the grades, I will simply shift everything down by a few points (whatever is 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 & 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:** 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 on Canvas. Please check the Canvas and your Umail regularly.