

MATHEMATICS 1100
SPRING, 2020

- **Instructor** : Vaibhav Pandey

- **Class time and Place** : 11 : 50 – 1 : 10 p.m.,
Mondays and Wednesdays
in BEH S-116

- **Office Hours** : TBD

- **Office Location** : JWB 115

- **E-mail Address** : pandey@math.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

For the first time, we are using inclusive access which means students will automatically purchase the 1100 e-book with their tuition, unless they opt out.

- **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 Math1080 (Precalculus) OR Math 1210 (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.
- **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:
 - (1) Homework 10%
 - (2) Quizzes 15%
 - (3) Midterm 20%
 - (4) Midterm 20%
 - (5) Final Exam 35%
 - **Homework** : I will collect homework on Wednesdays of each week. All of the homework assigned from sections covered in the previous week 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.** A homework set turned in without being stapled together 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 not accept any late homework sections**
Do not ask for special favors with regard to the homework policy, unless the circumstances are extraordinarily severe. In cases of extraordinary circumstances, upon my discretion, I may allow you to submit delayed homeworks.
- **I only collect homework on Wednesdays in class!!.** 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 Wednesday, except for test weeks. I reserve the right to start the quiz at any time during the Wednesday 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. All quizzes will be group quizzes and I'll assign the groups in Canvas. 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.**
- **Midterm** : There will be **two midterm exams** throughout the semester, these will be held in the regular class at class timings as follows-
Midterm 1 - February 12 (Wednesday), Midterm 2 - April 1 (Wednesday).
- **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 2020, the final exam is scheduled on Monday, April 27th, from 10:30 to 12:30 pm. 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. 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 and 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.
- **Additional Policies** : See the document on the class web page entitled Other Policies. All students will be held accountable for knowing these classroom 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 in class and send the change in email.