

Math 1100-002

Spring, 2018

- Instructor:** Marin Petkovic, JWB 221, petkovic@math.utah.edu
- Class Time & Place:** 09:10-10:30 a.m., Tuesdays and Thursdays in BU C 303
- Office Hours:** TBA
- 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
- 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: Homework 10%
Quizzes 10%
Midterms 50%
Final Exam 30%
(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.)

Important Dates: Classes begin: Monday, January 8th
Midterm 1: Tuesday, February 6th in class
Midterm 2: Tuesday, March 13th in class
Midterm 3: Tuesday, April 17th in class
Classes End: Tuesday, April 24th
Final Exam: Friday, April 27, 2018, 8:00 - 10:00 am
!!!If you are not able to attend the midterms or the final let me know as soon as possible!!!

Homeworks: I will collect homework in class on **Tuesday** every week. All of the homework assigned from sections covered in the previous few days is due at that time. I will accept two late homeworks, but they must be turned in on Tuesday in class.
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 set MUST be stapled together with the corresponding cover sheet as the first page.

Group quizzes: There will be 10 closed book group quizzes, every Tuesday in class (no quiz on the first week and no quiz on the last day of class). Three lowest scores will be dropped. I reserve the right to give the quiz at any time in class on Tuesday.

Midterms: There will be three one-hour midterm exams throughout the semester, and the dates will be fixed, according to the course outline/schedule that is on our class web page. They will be during normal class time, in our usual classroom.

- Final Exam:** The final exam for this class is comprehensive and will occur during the regularly scheduled final exam time, given by the University.
- 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.
- 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 would advise you to check your grades often and please let me know about any mistakes.
- Grading Scale:** 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).
- 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>
- Free Tutoring:** Available at the T. Benny Rushing Mathematics Student Center (adjacent to JWB and LCB), Room 155. M - Th 8am - 8pm; F 8am - 6pm. <http://www.math.utah.edu/ugrad/tutoring.html>
- Private Tutoring:** University Tutoring Services, 330 SSB (they offer inexpensive tutoring)

**Classroom
Equity:**

Social

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 inform me of whichever pronouns you prefer me to use for you. I will put great effort into honoring your request and ask that you correct me if I do happen to make a mistake.
2. 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.
3. 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.

Course Outline:

Chapter 9 (9.1 - 9.9) Derivatives (~ 5 days)
Chapter 10 (10.1 - 10.2) Application of Derivatives (~ 2 days)
Midterm 1
Chapter 10 (10.3 - 10.5) Applications of Derivatives (~ 2 days)
Chapter 11 (11.1 - 11.5) Derivatives Continued (~ 3 days)
Chapter 12 (12.1 - 12.4) Indefinite Integrals (~ 3 days)
Midterm 2
Chapter 13 (13.1 - 13.4, 13.6, 13.7) Definite Integrals (~ 5 days)
Chapter 14 (14.1, 14.2) Functions of Two or More Variables (~ 1 day)
Midterm 3
Final Exam