

Mathematics 1090

Fall, 2018

- Instructor:** Rebekah Eichberg
- Class Time and Place:** 10:45 a.m. – 12:05 p.m.
Tuesdays and Thursdays
in JTB 140
- Office Hours:** TBD in first week of classes
- Office Location:** JWB 206
- E-mail address:** eichberg@math.utah.edu
- Text:** *Business Algebra*, 3rd edition, published by Kendall Hunt, ISBN
- Course Information:** Math1090, College Algebra for Business and Social Sciences is a 3-credit semester course.
- Prerequisite:** At least a C grade in Math980 (Beginning Algebra), Math1010 (Intermediate Algebra) OR Math1030 (Quantitative Reasoning) OR an Accuplacer score of 60 on the College Level Math (CLM) test OR at least an ACT Math score of 23 OR at least SAT Math score of 570.
- Course Description:** Functions and graphs, polynomial and rational functions, matrices, Gaussian elimination, exponential and logarithmic functions, growth, periodic and continuously compounded interest, arithmetic and geometric sequences, annuities and loans.
- Expected Learning Outcomes:** Upon successful completion of this course, a student should be able to:
1. Graph and analyze quadratic, exponential and logarithmic functions; solve quadratic, exponential and logarithmic equations.
 2. Understand what a mathematical function is and know how to use linear, quadratic, logarithmic and exponential functions to model real world examples.
 3. Know how to solve a system of linear or quadratic equations that arise in business applications.
 4. Find solutions to linear programming problems, to maximize a function over a geometric region.
 5. Perform simple matrix algebra computations.

6. Use matrices to solve systems of linear equations.
7. Understand what an inverse function is and be able to find the inverse function, when it exists.
8. Distinguish between simple and compound interest situations.
9. Calculate future and present value of annuities, and know when to use which formula for the life application.
10. Compute an amortization schedule and loan payments, such as automobile or mortgage payments.

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

- Homework will be graded for completeness. 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.)
- Because homework is graded for completeness, I will be carefully looking through solutions. Points will only be awarded for genuine attempts, not just random work.
- The homework is to be turned in according to the following instructions:

1. **The homework set MUST be stapled together with your name and sections clearly written.** 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.
2. **I will not accept late homework.** Because of this, I will drop your 3 lowest homework scores.
3. **I only collect homework on Thursdays!!** 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 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. 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 10 quizzes throughout the semester. **Your lowest 2 quiz scores will be dropped.**

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. The midterm dates are as follows:

- **Midterm 1: Thursday, September 13th**
- **Midterm 2: Thursday, October 18th**
- **Midterm 3: Thursday, November 15th**

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 Fall 2018, the final exam is scheduled on **Monday, December 10th**, from 3:30 to 5:30 pm. Please put this date in your calendar now, as there will be no opportunity for a later or make-up final exam. The location is TBA. This is a departmental final which means there is a small chance that you will have a final from another class scheduled at the same time by the university. You have until November 20th to inform me of a conflict with another final. No exceptions made for any other conflicts.

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: For exams, you will be allowed to use a scientific calculator, but only a calculator from this approved list of calculators. This will also be true on the final exam.
<http://www.math.utah.edu/~strube/MATH1090ApprovedCalculators>

Lecture Videos: There is a complete set of lecture videos for this course, at <http://www.math.utah.edu/lectures/> (go to 1090 lecture videos page from there). These videos may be helpful additional resources for your success in this course.

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 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:

- I do NOT allow the use of laptop computers in my classroom, in order to minimize student distractions. At this point, it is almost impossible to take notes for a math class on a laptop in real time. Thus, it is unnecessary in this class. If you are using a tablet to take notes, please make sure the device lies parallel to your desk.
- There will be no retakes of exams, for any reason.
- If you have an 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. I normally allow exams to be taken early but not late.
- I will kindly demand respectful behavior in my classroom. Examples of disrespect include, but are not limited to, social chatting with your friend in class, reading materials not relevant to the course, texting during class, using social media during class, etc. If I do see you doing this repeatedly, I may ask you to leave the class. It is important that students have the ability to learn without distractions.
- I will regularly post announcements to the class in Canvas in will hold you accountable for receiving that information. Be sure to enable notifications in Canvas so that you are alerted for changes and announcements made in this class.
- If you have questions about any exam or assignment grade, or you want to appeal the grading of an exam or assignment, you must bring it to me within one week of the assignment being turned back in class.
- If you cheat on any homework, quiz or exam, I will automatically give you a zero for that grade. Depending on the severity, I may decide to fail you from the class. Using a cell phone during in class assignments and/or quizzes is considered cheating and you will receive a zero on that assignment.
- 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. I will offer an extra credit opportunity on 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.