

Instructor: Trent DeGiovanni

Office: JWB 206

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Instructor Office hours: T 10:45-11:45/Th 5:00-6:00/By appointment

Lecture: TTh 6:00-7:30 pm, LCB 219.

Textbook Business Algebra, by MacArthur, 3rd edition

(please see the Math 1090 document on the following webpage prior to purchasing a book

<http://www.math.utah.edu/schedule/bookInfo/index.html>)

ISBN: 978-1-5249-9340-5

Course Information: Math1090, Business Algebra 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 payme

Course Outline

Textbook Coverage: 1.1-1.8, 2.1-2.5, 3.1-3.7, 4.1-4.6, 5.1-5.5

Homework: A homework covering the material from the previous week will be due every Thursday, exceptions may be made for holidays or exam weeks. These will be graded out of 10 points per section (each homework will likely cover more than one section). Half of the homework score will be based on completion, this means that if you made an honest attempt at all questions you will get half credit. If even one problem is not done you will not get any completion credit. The other half of the credit will be based on selected problems, for which solutions will also be posted on Canvas. There will be 31 homework sections, and the lowest 6 **sections** will be dropped. **Late homework will not be accepted. Homework will not be accepted via email.**

Quizzes: There will be a quiz every Thursday covering content from the previous week, exceptions may be made for holidays or exam weeks. These will be group quizzes, groups will be assigned via Canvas. The lowest three grades will be dropped. There are no make-up quizzes.

Midterm exams: There will be two 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. For Spring 2020, the final exam is scheduled on Wednesday, April 29th, from 3:30 to 5:45 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 April 8th to inform me of a conflict with another final. No exceptions made for any other conflicts.

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 finalexam.

<http://www.math.utah.edu/schedule/bookInfo/m1090ApprovedCalculators.pdf>

Online grading: All grades will be recorded on the Canvas page. Please make sure that the grades on returned work accurately reflect the grades posted on Canvas. Tests will be graded online using Gradescope. After the first midterm an email will be sent out requesting that an account is created. From here, you can view your midterms and finals. If you believe a mistake has been made in grading, you will have a week to request that a question is regraded. This must be submitted via Gradescope and not via email. An explanation of the reason for the request must be included.

Grading weight and scale

Homework	Quizzes	Midterms	Final
10 %	15%	50%	25%

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
[100,93]	(93,90]	(90,87]	(87,83]	(83,80]	(80,77]	(77,73]	(73,70]	(70,67]	(67,63]	(63,60]	(60,0]

*The instructor has the right to modify if necessary.

Additional resources

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.

Tutoring: Additional help can be found in the T. Benny Rushing Mathematics Student Center (adjacent to JWB and LCB), Room 155. Students can also find computers with access to mathematical software (Matlab, Maple, etc.) in the computer lab here. Hours and more information:

<http://www.math.utah.edu/undergrad/mathcenter.php>.

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. Students 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, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, and I will do so, beginning with verbal warnings and progressing to dismissal from and 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>

Students with disabilities 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 Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

Safety: The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For

more information regarding safety and to view available training resources, including helpful videos, visit <https://safeu.utah.edu/>.

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 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.

Student Wellness: 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.

Veterans Center: If you are a student veteran, the U of Utah has a Veterans Support Center located in Room 161 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/>. Please also let me know if you need any additional support in this class for any reason.