

Business Algebra

Math 1090-001, Fall 2019

Instructor: Sung Chan Choi, (Office:JWB 121)

Class meets: 08/20/2017 to 12/05/2019

Time: T Th 12:25PM-1:45PM

Place: LCB 215. See <https://map.utah.edu/>

Email: choi@utah.edu

Office Hours: Th 10:35-11:35 am, 2-3 pm, or by appointment

Course Information: Math1090, Business Algebra is a 3-credit semester course.

Prerequisites: Prerequisites: "C" or better in (MATH 980 OR MATH 1010 OR MATH 1030) or Accuplacer AAF score of 240 or better OR Accuplacer CLM score of 60 or better OR ACT Math score of 23 or better or SAT Math score of 570 or better.

Requirement Designation: Quantitative Reasoning (Math)

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.

Text: *Business Algebra*, 3rd edition, by Kelly MacArthur (ISBN: 9781524993405)

Book Purchasing Instructions:

See <http://www.math.utah.edu/schedule/bookInfo/Math1090BookInfo.pdf>

Calculators: I will only allow scientific calculators (no graphing or programmable calculators will be allowed ever) on exams or quizzes.

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

Canvas: Canvas will be used for posting course announcements, homework assignments, grades, files and any relevant supplementary material. You are also welcome to make use of the Canvas discussion board to discuss course problems or topics. You can access the Canvas page through CIS or by logging in at utah.instructure.com. Students should check the Canvas page regularly for course information and resources. Email notifications and correspondence will be sent to the student's UMail address ([u-number]@utah.edu); this email account must be checked regularly.

Additional Resources

- **Tutoring Center & Computer Lab-** There is free tutoring in the T. Benny Rushing Mathematics Student Center (LCB 155, the lower level between JWB and LCB), as well as a computer lab (LCB 155C). The regular hours is M-Th 8:00am - 8:00pm, Fri 8:00am - 6:00pm. See <http://www.math.utah.edu/undergrad/mathcenter.php>
- **Private Tutoring-** University Tutoring Services, 330 SSB. There is also a list of tutors at the tutoring center LCB 155.
- **Departmental Videos-** The math department has a full set of lecture videos which you are welcome to use to supplement our course material. See <http://www.math.utah.edu/lectures/math1090.html>

Grade Distribution:

Homework	15%
Quiz	15%
Midterm Exam 1 (9/26 (Th))	20%
Midterm Exam 2 (11/14 (Th))	20%
Final Exam (12/10 (T))	30%

Grading Scale:

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

Course Policies:

- **General**

- Books, notes, and any reference are **not** allowed on midterm exams and quizzes.
- You are allowed to use one 8.5×11 inch sheet of paper (front and back) for your reference during the **final exam**.
- If you cheat on any homework, quiz or exam, I will automatically give you a zero for that grade.
- You may need a scientific calculator for the course. No other types of calculators, such as graphing, programmable or cell phone calculators will be allowed in homework and exams.
- **No makeup exams and quizzes will be given** except in the case of a documented emergency. Please contact the instructor ASAP, or at least two classes ahead of time so that the instructor and student can make arrangements to make up the test. I reserve the right to make makeup exams more difficult than the scheduled test.
- There will be **no retakes** of exams and quizzes . . . ever. Your score is what you get.

- **Weekly Homework**

- I will collect homework during the class on **Thursday**. Homework assignment will be posted on CANVAS. You need to check CANVAS everyday. All of the homework assigned the previous week is due at that time.
- All homework must be written in a neat and organized form and **stapled** together. If you do **not staple** together or do **not write homework number and your name**, **5 points will be taken off**. A non-stapled or non-organized homework will hinder our grader from grading because the class size is big.
- I will grade all homework problems for completeness. It will be worth 1 point a problem. For example, if you have 30 problems of homework assigned for one week and you solve all 30 problems then you can get 30 points regardless of correctness.
- I will choose 5 problems from weekly homework assigned then they will be graded for correctness. Each selected problem will be worth 5 points. To get 5 points for correctness, you **MUST** show all your work! If you turn in just the answers, with no work shown, you will get a 0 point for correctness.
- So total score will be worth the sum of completeness and correctness. For example, if you have 24 points for completeness and 23 points for correctness then your total score will be 47.
- **Late homework will NOT be accepted**. But **3 lowest scores** will be dropped at the end of this semester.

- **Daily Quiz**

- Quiz will be given for **every class** during this semester.
- 10-15 minutes will be given.
- **3 lowest scores** will be dropped.

- **Midterms**

- There will be three in-class midterm exams.
- **9/26(Th), and 11/14(Th)** in the regular classroom.

- **Final**

- The comprehensive final exam will be on **December 10 (T), 3:30 PM - 5:45 PM**. The location will be announced in class.
See <https://registrar.utah.edu/academic-calendars/final-exams-fall.php>
- There will be **no alternative** arrangements made for scheduling the final exam because we will have departmentally common final exam. You must be here for the scheduled final exam or you will receive a zero on that exam. Please **remember this fact** when scheduling your flights home for winter break.
- If you have another final exam scheduled at the same time or an **overlapping** time with this final exam, you have **until November 20th** to inform me of that conflict. In that case, we'll work with the other professor to find a solution for your final exam scheduling conflict.
- If you inform me of the final exam scheduling conflict **after November 20th**, then you will have to work out the accommodations with the other professor or **figure it out yourself**.
- No exceptions made for any other conflicts.

- **Attendance:** Like any college course, attendance is not mandatory. Please note however, that concepts will be thoroughly explained and reviewed in class. Students who regularly attend score on average 30% higher on exams than those who do not.

- **Other Policies**

- I do NOT allow the use of laptop computers in my classroom. But tablets are okay if you are taking notes on it.
- There will be no retakes of exams . . . ever. Your score is what you get.
- You may take an alternate exam if you submit a documented verification about it to me first and explain the extenuating circumstances that make it necessary. Needing to work, babysitting your siblings, oversleeping, or needing more time to study do not pass as acceptable reasons.
- I will demand respectful behavior in my classroom. Examples of disrespect include reading a newspaper or magazine in class, social chatting with your friend in class, text-messaging your buddies during class or cuddling with your girl/boyfriend in class.
- There will be no cursing nor negative ranting (for example, "math sucks") on any written work turned in. The penalty for such things on your written work will be a zero score on that assignment or test!
- You need to have a valid email address registered with Campus Information System.
- You need to check CANVAS everyday.
- 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.

See <http://regulations.utah.edu/academics/6-400.php>

- 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.

Important Dates:

- **Holidays**

- 10/7 (M) - 10/11 (F): Fall Break

- 11/28 (M) : Thanksgiving Break

- 8/30 (F): Last Day to Add,Drop(Delete),Elect CR/NC,or Audit Classes

- 10/18 (F): Last Day to Withdraw from classes

- See <http://registrar.utah.edu/academic-calendars/fall2019.php>

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.

ADA:

The American with Disabilities Act requires that reasonable accommodations be proved for students with physical, cognitive, systemic learning, and psychiatric disabilities. The student needs to have such a disability approved by the Disability Service Office (162 UNION, 581-5020) in order to have the accommodations provided. The instructor need to be informed about such a disability and approved accommodations at the beginning of the semester.

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: veteranscenter.utah.edu. Please also let me know if you need any additional support in this class for any reason.

University Safety Statement:

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).

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.