

## MATH 1090-002 Business Algebra, Summer 2020

**Class meets:** 5/11/2020 (M) to 6/17/2020 (W)

**Time & Place:** Lecture: This is a remote learning class, where instruction will take place at MWF 09:00 AM-11:15 AM in the online schedule. Students will join remotely for a learning experience that takes place together using technology (**zoom meeting id: 305 850 4901**).

**Holidays:** 5/25 M (Memorial Day)

**Other Important Dates:**

- 5/14 (Th): Last Day to Add,Drop(Delete),Elect CR/NC,or Audit Classes, Last day to wait list
- 5/29 (F): Last Day to Withdraw from classes
- See <http://registrar.utah.edu/academic-calendars/summer2020.php>

**Instructor & Office:** Sung Chan Choi, JWB 121

**Email:** [choi@math.utah.edu](mailto:choi@math.utah.edu)

**Office Hours:** Online by appointment.

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

Book Purchasing Instructions:

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

### Additional Resources

- **Online Tutoring & Learning consultaion** -  
Visit <https://learningcenter.utah.edu/> or email [learningcenter@utah.edu](mailto:learningcenter@utah.edu)
- **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>

**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 if 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](http://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.

**Course Information:** Math 1090 Business Algebra is a 3 credit course.

**Prerequisite Information:** “C” or better in (MATH 1010 OR MATH 1050 OR MATH 1080) OR Accuplacer CLM score of 60 or better OR ACT Math score of 23 or better OR SAT Math score of 540 or better.

**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.

**Course Objectives:**

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.

**Grade Distribution:**

Homework	10%
Daily Quiz	20%
Midterm Exam 1	20%
Midterm Exam 2	20%
Final Exam	30%

**Grading Scale:**

$\geq 93$	A	73 - 76.9	C
90 - 92.9	A-	70 - 72.9	C-
87 - 89.9	B+	67 - 69.9	D+
83 - 86.9	B	63 - 66.9	D
80 - 82.9	B-	60 - 62.9	D-
77 - 79.9	C+	$\leq 59$	E

## Grading Policies:

- **General**

- I'll post lecture notes before class. You have to prepare the lecture note on your computer or in printout.
- You are allowed to use only book and lecture notes for your reference during the **exams and quizzes**. You are **not allowed to use googling**.
- If you cheat on any homework, quiz or exam, I will automatically give you a zero for that grade.
- Makeup exams and quizzes are **not** allowed without a reasonable document like doctor's note.
- 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.
- There will be no retakes of exams . . . ever. Your score is what you get.

- **Weekly Homework**

- I will collect homework in gradescope on **Wednesday**. 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. If you do **not write homework number, 5 points will be taken off**.
- 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 **2 lowest scores** will be dropped at the end of this semester.

- **Daily(on the days when class meets) Quiz**

- Quiz will be given daily on the topic of the previous class.
- I will post quiz on **CANVAS** at 11:00 am. You can spend 15 minutes on taking the quiz then submit the pdf file on **gradescope** within 10 minutes. So you can use 25 minutes until you submit your work.

- **2 lowest scores** will be dropped.

- **Midterm Exams**

- There will be 60-minute two midterm exams.
- I will post exam on **CANVAS** at 9:00 am on the exam day. You can spend 60 minutes on taking the exam then submit the pdf file on **gradescope** within 10 minutes. So you can use 70 minutes until you submit your work.
- **5/29(F) and 6/12(F)** .
- **No makeup exams 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 exam.

- **Final Exam**

- A two-hour comprehensive exam will be given.
- I will post exam at 9:00 am on **CANVAS** on 6/19. You can spend 120 minutes on taking the exam then submit the pdf file on **gradescope** within 15 minutes. So you can use 135 minutes until you submit your work.
- **No makeup exams will be given. No exception**

## Other Policies

- I request respectful behavior in the classroom. Please do not read a newspaper or magazine in class, talk with your friends in class, or use a phone for texting or web surfing in class.
- Please do not curse or use disparaging language on any assignment that is turned in; if you do, you will receive a zero 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.

**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, 162 Olpin Union Building, 801-581-5020. CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability & Access.

**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 UIDcard, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email [bpeacock@sa.utah.edu](mailto: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 students ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at [www.wellness.utah.edu](http://www.wellness.utah.edu) or 801-581-7776.