

MATH 1090-003 Business Algebra, Summer 2018

Class meets: 6/22/2018 (F) to 8/1/2018 (W)

Time & Place: Lecture: MWF at 10:00 AM-12:15 PM in JWB 335

Holidays: 7/4 W (Independence Day)

Other Important Dates:

- 5/18 (F): Last day to add without a permission code
- 6/26 (T): Last Day to Add,Drop(Delete),Elect CR/NC,or Audit Classes, Last day to wait list
- 7/13 (F): Last Day to Withdraw from classes
- See <http://registrar.utah.edu/academic-calendars/summer2018.php>

Instructor & Office: Sung Chan Choi, JWB 121

Email: choi@math.utah.edu

Office Hours: Monday and Thursday 12:30 pm - 1:30 pm in JWB 121, or by appointment.

Text: *Business Algebra*, 2nd edition, by Kelly MacArthur

ISBN: 978-1-4652-4069-9 (E-Book Version)

Go to <http://www.math.utah.edu/schedule/bookInfo/Math1090BookInfo.pdf> and purchase the e-book package for \$65 (e-book +WebAssign access)

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).
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>

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

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](mailto:[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:

≥ 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+	≤ 59	E

Grading 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.
- 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.

- **Homework-WebAssign**

- Homework will be assigned through WebAssign: for a detailed guide on how to create your WebAssign account and how to enroll in the WebAssign course, see the dedicated pdf file on Canvas (“How to create a WebAssign account”). Please try to complete this process before the course starts and get familiar with the website. Once successfully enrolled, you will be able to purchase the textbook directly through WebAssign, and you will also find a practice assignment to get familiar with the platform. Homework due dates will be displayed on WebAssign as well (there will be a homework due roughly three times a week), and it is your responsibility to keep track of when homework is due. I will not answer questions about the homework during class time: please come to office hours or review sessions for those.
- **2 lowest scores** will be dropped at the end of this semester.

- **Daily Quiz**

- Quiz will be given daily on the topic of the previous class in class.
- 10 minutes will be given.
- **2 lowest scores** will be dropped.

- **Midterm Exams**

- There will be 60-minute two in-class midterm exams.
- **7/9(M) and 7/25(W)** in the regular classroom.
- **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.
- You are allowed to use one **8.5×11 inch sheet of paper (front and back)** for your reference during the final exam.
- **10:00 am - 12:00 pm 8/3(F)** in a classroom (TBA).
- **No makeup exams will be given. No exception**

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.
- 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 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 or 801-581-7776.

Tentative Course Outline:

The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

Week	Content
Week 1	<ul style="list-style-type: none">• 6/22 Intro, 1.1-1.3
Week 2	<ul style="list-style-type: none">• 6/25 Section 1.3-1.5 , Quiz 1• 6/27 Section 1.6, 1.7 , Quiz 2• 6/29 Section 1.8, 2.1 , Quiz 3
Week 3	<ul style="list-style-type: none">• 7/2 Section 2.2, 2.3 , Quiz 4• 7/4 Independence Day• 7/6 Section 2.4, 2.5 , Quiz 5
Week 4	<ul style="list-style-type: none">• 7/9 Review and Midterm Exam 1.• 7/11 Section 3.1-3.3• 7/13 Section 3.3, 3.4, 3.7 , Quiz 6
Week 5	<ul style="list-style-type: none">• 7/16 Section 3.6, 4.1 , Quiz 7• 7/18 Section 4.2, 4.3 , Quiz 8• 7/20 Section 4.3, 4.4 , Quiz 9
Week 6	<ul style="list-style-type: none">• 7/23 Section 4.5, 4.6 Quiz 10• 7/25 Review and Midterm Exam 2• 7/27 Section 5.1, 5.2
Week 7	<ul style="list-style-type: none">• 7/30 Section 5.3, 5.4 Quiz 11• 8/1 Section 5.5, (Review for Final) Quiz 12• 8/3 Final 10:00 AM ? 12:00 PM