

**Course Syllabus**  
Mathematics 1090, Section 090 Spring 2018  
Business Algebra

**Instructor:** Allechar Serrano López  
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**Office Hours:** Wednesdays 2:00-3:00 p.m.

**Online Office Hours:**

Tuesdays 7:00-8:00 p.m.

Participating in one of these is similar to making a Skype call while watching a math video. To attend, go to conferences in Canvas. You need speakers. If you have a microphone, you can ask questions; if not you can type them.

**Alternative Meetings:** If the times above are not convenient for you, contact me about setting up a meeting or office hour at an alternative time.

**Communication:** You may contact the instructor by e-mail or through Canvas-mail. When e-mailing your instructor, please include *1090* in the subject line. All announcements for the course will either be posted in quiz format on the Canvas website (these are graded) or sent by Canvas-mail.

**Course information:** Math 1090, College Algebra for Business and Social Sciences is a 3-credit semester course.

**Prerequisites:** At least a C grade in Math 1010 (Intermediate Algebra) OR Math 1050 (College Algebra) OR in Math 1080 (Precalculus) 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 540.

*Important Note:* The mathematics department DOES enforce prerequisites for all undergraduate courses. If you were able to register for this class based on your enrollment in the prerequisite course last semester and you did not receive the minimum grade in that course to enter this class, then you will be dropped from this class on Friday of the first week of classes. If you are in this situation, it is in your best interest to drop yourself from this class and enroll in a class for which you have the prerequisites before you are forcibly dropped.

**Weekly workload:** This is an online course, but still an intense course. According to the University of Utah, a 3-unit course should have about 3 hours of lecture and 6 hours of outside study/homework time. This means that our online course, will take the average student about 9 hours per week. Some students will be able to get by on less, and some student will need more.

Each week, we cover specific sections. You can choose when you work on the material in the week, keeping your objective and topic goals in mind, but you can't complete the course at your own pace.

**Is online right for you?:** Before committing to this course, consider whether the online format matches your learning style. To aid in this, please look at: A: Online?

**To purchase course materials:** Use the link found in this document: <http://www.math.utah.edu/schedule/bookInfo/Math1090BookInfo.pdf>

**Description of course materials and resources:**

**Homework website:** The homework website that accompanies the textbook is run by the company WebAssign. It has the weekly homework assignments. In order to get to a WebAssign, click on the link in the first module in Canvas. The first time you do this, your WebAssign account will be created.

If you are sure you will be taking the class, purchase WebAssign access, which gives you access to the homework and the E-book. If you drop the course after you've already paid for WebAssign, please contact the publisher Kendall Hunt to get a refund (go to the site where you purchased the book and look for the contact option). They will provide a full refund if you drop within the first two weeks of the semester.

**Text:** Business Algebra, 2nd edition, by Kelly MacArthur, published by Kendall Hunt. In this course we will be using the E-book version available on WebAssign. If you would like to purchase a paper version as well, contact your instructor for options.

**Course website:** Canvas <https://utah.instructure.com/> It is a good idea to save this address, so that you can get to Canvas without going through CIS. Usually once or twice a term, CIS goes down, so the alternative access is useful.

**Recorded lecture videos:** They are available through the modules or in both streamable and downloadable versions at <http://www.math.utah.edu/lectures/math1090.html> (It's good to save this address somewhere else, in case Canvas is down)

**Technology:** You may find it helpful to have a scientific or graphing calculator for your own personal use. I will give recommendations for the weekly quizzes, but whether you use a calculator or not is up to you. (You will get different feedback either way. If I allow calculators on exams or quizzes, I will only allow scientific calculators (no graphing or programmable calculators will be allowed ever). Most and possibly all of the time, you will not have use of a calculator on exams.

**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.

**Help/Resources:** Contacting me by my e-mail, coming into office hours, or setting up an appointment is the first way to get help. I am happy to talk about individual problems, mathematical concepts, or help you make a study/learning plan. Please seek help early in the term.

If you have a question about a WebAssign problem, you can contact me (good for formatting issues) or look/post in the Canvas discussion board (good for content questions/ calculation issues).

You can also get tutoring through the following:

- **Math Tutoring Center (drop-in tutoring, computer lab, group tutoring)** This is free to all students. It is in the underground passage between JWB and LCB, Room 155. See <http://www.math.utah.edu/ugrad/mathcenter.html> for hours.
- **Private Tutoring** University Tutoring Services, 330 SSB (they offer inexpensive tutoring). There is also a list of tutors at the Math Department office in JWB 233.
- **Computer Lab** also in the T. Benny Rushing Mathematics Student Center, Room 155C. See <http://www.math.utah.edu/ugrad/lab.html>
- **ASUU Tutoring in the evenings at the Marriott Library** See <https://tutoringcenter.utah.edu/tutoring-services.php> for details.

**Breakdown of course:** Each week, we cover specific sections. You can choose when you work on the material in the week (as long as you meet deadlines), but you can't complete the course at your own pace. There is weekly online homework and weekly online quizzes. All materials can be found in the modules on Canvas, except the weekly homework, which is found at WebAssign. There will be two midterms and a final, which you will take at the testing center or with a proctor.

Here is a more detailed description of both graded and non-graded aspects of this course.

- **Reading Announcements on Canvas** Course documents and announcements are given in quiz format and have a short quiz about the content at the end. These "quizzes" begin with "A:..." Completing these is worth 2% of your grade. Suggested due dates are shown, but these can be completed at any time before the common final.
- **Reading from your text book** (use the E-book on WebAssign.)
- **Watching the video lectures** These were produced by the UofU math department. They are available in Canvas or on the math department website. If you find a video isn't addressing your questions, ask your instructor for additional resources.
- **Homework (worth 14%)** Homework will be assigned through WebAssign. These are due on Wednesday nights at 11:59 pm. The lowest three homework scores will be dropped at the end of the semester.
- **Bi-weekly Take-Home Quizzes (worth 14%)** There will be take-home quizzes, due on the following dates:

– 1/24	– 2/28	– 4/11
– 2/7	– 3/14	
– 2/21	– 3/28	– 4/24

You can access them on Friday (earlier by special arrangement) and they are due on Wednesdays at 11:59 pm. You will need to scan and upload them as pdfs. The lowest quiz score will be dropped at the end of the term. Note that some weeks you will have homework and quiz due on the same day, so please plan accordingly.

- **Exams (worth 40%)** There are two proctored midterm exams. Each exam is worth 20% of your grade. You must schedule your exams ahead of time, using the Schedule exams link on the top left of the Canvas course page. Exams will be administered at the Uonline testing center (in the Marriott Library), at a satellite testing center (in Sandy) or if you are out of area, with a proctor that you set up and register with Uonline. There will be practice material provided prior to each exam. Unless otherwise announced, no calculators will be allowed on exams. More information about exams, including how to set up a proctor, can be found here A: Exams. The dates for the exams are the following:

**Midterm 1 February 12-17**

**Midterm 2 April 2-7**

- **Common Final (worth 30%)**: The final is comprehensive. All the students in Math 1090 at the University of Utah take the same common final at the same time, including online students. However, since you are an online student, if you are unable to attend the common final due to the time or location, you can take the exam at the testing center or with a proctor at an earlier time. The date of the final exam is

**Monday 4/30  
3:30 - 5:30 pm**

The dates for the alternative final exam are April 25-28.

- **Extra Credit** Extra credit, worth up to 3-5% or more of your course grade, can be earned for participating in online discussions (by asking or answering questions with significant mathematical content) or by spotting errors in course materials. See A: Extra Credit for details.

**Grading:** The grades will be calculated as follows:

Announcement Quizzes	2%
Homework	14%
Quizzes	14%
Midterm exams	40%
Final Exam	30%

The lowest 3 online homework scores and the lowest 1 quiz scores will be dropped at the end of the term.

**Online grading:** I will put your grades online on Canvas. 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.

**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).

**Early policy:**

- You can start WebAssign homework early at any time.
- You have a 6-day window to complete quizzes. Under special circumstances, you may request them up to two-days earlier than this. Please request this at least 48 hours before you would like to access the quiz.
- You can also take exams up to a week early, upon well-planned request. Please let me know at least 7 days before you wish to take the exam.
- Students are encouraged to take the departmental final. If this time or location is inconvenient, you may schedule an earlier alternative final either at the Uonline testing center or with a proctor.

**Late policy:** Unexpected events arise you get sick, called into work, have computer or Internet problems, get back late from a trip, etc. If you know you will have a time conflict, busy week, be away, etc., please start work early.

**Graded WebAssign assignments:** You can request 5-day extensions of WebAssign assignments up to 2 weeks after they are due. This deduction is automatically granted by WebAssign. There is a penalty of 30% of the unearned points for using this feature (i.e. a penalty of 1-15 points per assignment). After 2 weeks, extensions are not given on graded assignments. Instead, you should use the practice assignments for practice.

The three lowest graded WebAssign assignment scores will be dropped as well at the end of the term.

If a situation arises in your life which will prevent you from completing your assignments within 2 weeks of the due date, please contact your instructor with documentation.

**Quizzes and Exams:** You have a 6-day window to take quizzes and a 6-day window to take exams. It is recommended that you complete these during the middle of the window, in case something arises at the end which would prevent you from completing them.

- Extensions on quizzes or exams are only given in the case of BIG, UNANTICIPATED, DOCUMENTABLE circumstances beyond your control. If this occurs you must contact your instructor in a timely manner and provide documentation by a third party (for example, a Dr.'s note or police report).
- The following reasons are not sufficient to get an extension on a quiz: technical issues like failed computers or internet, being called into work. Similarly, there are very few reasons that qualify for extensions on exams.

**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 and 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>

**Cheating:** If you cheat on any homework, quiz, project or exam, I will give you a grade of zero for that work. Depending on the severity of the cheating, I may decide to fail you from the class. In all cases, I will report the incident to the Dean of Students, and to the International Students Office in the case of an international student.

**Additional policies:**

- 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.
- If you have questions about any exam/quiz/homework grade, or you want to appeal the grading of the exam/quiz/homework, you must scan it and email it to me within one week of the exam/quiz/homework. I'm happy to look over your appeal and/or questions and give my feedback in order to benefit your learning. But, it must be done in this time frame.
- I will offer an extra credit question on every midterm and final exam, to help make up for arithmetic mistakes. 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 when you realize you don't like your grade. Most likely, I just won't respond to such emails or questions.

**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:

- Please inform me of whichever pronouns you prefer me to use for you. I will put great effort into honoring your request and ask that you correct me if I do happen to make a mistake.
- 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.

**Disclaimer:** This syllabus may change during the semester. If I do any modification to this syllabus, I will let you know and post the new syllabus on the Canvas webpage.