

MATH 1090 – College Algebra for Business and Social Sciences – SPRING 2021 Section 1

Instructor: Christina Pick

Office: Zoom

Contact: pick@math.utah.edu

Office Hours: Mondays 9:30-10:30 and TBA or by appointment

(The second office hour will be voted on in the first week of class)

Meets: MW 8:05-9:25 ONLINE via Zoom

Course Description:

In Math 1090, College Algebra for Business and Social Sciences, students will gain a background of algebra topics that will be important in future business classes. Topics include 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. Math1090 is a 3-credit semester course and satisfies the University's QA requirement.

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 (within the last two years).

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.

Course Details:

- **Course type: Interactive Video Conferencing (IVC)**
- **Course meeting details:**
 - This course will meet virtually via **Zoom** Mondays and Wednesdays from 8:05-9:25am
 - Exam Schedule (mandatory attendance on Zoom):
 - Midterm Exam 1: **Wednesday, Feb. 24, 2021**
 - Midterm Exam 2: **Wednesday, Mar. 31, 2021**
 - Final Exam (common exam for MATH 1090): **Thursday, April. 29, 2021, 3:30-5:30pm**

- **Course information will be available online on the course Canvas page**
- **Attendance:**
 - Students are expected to attend our synchronous online class meetings each Monday and Wednesday. **Homework assignments** will be due on Mondays, Wednesdays, and sometimes Fridays. **Quizzes** and **Exams** will be given and due in class. You must be present in the online class in Zoom to participate in these assessments. Submitting such an assessment, but not being present in class, will be considered **academic misconduct**. A number of quizzes will be dropped to accommodate unavoidable circumstances/absences that may arise during the semester (see the **Assessment and Grading** portion of the syllabus for these details).
- **Late/Makeup Work:**
 - Homework: there will be no late work accepted for any homework assignments except in extreme circumstances. I must receive notice at least 24 hours before a homework assignment is due so arrangements can be made. Again, 3 homework grades will be dropped to make up for unavoidable circumstances that do not merit an extension.
 - Quizzes: there will be no makeup quizzes except in extreme circumstances. I must receive notice at least 48 hours before the quiz so arrangements can be made to take the quiz early if necessary. 3 quiz grades will be dropped for unavoidable circumstances that do not merit a makeup quiz.
 - Tests: there will be no makeup tests except in extreme circumstances. I must receive notice at least 72 hours before a test so arrangements can be made to take the test early if necessary.
 - Please provide proof such as a formal doctor note when possible.
- **COVID-19 Considerations:**
 - Per University requirements, students must self-report if they test positive for COVID-19 via coronavirus.utah.edu.
- **Course Materials:**
 - **Textbook:** Business Algebra, 3rd edition, published by Kendall Hunt, (ISBN: 9781524993405). (The majority of assignments will be given from this text. Please contact me if you experience any issues accessing or acquiring this text.)
 - **Additional Course Materials:**
 - The course website is Canvas.
 - The university has recorded lectures for MATH 1090, available at <http://www.math.utah.edu/lectures/math1090.php> These lecture videos can always be used as an additional resource in learning the course material, and may occasionally be used as part of class assignments. They will also be posted in Canvas.
 - We will use the online site, Gradescope, for grading and giving feedback on exams. There is a link in Canvas to Gradescope. You may be asked to submit some assignments directly to Gradescope.
- **Technical Requirements:**
 - A scientific calculator is needed for some homework and exams. On exams,

you are allowed to use a basic scientific calculator, so long as it does not have graphing or scientific formula functionality. You are not allowed to use a phone or computer calculator app. If you are uncertain whether your calculator meets requirements, ask me.

- For both quality learning and proctored testing, students are required to have access to the following equipment:
 - A strong internet connection with sufficient bandwidth (in order to participate in IVC classes, access course materials, and take exams):
 - A webcam on your computer or camera on your phone (this is required for taking quizzes and exams in Zoom; it is recommended for IVC lecture classes):
 - A scanning device which is different than the device you are using for your webcam (smartphones can be used as scanning devices)
 - a microphone (used for online meetings);
- Students are expected to be computer literate and Canvas and zoom navigation skills are expected. Knowledge and navigation of canvas and zoom is critical to access all features and resources of this course.
- Students are expected to participate in the IVC portion of class, which is done through Zoom, with audio and visual enabled. This expectation is there because it improves learning and the classroom environment. If students need to turn off cameras and/or microphones, that is allowed. It is polite if you will be doing so for long periods to inform your instructor. Also note, even though microphones are enabled, they may be muted when not in use.
- During quizzes and exams, students are required to have audio available if needed but stay muted unless asked otherwise. Students need to position the camera and/or themselves so that their head, hands and workspace is visible. Students are required to have a separate scanning device and continue to have their Zoom camera turned on while scanning; during the scanning phase, students may be gone from the screen for a few seconds. Note, a smartphone can be used as a scanning device (for example, the iPhone has built-in scanning capabilities through the Notes app).
- **UofU Learning Support:**
 - Math Center Online Tutoring, (Paid for by Your Student Fees)
 - The Learning Center, 3 free tutoring sessions, \$5 after that, learning consultations <https://learningcenter.utah.edu/>
 - Student Success Advocates <https://ssa.utah.edu>
- **General Help:**
 - Here is information from the University about logistics in light of COVID-19. There is also information about financial assistance, counseling, the food pantry,

and much more. <https://coronavirus.utah.edu/#students>

- **Equipment Help**

- The UofU has a laptop and mobile hotspot loan program – laptops, mobile hotspots mailed to current U students on a first-come, first-served basis. You can find out more information about this through this link: <https://union.utah.edu/covid-19/>
- For technical assistance, review the [Canvas Getting Started Guide for Students](https://community.canvaslms.com/docs/DOC-10701) <https://community.canvaslms.com/docs/DOC-10701> and/or contact TLT, Knowledge Commons, etc.

Content Overview:

- **Course Objective:** for students to improve their quantitative reasoning, gaining an understanding of algebra and its applications to business that prepares them for future business courses.
- **Instructor Objective:** My aim is to facilitate the students' learning and retention of course concepts in the most effective way possible by providing a nonjudgmental environment in each student feels welcome to be present and participate. My goal is not only to help students learn the course content, but to help students gain confidence in their quantitative abilities that will extend beyond the scope of the material covered here.

Expected Learning Outcomes (ELOs):

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.

Course Design:

- **Lectures:** Class lectures will be structured as a combination of lecture and allowing time for questions before beginning new topics. There will be short periods in class to allow for students to complete problems and discuss. Be prepared to participate either verbally or through the chat, preferably both.
- **Assignments:**
 - The lowest 3 assignment grades will be dropped.
 - Assignments will be graded in the following way:
 - 50% credit for:
 1. Turning in the complete assignment on time with sufficient work. Copying answers from the back of the book does not earn these points.
 - 50% credit for:
 1. Correctness
 2. Neatness
 3. Correct work shown (this includes, but is not limited to: relevant equations shown, thought process made clear, variables labeled)
- **Quizzes:**
 - (see **Assignments** section)
 - There will be 6-8 quizzes spread out throughout the semester. A set amount of time, generally 30 minutes, will be given to complete each quiz. You will be allowed to use your notes, previous homework assignments, textbook, and a calculator to complete them. You may not use the Internet.
 - Attendance in class is mandatory to turn in a quiz. At the end of the semester your **lowest 3 quiz grades will be dropped.**
- **Exams:**
 - **Dates:**
 - **Midterm Exam 1: Wednesday, Feb. 24, 2021**
 - **Midterm Exam 2: Wednesday, Mar. 31, 2021**
 - **Final Exam (common exam for MATH 1090): Thursday, April. 29, 2021, 3:30-5:30pm**
 - Final Exam: The final exam will consist of 2 parts: one will cover selected material from Midterms 1 and 2; the other will assess only the material covered after Midterm 2.
 - **Exam structure:**
 - Exams will be taken in class, as addressed previously in the syllabus. The exams will be split into two blocks, each for 30 minutes. The time block will be activated in Canvas, and upon completion, that portion of the exam should be submitted before beginning the next block.
 - Exam structure will be discussed more thoroughly in class. I am happy to address any and all questions, as this is a new process for all of us.
 - You can bring a single 8x11in piece of paper, front and back, with any notes, formulas, ect. that you would like to use on the test.

- Exam questions will be similar in format to homework and quiz questions, therefore reviewing previous assignments and quizzes is a useful way of preparing for exams.
- Exam reviews will be posted on Canvas the week before each exam. A portion of the Monday class before each exam will be dedicated to reviewing the material, which will be done in a Q&A/Discussion format. There may be extra credit opportunities at these review sessions.
- Exam review zoom sessions outside of class may be offered if there is enough demand.

Student Expectations: In addition to the expectations with regards to attendance, assignments, and grading, the following are also expected of students:

- Proper etiquette in a virtual classroom environment:
 - Unacceptable behavior:
 - *Posting photos or comments that would be off-topic in a classroom are still off-topic in an online posting.*
 - *Disrespectful language and photos are never appropriate.*
 - *Using angry or abusive language is not acceptable, and will be dealt with according to the Student Code. The instructor may remove online postings that are inappropriate.*
 - *Using ALL CAPS, except for titles, or overuse certain punctuation marks such as exclamation points and question marks.*
 - *Course e-mails, e-journals, and other online course communications are part of the classroom and as such, are University property and subject to the Student Code. Privacy regarding these communications between correspondents must not be assumed and should be mutually agreed upon in advance, in writing.*
 - *Other unsuitable classroom behavior.*
- It is expected, both of you and me, that electronic equipment is operating and prepared for class. Equipment failure is not a valid excuse for missing a quiz/exam, or for late homework submission. Please communicate all technical issues with me immediately so we can work it out without losing points.

Course Schedule: (Note, some sections may be omitted, and some may be covered more thoroughly. This is a tentative schedule and will be updated as the semester progresses.)

Week #	Date	Monday	Date	Wednesday
1			1-20	1.1
2	1-25	1.2,1.3	1-27	1.4,1.5
3	2-01	1.6,1.7	2-03	1.8,2.1
4	2-08	2.2	2-10	2.3
5	2-15	2.4	2-17	2.5
6	2-22	Exam 1 Review	2-24	Midterm Exam #1 (in class) covers through 2.5
7	3-1	3.1,3.2	3-03	3.3,3.4
8	3-8	3.5,3.6	3-10	3.7,4.1
9	3-15	4.1,4.2	3-17	4.3,4.4
10	3-22	4.5	3-24	4.6
11	3-29	Exam Review	3-31	Midterm Exam #2 covers through 4.6
12	4-05	No Class	4-07	5.1/5.2
13	4-12	5.2/5.3	4-14	5.3/5.4
14	4-19	5.5	4-21	Final Exam Review
15	4-26	Final Exam Review	4-28	No Class
16	5-03	Final Exam	5-05	Done

Important Dates:

Classes begin: Tuesday, January 19

Last day to add without a permission code/wait list: Friday, January 22

Last day to add or drop classes: Friday, January 29

Presidents Day (no class): Monday, February 15

Midterm Exam 1: Wednesday, February 24

Non-instructional Day (no class): Friday, March 5

Last day to withdraw from classes: Friday, March 12

Midterm Exam 2: Wednesday, March 31

Non-instructional Day (no class): Monday, April 5

Classes end: Tuesday, April 27

Reading Day (no classes): Wednesday, April 28

Final Exam: Thursday, April 29, 3:30-5:30pm

Assessments and Grading:

The final grade will be composed of assignments, quizzes, midterms, and the final exam, split up as follows:

Assignments: 20%
Quizzes: 20%
Midterm Exam 1: 20%
Midterm Exam 2: 20%
Final Exam: 10% (previous material) + 10%(new material)

If a grade is recorded incorrectly, it is the student's responsibility to let the instructor know in a timely manner.

The grading scale for final grades is as follows:

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

The lowest 3 quiz grades will be dropped. The lowest 3 homework assignments will be dropped.

Credit/No Credit Option:

If you are taking Math 1090 to meet a major or minor requirement, then you should opt for a letter grade, rather than credit/no credit (CR/NC).

If you are taking Math 1090 as a prerequisite, it is easiest if you opt for a letter grade. You need a C or better to enroll in Math 1100 (Business Calculus). But if you choose to take Math 1090 CR/NC, when you want to enroll in the subsequent class, you will need to request a permission code. The permission code team will look up whether the underlying grade meets the requirements.

This is the official University description of the credit/no credit option: “The credit/no credit (CR/NC) option allows a student to enroll in selected courses outside of his/her academic plan, without the pressure of competing for a letter grade. By electing CR/NC, students are expected to complete the same work as students enrolled for letter grades.” If you are interested in credit/no credit, consult the following:

- University guidelines:
<https://catalog.utah.edu/#/policy/B12v3LX0G?bc=true&bcCurrent=Grading%20Poli>
- Dates for Choosing CR/NC
<https://registrar.utah.edu/academic-calendars/spring2021.php>
- Consider speaking with an academic advisor to determine whether this is a good option.

ACADEMIC CODE OF CONDUCT

Students are encouraged to review the Student Code for the University of Utah: <https://regulations.utah.edu/academics/6-400.php>. In order to ensure that the highest standards of academic conduct are promoted and supported at the University, students must adhere to generally accepted standards of academic honesty, including but not limited to refraining from cheating, plagiarizing, research misconduct, misrepresenting one's work, and/or inappropriately collaborating. A student who engages in academic misconduct as defined in Part I.B. may be subject to academic sanctions including but not limited to a grade reduction, failing grade, probation, suspension or dismissal from the program or the University, or revocation of the student's degree or certificate. Sanctions may also include community service, a written reprimand, and/or a written statement of misconduct that can be put into an appropriate record maintained for purposes of the profession or discipline for which the student is preparing.

ADDITIONAL POLICIES AND RESOURCES

Inclusivity Statement: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, and veteran status, and other unique identities. gender, sexuality, disability, age, socioeconomic status, ethnicity, race, culture, and other unique identities. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Discrimination and Harassment: 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 Office of the Dean of Students, 270 Union Building, 801-581-7066. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS). Please see Student Bill of Rights, section E <http://regulations.utah.edu/academics/6-400.php>. I will listen and believe you if someone is threatening you.

Names/Pronouns. Canvas allows students to change the name that is displayed AND allows them to add their pronouns to their Canvas name. Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account, which managed can be managed at any time). 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 or on assignments. Please advise me of any name or pronoun changes so I can help create a learning environment in which you, your name, and your pronoun are respected. If you need any assistance or support, please reach out to the LGBT Resource Center. https://lgbt.utah.edu/campus/faculty_resources.php

English Language Learners. If you are an English language learner, please be aware of several resources on campus that will support you with your language and writing development. These resources include: the Writing Center (<http://writingcenter.utah.edu/>); the Writing Program (<http://writing-program.utah.edu/>); the English Language Institute (<http://continue.utah.edu/eli/>). Please let me know if there is any additional support you would like to discuss for this class.

Undocumented Student Support. Immigration is a complex phenomenon with broad impact—those who are directly affected by it, as well as those who are indirectly affected by their relationships with family members, friends, and loved ones. If your immigration status presents obstacles to engaging in specific activities or fulfilling specific course criteria, confidential arrangements may be requested from the Dream Center. Arrangements with the Dream Center will not jeopardize your student status, your financial aid, or any other part of your residence. The Dream Center offers a wide range of resources to support undocumented students (with and without DACA) as well as students from mixed-status families. To learn more, please contact the Dream Center at 801.213.3697 or visit dream.utah.edu.

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.

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.

Student Success Advocates: The mission of Student Success Advocates is to support students in making the most of their University of Utah experience (ssa.utah.edu). They can assist with mentoring, resources, etc. Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact a Student Success Advocate for support (<https://asuu.utah.edu/displaced-students>).

The Americans with Disabilities Act:

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, veteran's status or genetic information. If you or someone you know has been harassed or assaulted on the basis of your sex, including sexual orientation or gender identity/expression, you are encouraged to report it to the University's Title IX Coordinator; Director, Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or to 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 police, contact the Department of Public Safety, 801-585-2677(COPS).

Campus 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 safeu.utah.edu

University Counseling Center The University Counseling Center (UCC) provides developmental, preventive, and therapeutic services and programs that promote the intellectual, emotional, cultural, and social development of University of Utah students. They advocate a philosophy of acceptance, compassion, and support for those they serve, as well as for each other. They aspire to respect cultural, individual and role differences as they continually work toward creating a safe and affirming climate for individuals of all ages, cultures, ethnicities, genders, gender identities, languages, mental and physical abilities, national origins, races, religions, sexual orientations, sizes and socioeconomic statuses. More information about the counseling center, including ways to contact them, can be found here: <https://counselingcenter.utah.edu/>.

Office of the Dean of Students The Office of the Dean of Students is dedicated to being a resource to students through support, advocacy, involvement, and accountability. It serves as a support for students facing challenges to their success as students, and assists with the interpretation of University policy and regulations. Please consider reaching out to the Office of Dean of Students for any questions, issues and concerns. 200 South Central Campus Dr., Suite 270. Monday-Friday 8 am-5 pm. Their phone number is 801-582-7066.

Syllabus subject to change: This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas.