College Algebra-Business (QL)

MATH - 1090 002

Introduction to Math 1090

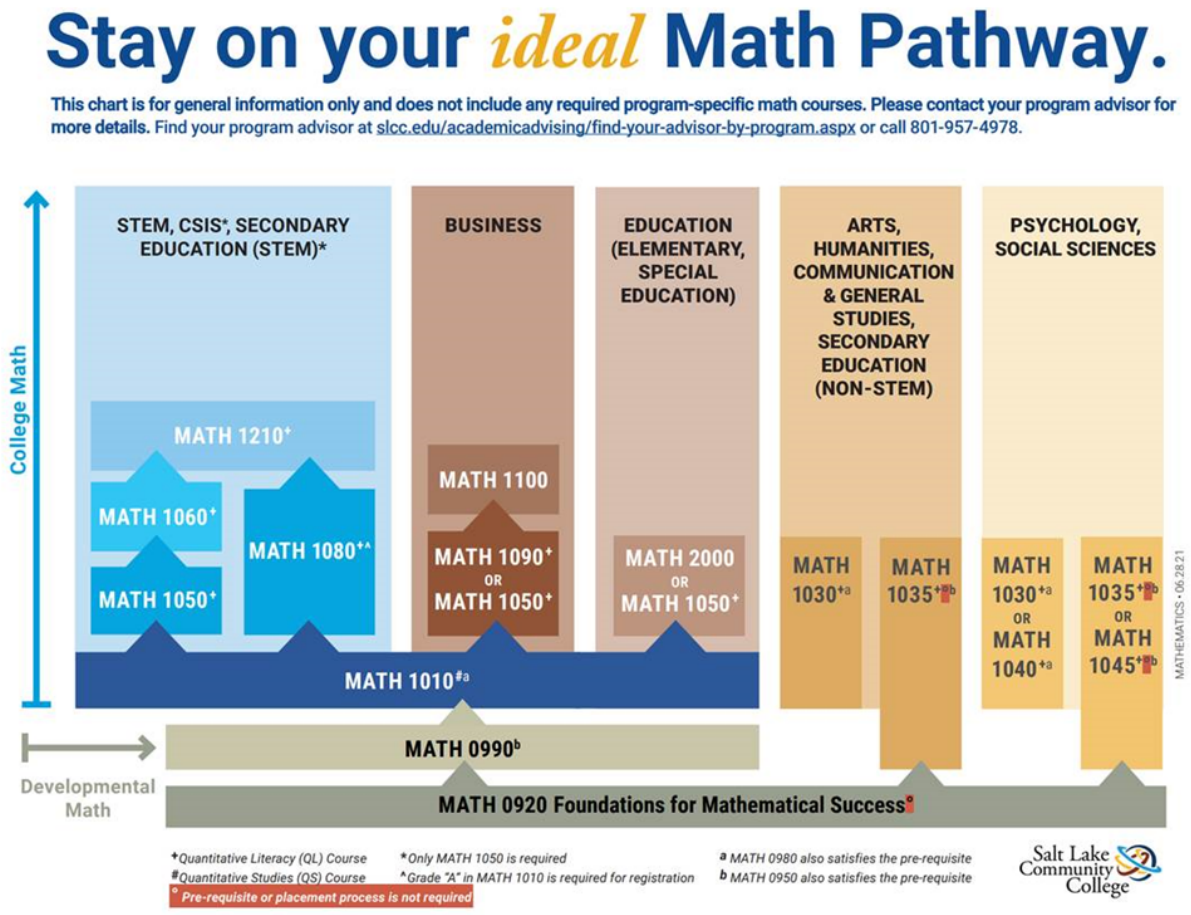
Our Math 1090 class will be delivered completely in an ONLINE format and delivered remotely. There are no required synchronous interaction requirements, but students are expected to complete all course requirements by the specified due dates on the course calendar. This **syllabus** and the **Orientation Module** in our CANVAS are intended to introduce you to the structure and expectations of the course. Please read the entire syllabus and complete the Orientation Module.

Course Prerequisites

Within the past year you should have completed an intermediate algebra course, such as Math 1010, with a grade of C or better. Acceptable substitutions for this course are an ACT score of 22 or better, or a score of at least 43 on the college algebra section of the CPT. If you do not have documentation for one of these prerequisites, you should enroll in a math class more appropriate for your background.

Math Pathways

The mathematics department prepares students with strong skills in mathematical communication, problem-solving, and mathematical reasoning. This solid foundation enables students to transfer to other institutions of higher education, pursue advanced studies in math or related disciplines. Staying on your math pathway will help you be prepared for your specific program or degree requirements.



Course Description

This course is primarily designed for students interested in a Business degree. This course prepares students for MATH 1100 or BUS 1100. Course topics include: graphs, linear, quadratic, logarithmic, and exponential functions; matrices; systems of equations and inequalities; Leontieff models; compound interest; geometric and arithmetic series, loans and annuities.

Pre-Requisite: ENGL 0990 w/C grade or better or appropriate placement score; AND within the last year MATH 1010 w/C grade or better or appropriate placement score.
Semester: All

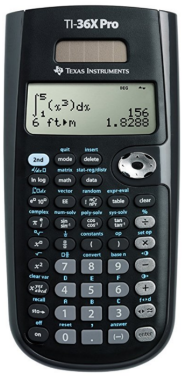
Course Student Learning Outcomes

- Demonstrate theoretical and operational skills with functions, including linear, quadratic, polynomial, rational, exponential, and logarithmic functions.
- Solve systems of linear equations in two and three variables, including applications.
- Demonstrate theoretical and operational skills with linear inequalities and systems of linear, nonlinear, and quadratic inequalities.
- Solve linear programming problems and quadratic optimization problems.
- Demonstrate theoretical and operational skills with sequences and series.
- Represent systems of linear equations using matrices and perform basic matrix operations.
- Apply algebraic skills to the formulation and solution of business applications.
- Advance readily to higher level math classes including Applied Calculus.

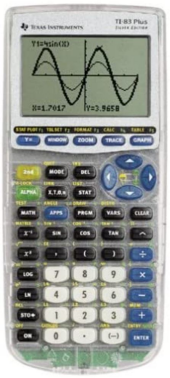
Learning the Content of Math 1090

Our Math 1090 class will be taught in an online format. The content of the course will be presented using a set of Guided Lecture Notes and Recorded Lecture Videos that are included in CANVAS. The Guided Lecture Notes match the Recorded Lecture Videos perfectly so you can complete them while watching the videos.

Materials for our Course



- Guided Lecture Notes
  (Digital version available free in Canvas)
- TEXTBOOK: Business Precalculus (2016) by David Lippman
  (Digital version available free in Canvas)
- CALCULATOR: TI-83 or TI-84 Series, or TI-36X Pro recommended



Guided Lecture Notes

Math 1090 uses a set of Guided Lecture Notes to facilitate learning and organize content. The Guided Lecture Notes contain definitions, theory, and examples to practice the concepts of the course. You should have the Guided Lecture Notes at the start of the course and organize them in a binder to use throughout the entire semester. These will be an essential part of your course learning and will save valuable class time from copying theorems, pictures, and examples.

Brief Description of Assignments/Exams

The content of Math 1090 is divided into 6 modules. You will work independently to learn the material using your textbook, Guided Lecture Notes, and resource videos that are built into CANVAS. Each module will have

1. A homework assignment that is completed in CANVAS.
2. A technology-based projects using MS Excel.
3. The course has three proctored midterm exams following the calendar.
4. The course has a compressive final exam following the calendar.

Because of the time involved in learning the material outside of a classroom plus completing the assignments, you need to be able to dedicate several hours every weekday to this class. If your schedule does not allow this time commitment you should consider taking Math 1090 in a lecture format or during another semester.

Online Homework

Your homework assignments will be completed online. Your homework assignments are set to have 3 attempts per question. After the 3 attempts the solution will be given. You will then be given the choice to try a similar question and still earn full credit. This process can be repeated until you get the question correct. CANVAS will save your highest score for each question. Some sections take longer than others to understand and complete and working ahead of the schedule will allow you to ask questions and spend more time on the longer assignments.

Our calendar does show daily due dates for each section, but to give you some flexibility the assignments will stay open until 11:59pm of the day we take each exam following the course calendar. You must finish your homework assignments by 11:59 pm that evening because they will lock, and you will not be allowed to work on them.

The best way to do online assignments is to work problems in a notebook first, being careful to label each section and problem and working neatly as you would for written homework. Then enter your solutions online. You can copy the problems by hand, or you can use the print feature. The important part is to keep the steps you do for each problem easily accessible and organized as you will use this same notebook to study for the midterms and final exam.

Projects

There will be one required project in each of the 6 modules in Math 1090 with due dates indicated on the class calendar. These projects are designed to allow students to examine real-world applications using technology as a tool. Information about these projects is posted in CANVAS.

Signature Assignment

Math 1090 is a QL course at SLCC, as such we will complete a signature assignment for the course. Our course contains six projects that we can choose from. The signature assignment should be submitted to CANVAS as a narrative along with the project that you chose that includes an introduction, a description of the project and a reflection.

Discussions

Each of the 6 modules in our course will have two different discussion boards:

1. Module homework help (optional): These discussion boards are used to ask questions about the homework to your peers. This is a space for trying to understand the content or asking questions about what you do not understand. If you have a personal or non-general question, please email the instructor directly.

2. Content discussions (required): These discussion boards are used to discuss the ideas of the module, allowing you to engage with other course participants to understand the content and prepare for the examinations. You will be required to post to your classmates' posts on these discussion boards to earn full credit following the due dates indicated on the class calendar.

Midterm Exams and Final Exam

Math 1090 has 3 midterm exams and a comprehensive final exam that must be proctored. This means they must be taken at an SLCC Testing Center or approved proctor. These exams cannot be taken ONLINE.

Students who live in Salt Lake County are required to go to the Instructional Testing Center located at one of the SLCC Campus. To take an exam at the Instructional Testing Center, you must make a reservation for a specific day and time. You will be required to show a current college ID “SLCC one card” to take an exam. ID's are available in the Student Center.

Students who live outside of Salt Lake County must arrange for a proctor through the Distance Education Service Center. Proctors need to be approved by the second week of the semester. Go to Remote & Distance Proctoring | SLCC information on arranging for a proctor.

- **Midterm Exams**
  There will be 3 midterm exams with around 15-20 free response questions on each exam. You will have 90 minutes to complete each of the exams. You may earn partial credit on these questions by submitting your work for review. Show all steps toward your final solution clearly and concisely. Answers with no logical steps or work that cannot be read or clearly followed will be marked incorrect.

- **Final Exam**
  The final exam for Math 1090 will be a comprehensive departmental examination emphasizing topics listed under the course objectives. You will have 120 minutes to complete the exam. You must take the exam on the scheduled final exam date. IT CANNOT BE TAKEN AFTER THAT DATE.

  It is an SLCC Math Department rule that students attaining a score of less than 60% on the final shall receive a grade no higher than "D" for the course

Engagement Plan

Example language:

- I will respond to email within 48 hours; however, I am usually much quicker. I will offer feedback on major assignments within 1 week. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- In this course I will be posting interactive announcements which will offer specific opportunities for class questions and extra credit every other week.
- Additionally, I will be participating in the discussion forums with you to share my perspective within the discipline and to offer some nuances of interpretation that may not be present in your textbook.

Assignment Due Dates

Due Dates for Online Homework
It is strongly recommended that you do not wait until the last day of the module to begin your assignments, as it does not allow time to seek out assistance if needed.

Due Dates for Exercises & Quizzes:

There will be TWO dates for the online exercises and quizzes that you need to worry about.

1. The Due Date: The printed calendar and the CANVAS calendar show the date that you should stick to pace yourself throughout the course.
2. Deadline: This is the last day of the Midterm exam. This is the last day to improve your score on any exercise. After this date, you may review your answers, but the assignment score will be permanently locked.

Due Dates for Projects

The 6 projects in the course have **due dates indicated on the calendar**. These projects will be graded manually within a week. I may give feedback on the project and ask that revisions be completed and then the project resubmitted.

Grading Scale

Grading

The grade you earn will be recorded on your SLCC transcript. Grades are not negotiable, and no work will be accepted after the last day of class. Limited, if any, extra credit opportunities may be available. If you need to achieve a certain grade in this course, be careful to complete all assignments, plan appropriate time for studying, and get help as needed so that you achieve your goal. Grades will be assigned according to this scale:

A 93% - 100%	C 73% - 76%
A- 90% - 92%	C- 70% - 72%
B+ 87% - 89%	D+ 67% - 69%
B 83% - 86%	D 63% - 66%
B- 90% - 82%	D- 60% - 62%
C+ 77% - 79%	E 59% or below

Assessment Weights

The assessments in Math 1090 will be divided into the following categories with the corresponding weights.

- Online Homework 17%
- 6 Module Projects and Signature Assignment 10%
- Content Discussions (class participation) 3%
- Three Midterm Exams 45%
- Final Exam 25%

General Education Information

QL

This course fulfills the above requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning.

General Education courses teach basic skills as well as broaden a student's knowledge of a wide range of subjects. Education is much more than the acquisition of facts; it is being able to use information in meaningful ways in order to enrich one's life.

While the subject of each course is important and useful, we become truly educated through making connections of such varied information with the different methods of organizing human experience that are practiced by different disciplines. Therefore, this course, when combined with other General Education courses, will enable you to develop broader perspectives and deeper understandings of your community and the world, as well as challenge previously held assumptions about the world and its inhabitants.

SLCC STEM Tutoring

SLCC and the STEM Tutoring Center offers free tutoring to students enrolled in various courses offered by the School or Science, Math, and Engineering. The STEM center offers free drop-in tutoring at each of the SLCC campus locations.

Online Tutoring

Students at SLCC have access to online tutoring through Canvas. From your Canvas course click Online Tutoring in the course navigation and follow the steps to set up an appointment. If this is your first time using the Online Tutoring we recommend you click "Take a Tour" to familiarize yourself with the service.

Note that students only receive 480 minutes of tutoring time each semester. After that we encourage you to use the resources found through this link: https://www.slcc.edu/tutoring/index.aspx

If you have any additional questions reach out to elearningsupport@slcc.edu.

Keys For Success

It is very important that you set aside time each day to work on the course so that you can remain on schedule. You can do a better job at both understanding and retaining the material if you learn at an even pace. Trying to “cram” too much in one sitting will result in frustration and lower retention of the material. Recognize that you need time both to learn the material and time to complete your homework for each section. It will take a significant investment of time each day to be successful in this course. To be successful over the course of the semester you will want to always work a couple of days ahead of the schedule so that you won’t miss deadlines if something comes up. It is important that you have the course calendar readily available and refer to it frequently.

As with any math course, you need to find the best way for you to learn the concepts and skills. There are many options, including reading the textbook, taking notes, or watching a video lecture. It is also crucial that you seek help when you need it. At the very beginning of the course, you should spend time familiarizing yourself with available resources in Canvas, and on campus.

Drop Policy

You may drop the course up through the drop date (Student Academic Calendar | SLCC). If you drop classes by the published deadline, you will receive a refund or adjustment of tuition. Dropped classes do not show on the student's transcript.

- First-Week Participation: If a student does not fully complete the orientation during week one, a student will likely be dropped from the class.
- Attendance After Drop Date: If a student decides later in the semester that they do not want to continue in the course, it is the student's responsibility to withdraw from the course.
- Failure to Drop: Be sure to drop classes you no longer wish to attend as soon as possible. If you don't drop by the deadline listed in the Academic Calendar, you will pay full tuition and fees for the course.

General Education

This course fulfills the Quantitative Literacy (QL) requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning. General Education courses teach basic skills as well as broaden a student's knowledge of a wide range of subjects. Education is much more than the acquisition of facts; it is being able to use information in meaningful ways to enrich one's life.

While the subject of each course is important and useful, we become truly educated through making connections of such varied information with the different methods of organizing human experience that are practiced by different disciplines. Therefore, this course, when combined with other General Education courses, will enable you to develop broader perspectives and deeper understandings of your community and the world, as well as challenge previously held assumptions about the world and its inhabitants. Regardless of your major, General Education courses build a foundation of broad knowledge and skills that help you in your further career and life.

Contingency Plan for Remote Days

Under Utah legislation, the governor can now call a "Remote Workday" given certain circumstances. In the event that on campus classes are canceled due to unforeseen circumstances such as inclement weather, power outages, or other emergencies, we will follow a contingency plan to ensure that you are able to continue your learning and stay on track in this course. You should check your Canvas announcements and inboxes to learn what is expected of you.

If the remote day falls on a regular calendar day, then our class will be unaffected, and we will continue to learn material using the lectures notes and recorded videos that are available within the modules of our CANVAS course.

If the remove day falls on a scheduled exam day, then the exam will be extended when campus opens to allow make-up exams.

College Wide Student Learning Outcomes

- Communicate effectively
- Develop quantitative literacies necessary for the chosen field of study
- Think critically
- Express themselves creatively
- Develop civic literacy and the capacity to be community-engaged learners who act in mutually beneficial ways with community partners
- Develop the knowledge and skills to work with others in a professional and constructive manner
- Develop information literacy
- Develop computer literacy

- Acquire substantive knowledge in the intended major and throughout General Education

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the Institutional Syllabus page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the Institutional Syllabus page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the Institutional Syllabus page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Module 1 Homework Questions Forum	Discussion	0
	Module 1 Homework Questions Forum (Optional)	Discussion	0
	Module 2 Homework Questions Forum (Optional)	Discussion	0
	Module 3 Homework Questions Forum (Optional)	Discussion	0
	Module 4 Homework Questions Forum (Optional)	Discussion	0
	Module 5 Homework Questions Forum (Optional)	Discussion	0
	Module 6 Homework Questions Forum (Optional)	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	Orientation: Any Questions? (optional)	Discussion	0
8/26/25	Orientation: Important CANVAS Settings	Quiz	5
8/26/25	Orientation: Introduce Yourself	Discussion	10
8/26/25	Orientation: Is Online Learning Right For Me?	Quiz	0
8/26/25	Orientation: Practice Submitting Assignments	Assignment	5
8/29/25	Section 1.1	Assignment	17
8/29/25	Orientation: The KEY to success in College (Extra Credit) - Due by Friday 8/29	Assignment	20
9/3/25	Section 1.2	Assignment	18
9/5/25	Section 1.3	Assignment	17
9/9/25	Section 1.4	Assignment	14
9/10/25	Section 1.5	Assignment	15
9/12/25	Section 1.6	Assignment	15
9/16/25	Section 1.7	Assignment	8
9/19/25	Section 2.1	Assignment	15
9/21/25	Module 1 Discussion	Discussion	10
9/21/25	Project 1: Linear Regression in Excel	Assignment	50

Due Date	Assignment Name	Assignment Type	Points
9/23/25	Section 2.2	Assignment	11
9/25/25	Section 2.3	Assignment	17
9/26/25	Section 2.4	Assignment	8
9/28/25	Module 2 Discussion	Discussion	10
9/28/25	Project 2: Matrix Operations in Excel	Assignment	50
10/3/25	Midterm Exam #1	Assignment	100
10/3/25	The KEY to success in College (Second X-TRA Credit Opportunity) - Due by Friday 10/3	Assignment	20
10/7/25	Section 3.1	Assignment	17
10/10/25	Section 3.2	Assignment	9
10/14/25	Section 3.3	Assignment	8
10/15/25	Section 3.5	Assignment	3
10/19/25	Module 3 Discussion	Discussion	10
10/19/25	Project 3: Linear Programming in Excel	Assignment	50
10/22/25	Section 4.1	Assignment	16
10/24/25	Section 4.2	Assignment	15
10/29/25	Section 4.3	Assignment	12
11/2/25	Module 4 Discussion	Discussion	10
11/2/25	Project 4: Polynomial Regression in Excel	Assignment	50

Due Date	Assignment Name	Assignment Type	Points
11/4/25	Midterm Exam #2	Assignment	100
11/4/25	The KEY to success in College (Third X-TRA Credit) - Due by Tuesday 11/4	Assignment	20
11/7/25	Section 5.1	Assignment	18
11/11/25	Section 5.2	Assignment	20
11/14/25	Section 6.1	Assignment	12
11/16/25	Module 5 Discussion	Discussion	10
11/16/25	Project 5: Exponential and Logarithmic Regression in Excel	Assignment	50
11/19/25	Sections 6.2 & 6.3	Assignment	13
11/21/25	Section 6.4	Assignment	8
11/25/25	Section 6.5	Assignment	7
11/30/25	Module 6 Discussion	Discussion	10
11/30/25	Project 6: Future and Present Value in Excel	Assignment	50
12/4/25	The KEY to success in College (Fourth X-TRA Credit) Due by Friday 12/5	Assignment	20
12/5/25	Midterm Exam #3	Assignment	100
12/10/25	GE Signature Assignment	Assignment	30
12/17/25	Final Exam	Assignment	100