Trigonometry (QL)

MATH - 1060 001

Course Description

This course includes trigonometric functions and their graphs developed using circular and triangular methods including inverses; polar coordinates; and an introduction to vectors.

Pre-Requisite: ENGL 0990 w C/grade or better or appropriate placement score; AND within the last year MATH 1050 w/C grade or better or appropriate placement score.
Semester: All

Course Student Learning Outcomes

- Understand important trigonometric concepts.
- Have the necessary knowledge and skills to succeed in a calculus course.
- Acquire skills necessary for expressing concepts, ideas, and problem-solving techniques using correct mathematical notation and language.
- Organize, present and explain solutions to problems involving real-world applications, both individually and through group work.
- Gain knowledge of mathematical theory and develop skills in logical thinking, leading to understanding of mathematical proofs.

Course Prerequisites

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Transfer/Certification/Licensure/Employment Information

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Engagement Plan

Example language:

- I will respond to email within 4 days. I will offer feedback on major assignments within 7days. 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.
- Lastly, we'll be holding small group Q & A sessions, where we can learn from our peers (and faculty) on some of the more difficult units within the course.

Keys for Success (how to succeed in the course)

Do the exercises!! (in time!)
Leave no question unanswered.

Only doing well at parts of the content will not give you a passing grade. You will need to learn all the content and perform well at the final exam.

Departmental policy dictates that you can receive no higher than a D for the course if your final exam score is lower than 60%.

Course Content Advisory

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Additional Materials

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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.

Brief Description of Assignments/Exams

Composed of online and written homeworks.
Exam will be on paper and pen.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Exam 1	Assignment	100
	Exam 2	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
	Exam 3	Assignment	100
	Final Exam	Assignment	100
	Introduce Yourself	Discussion	0
	Module 5 Homework Questions Forum (Optional)	Discussion	0
	Module 6 Homework Questions Forum (Optional)	Discussion	0
	Module 7 Homework Questions Forum (Optional)	Discussion	0
	Module 8 Homework Questions Forum (Optional)	Discussion	0
	Module 9 Homework Questions Forum	Discussion	0
	Practice Problems for Lessons 1 through 26	Quiz	0
	Practice Problems for Lessons 1 through 9	Quiz	0
	Practice Problems for Lessons 10 through 17	Quiz	0
	Practice Problems for Lessons 18 through 26	Quiz	0
9/2/25	Homework 1 Degree and Radian Measures of Angles	Assignment	20

Due Date	Assignment Name	Assignment Type	Points
9/2/25	Quiz 1 Degree and Radian Measure of Angles	Assignment	50
9/7/25	Homework 2 Right Triangle Trigonometry	Assignment	21
9/7/25	Quiz 2 Right Triangle Trigonometry	Assignment	50
9/14/25	Homework 3 The Unit Circle	Assignment	18
9/14/25	Homework 4 The Six Trigonometric Functions	Assignment	21
9/14/25	Quiz 3 The Unit Circle	Assignment	50
9/14/25	Quiz 4 The Six Trigonometric Functions	Assignment	50
9/21/25	Homework 5 Trigonometric Identities	Assignment	10
9/21/25	Homework 6 Beyond the Unit Circle	Assignment	10
9/21/25	Quiz 5 Trigonometric Identities	Assignment	40
9/21/25	Quiz 6 Beyond the Unit Circle	Assignment	40
9/22/25	Homework 5 Trigonometric Identities (Document)	Assignment	20

Due Date	Assignment Name	Assignment Type	Points
9/28/25	Homework 7 Graphs of the Sine and Cosine Functions	Assignment	20
9/28/25	Homework 8 Graphs of the Other Trigonometric Functions	Assignment	19
9/28/25	Quiz 7 Graphs of the Sine and Cosine Functions	Assignment	50
9/28/25	Quiz 8 Graphs of the Other Trigonometric Functions	Assignment	50
10/2/25	Homework 9 Applications of Radian Measure	Assignment	11
10/2/25	Quiz 9 Applications of Radian Measure	Assignment	50
10/12/25	Homework 10 Using Trigonometric Identities	Assignment	14
10/12/25	Quiz 10 Using Trigonometric Identities	Assignment	50
10/19/25	Homework 10 & 11 Verifying Identities	Assignment	10
10/19/25	Homework 11 Multiple Angle Identities	Assignment	14
10/19/25	Quiz 11 Multiple Angle Identities	Assignment	50

Due Date	Assignment Name	Assignment Type	Points
10/20/25	Homework 10 & 11 Verifying Identities (Document)	Assignment	20
10/21/25	Homework 12 Inverse Sine and Cosine Functions	Assignment	26
10/21/25	Quiz 12 Inverse Sine and Cosine Functions	Assignment	50
10/26/25	Homework 13 The Other Inverse Trigonometric Functions	Assignment	24
10/26/25	Homework 14 Inverse Trigonometric Functions and Trigonometric Equations	Assignment	26
10/26/25	Quiz 13 The Other Inverse Trigonometric Functions	Assignment	50
10/26/25	Quiz 14 Inverse Trigonometric Functions and Trigonometric Equations	Assignment	50
11/2/25	Homework 15 Solving General Trigonometric Equations	Assignment	15
11/2/25	Homework 16 The Law of Sines	Assignment	17

Due Date	Assignment Name	Assignment Type	Points
11/2/25	Quiz 15 Solving General Trigonometric Equations	Assignment	50
11/2/25	Quiz 16 Law of Sines	Assignment	40
11/9/25	Homework 17 The Law of Cosines	Assignment	15
11/9/25	Quiz 17 the Law of Cosines	Assignment	50
11/16/25	Homework 18 Polar Coordinates and Equations	Assignment	22
11/16/25	Quiz 18 Polar Coordinates and Equations	Assignment	50
11/16/25	Quiz 19 Graphing Polar Equations	Assignment	40
11/23/25	Homework 19 Graphing Polar Equations	Assignment	6
11/23/25	Homework 20 Polar Representations of Complex Numbers	Assignment	8
11/23/25	Quiz 20 Polar Representations of Complex Numbers	Assignment	50
11/30/25	Homework 21 Complex Products, Powers, Quotients, and Roots	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
11/30/25	Homework 22 Vector Properties and Operations	Assignment	18
11/30/25	Quiz 21 Complex Products, Powers, Quotients, and Roots	Assignment	40
11/30/25	Quiz 22 Vector Properties and Operations	Assignment	50
12/7/25	Homework 23 The Unit Vector and Vector Applications	Assignment	11
12/7/25	Homework 24 The Dot Product	Assignment	10
12/7/25	Quiz 23 The Unit Vector and Vector Applications	Assignment	50
12/7/25	Quiz 24 The Dot Product	Assignment	40
12/14/25	Homework 25 Sketching Curves Described by Parametric Equations	Assignment	15
12/14/25	Homework 26 Parametric Descriptions for Oriented Curves	Assignment	13
12/14/25	Quiz 25 Sketching Curves Described by Parametric Equations	Assignment	50

Due Date	Assignment Name	Assignment Type	Points
12/14/25	Quiz 26 Parametric Descriptions for Oriented Curves	Assignment	50
12/21/25	GE Reflection	Assignment	10
12/21/25	GE Signature Assignment	Assignment	35

Grading Scale

Department default

How to Navigate to Canvas

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