

MATH 1060-003 SYLLABUS

SUMMER SEMESTER 2020

INSTRUCTOR INFORMATION

Instructor: Jordan Saethre

Email: saethre@math.utah.edu

COMMUNICATION: You may contact me by e-mail or through Canvas-mail. I will regularly check my email during working hours: Monday-Friday from 8:00 am – 5:00 pm. Be aware that if you send me an email outside of these times I won't respond until working hours. Usually I will respond within 24 hours. Announcements will be made in Canvas for anything that pertains to the whole class. It is your responsibility to read announcements to stay informed of what is happening in the class.

CLASS SCHEDULE: Lectures will be given on zoom each Monday, Wednesday, and Friday (with the exception of holidays listed below) starting May 11, 2020 to July 29, 2020 at 8:45 am – 9:45 am. Please refer to the Tentative Schedule at the end of this syllabus for specific due dates of each homework, quiz, and exam.

HOLIDAYS:

- Memorial Day, Monday May 25, 2020
- Independence Day, Friday July 3, 2020
- Pioneer Day, Friday July 24, 2020

OFFICE HOURS: Office hours will be held each week from 8:45 am – 9:45 am on Tuesday and Thursday via zoom. I am also happy to schedule office hours by appointment.

COURSE INFORMATION:

Math 1060, Trigonometry is a 3-credit semester course.

PREREQUISITES:

Prerequisites: "C" or better in MATH 1050 OR Accuplacer CLM score of 80 or higher.

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 summer semester course which takes place over 12 weeks. Students should plan to spend about 11-14 hours on this course in addition to the 3 hours of lecture per week.

WEEKLY DUE DATES:

- Online homework due each Monday at 11:59 pm. You will be given a period of 10 days to complete each homework set as listed on the Tentative Schedule at the end of this syllabus. Late homework not accepted.
- Quiz due each Monday at 11:59 pm. Quizzes will be available through Gradescope. You will be given a period of 4 days to take each quiz. Once you start the quiz you will have 30 minutes to finish and submit. Late quizzes not accepted.

EXAM PERIODS: Each exam will be available through Gradescope. Exam 1 and 2 will be available for you to take at your convenience during a 5 day period. Once you start the exam you will only have 90 minutes to finish and submit. The final exam will function in the same way except it will only be available for a period of 2 days.

- Exam 1: Friday June 12, 2020 12:00 am - Wednesday June 17, 2020 11:59pm
- Exam 2: Friday July 10, 2020 12:00 am - Wednesday July 15, 2020 11:59pm
- Final: Thursday July 30, 2020 12:00 am - Friday July 31, 2020 11:59pm

OTHER DATES:

- Drop/audit date: Thursday May 14, 2020
- Withdraw date: Friday June 19, 2020

GRADING:

- Quizzes (15%)
- Homework (15%)
- Exam 1 (20%)
- Exam 2 (20%)
- Final (30%)

The lowest 3 homework scores and the lowest 3 quiz scores will be dropped at end of semester.

GRADING SCALE:

A	93% - 100%	C+	77% – 79.9%	D-	50% - 59.9%
A-	90% - 92.9%	C	73% – 76.9%	E	below 55%
B+	87% - 89.9%	C-	70% – 72.9%		
B	83% - 86.9%	D+	66% – 69.9%		
B-	80% - 82.9%	D	60% – 65.9%		

COURSE WEBSITE:

Canvas <https://utah.instructure.com/>

TEXT:

The course uses OER Math 1060 – Trigonometry, 1st Edition (Created Fall 2017 by Salt Lake Community College and the University of Utah). You can access the text for free in Canvas.

ONLINE HOMEWORK:

The homework can be accessed in Canvas. It is free.

RECORDED LECTURE VIDEOS:

Lectures will be held during class times listed above, but prerecorded lecture videos are also available for extra help. You can access these at <http://www.math.utah.edu/lectures/math1060New.html> (Links to an external site.)

CALCULATORS:

The majority of the course work can be done without a calculator. No calculators will be allowed on exams nor the final. Calculators will be useful on some homework assignments and may be allowed on portions of quizzes. If you do not have a scientific or graphing a calculator, there are free calculator applications online.

EXPECTED LEARNING OUTCOMES:

1. Understand trigonometric function definitions in the context of the right triangles and on the unit circle.
2. Graph basic trigonometric functions and those with basic transformations. Be able to write an equation given a graph. Identify amplitude, periods, phase shifts from graphic and algebraic representations of functions.
3. Solve applications problems using principles in trigonometry.
4. Represent and interpret “real world” contexts situations using radian trigonometric functions.
5. Use trigonometric inverses correctly, understanding the domain/range restrictions.
6. Verify trigonometric identities, using proper logic and use trigonometric identities to evaluate expressions.
7. Solve trigonometric equations.
8. Solve for all measurements in any triangle, using the Pythagorean Theorem, trigonometric functions, the Law of Sines, and Law of Cosines in a variety of contexts and applications.
9. Be able to convert to and from rectangular and trigonometric-form coordinates (polar coordinates).
10. Graph complex numbers in a plane, perform operations on such numbers and use DeMoivre’s theorem to find roots and powers of complex numbers.
11. Understand geometry and arithmetic operations with vectors and use vectors in application problems.
12. Use parametric equations in application problems and be able to convert between parametric and non-parametric representation of functions.
13. Understand and explain arithmetic with complex numbers using trigonometry.
14. Recognize the formulas for parabolas, hyperbolas and ellipses (including circles). Be able to manipulate these basic conics to find foci, any asymptotes, and important points and to graph these conics. Use conics in real world context situation.

HELP:

Contacting me by my e-mail, coming to Zoom 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.

TUTORING:

<http://www.math.utah.edu/undergrad/mathcenter.php>

COMMENTS ON THE LATE POLICY:

You are expected to turn things in on time. It is your responsibility to maintain your computer and related equipment in order to participate in this online course. Equipment failures will not be an acceptable excuse for late or absent assignments. Similarly, it is your responsibility to start assignments early enough, so that even if you are in traffic, your flight gets delayed, you are called into work, you run out of ink, you do work for another class, etc., you still have time to deal with the situation and then finish the assignment.

EXTREME SITUATIONS:

If you have an extraordinarily severe situation, contact me, your instructor. We can discuss waiving penalties, granting longer extension periods for homework, excusing quizzes, extending exam dates, etc. Send documentation if possible. If not possible, still contact me to discuss alternatives.

CENTER FOR DISABILITY & ACCESS:

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.

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> (Links to an external site.)

PREFERRED NAME AND PRONOUN:

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). 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 correspondence, discussions, in office hours and on assignments, 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.

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, 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).

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.

SAFETY STATEMENT:

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 (Links to an external site.).

Class Schedule

(Tentative)

Week	Monday	Wednesday	Friday
1	5/11/2020	5/13/2020	5/15/2020
	First day of class	1.3	2.1
	Syllabus		
	1.1 and 1.2		
2	5/18/2020	5/20/2020	5/22/2020
	2.2	2.3	2.4
	HW 1.1 and 1.2		
	HW 1.3		
	HW 2.1		
	Quiz 1 (1.1-2.1)		
3	5/25/2020	5/27/2020	5/29/2020
	No Class	2.5, 3.1, 3.2	3.3, 3.4
	HW 2.2		
	HW 2.3		
	HW 2.4		
	Quiz 2 (2.2-2.4)		
4	6/1/2020	6/3/2020	6/5/2020
	4.1, 4.2	4.3, 4.4, 4.5	5.1
	HW 2.5		
	HW 3.1 and 3.2		
	HW 3.3 and HW 3.4		
	Quiz 3 (2.5 - 3.4)		
5	6/8/2020	6/10/2020	6/12/2020
	5.2, 5.3	5.4, 6.1, 6.2, 6.3	Exam 1(1.1 - 5.1) Opens
	HW 4.1 and 4.2	Review	
	HW 4.3, 4.4, and 4.5		
	HW 5.1		
	Quiz 4 (4.1 - 5.1)		
6	6/15/2020	6/17/2020	6/19/2020
	7.1, 7.2	7.2	7.3
	HW 5.2 and 5.3	Exam 1(1.1 - 5.1) Closes	
	HW 5.4, 6.1, and 6.2		
	HW 6.2 and 6.3		
	Quiz 5 (5.2 - 6.2)		
7	6/22/2020	6/24/2020	6/26/2020
	Parabolas, Circles	Ellipses	Hyperbolas
	HW 7.1 and 7.2		
	HW 7.3		
	Quiz 6 (7.1 - 7.3)		
8	6/29/2020	7/1/2020	7/3/2020
	8.1, 8.2	8.3	No Class
	HW C.1 Parabolas		
	HW C.2 Circles		
	HW C.3 Ellipses		
	HW C.4 Hyperbolas		
	Quiz 7		
9	7/6/2020	7/8/2020	7/10/2020
	8.4	8.5	Exam 2 (5.2-8.3) Opens
	HW 8.1 and 8.2	Review	
	HW 8.3		
	Quiz 8 (8.1 - 8.3)		
10	7/13/2020	7/15/2020	7/17/2020
	9.1	9.2	9.3
	HW 8.4	Exam 2 (5.2-8.3) Closes	
	HW 8.5		
	Quiz 9 (8.4-8.5)		
11	7/20/2020	7/22/2020	7/24/2020
	9.4	9.5	No Class
	HW 9.1		
	HW 9.2		
	HW 9.3		
	Quiz 10 (9.1 - 9.3)		
12	7/27/2020	7/29/2020	7/31/2020
	Review	Last Day of Class	Final (1.1-9.5)
	HW 9.4	Review	
	HW 9.5		
	Quiz 11 (9.4 - 9.5)		

Key
Lecture
Homework Due
Quiz Due
Review
Exams and Final