

# Math 1060 Syllabus

Fall 2014

## **MATH 1060-002**

### **Trigonometry**

Fall 2014

Meeting time: TH 6:00pm–7:20pm

Instructor: Daniel Smolkin

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Office: JWB 314

Office hours: MW 1–2pm; Th 11:20am–12:20pm; or by appointment

Course website: <http://www.math.utah.edu/~smolkin/teaching/1060f14.html>

## **Course Description**

Trigonometry is the study of angles, triangles, and periodic functions.

## **Prerequisites**

One of the following:

- A passing grade (C or better) in one of: Math 1010, Math 1050, Math 1080
- A score of at least 23 on the math section of the ACT
- A score of 540 or better on the SAT
- The appropriate score on the Math Placement exam given through the Testing Center.

Please see me if you do not meet any of these requirements.

## **Course text**

The course text is *Precalculus* by Larson, ninth edition. The course covers chapters 4, 5, and 6, as well as sections 10.7–10.8. Make sure to purchase this book from the university book store, as we will be using a unique version with unnecessary chapters omitted. This version is cheaper than the regular ninth edition of the book.

You will not need a calculator for this course.

## **Important Dates**

- Exam 1: September 18
- Exam 2: October 9
- Exam 3: November 13
- Final exam: December 16

## Grading and Course Policies

Grading will be based on homework, quizzes, and exams. Each student's grade for the course will be broken down in the following way:

Homework	Quizzes	Midterm 1	Midterm 2	Midterm 3	Final
10%	15 %	15 %	15 %	15 %	30 %

Homework will be assigned every Thursday, starting August 28<sup>th</sup>. Each homework assignment will be collected at the beginning of class a week after it was assigned, unless homework is assigned a week before an midterm. In those cases, homework will be due the following Tuesday. I'll try to remind you of this when it comes up. This adds up to 10 homework assignments. We will have a 10-minute quiz every Thursday **at 6:10pm sharp** starting September 4<sup>th</sup>, until December 11<sup>th</sup>, except on midterm days. This means we will have 10 quizzes. The quizzes are intended to help you be aware of what you do and don't know. The homeworks are an opportunity for you to practice the course material and actually learn it—you learn math by doing it! Exams, on the other hand, will be *summative* assessments, and are intended to gauge your understanding of the course material.

Cheating will not be tolerated. Any homework, quiz, or exam on which we determine a student has cheated will receive a 0. **Calculators will not be allowed for exams and quizzes. Cell phones must be turned off during exams.** I don't care about cell phone use during class, as long as you are not distracting to other students. **If you must pick up a call during class, please leave the classroom before doing so.**

**It is your responsibility to tell me as soon as possible if you will be missing an exam. You will not be able to make up an exam unless you let me know two weeks ahead of time that you'll be missing it, or you provide proof that you missed it for an emergency.** There will be no make up quizzes.

You will be allowed to drop your worst two quizzes and your worst midterm.

The grading scale:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
> 94	90–93	87–89	84–86	80–83	77–79	74–76	70–73	67–69	64–66	60–63	< 60

## Tips for success

*Come to office hours early; come to office hours often.* If you don't seek help when you're confused about something in the course, things will only get worse! I'm here to help

The math tutoring center is a great place for (free!) student help. The tutoring center is located in room 155 of the T. Benny Rushing Mathematics Center, adjacent to the first floors of LCB and JWB. Their website is <http://www.math.utah.edu/ugrad/tutoring.html>

The department has video lectures corresponding to the course available at <http://www.math.utah.edu/Lectures>

For students convinced that they cannot do the math, there is an excellent website called Understanding Mathematics by Peter Alfeld, available at <http://www.math.utah.edu/~pa/math.html>

**Course schedule (tentative)**

<b>Week</b>	<b>Section</b>	<b>Date</b>	<b>Title</b>
1	4.1	Aug. 25	Radian and Degree measure
	4.2	Aug. 27	Trig functions; the unit circle
2	4.3	Sept. 2	Right triangle trigonometry
	4.4	Sept. 4	Trig functions of any angle
3	4.5	Sept. 9	Graphs of sine and cosine function
	4.6	Sept. 11	Graphs of other trig functions
4	1.9	Sept. 16	Inverse functions; midterm review
		Sept. 18	<b>Midterm 1</b>
5	4.7	Sept. 23	Inverse trigonometric functions
	4.1	Sept. 25	Linear and angular velocity
6	4.8	Sept. 30	Applications and models
	5.1	Oct. 2	Using fundamental identities
7		Oct. 7	Midterm review
		Oct. 9	<b>Midterm 2</b>
8		Oct. 12–19	Fall break!
9	5.2	Oct. 21	Verifying trig identities
	5.3	Oct. 23	Solving trigonometric equations
10	5.4	Oct. 28	Sum and difference formulas
	5.5	Oct. 30	Multiple angle and product-to-sum formulas
11	6.1	Nov. 4	Law of sines
	6.2	Nov. 6	Law of cosines
12		Nov. 11	Review
		Nov. 13	<b>Midterm 3</b>
13	6.3	Nov. 18	Vectors in the plane
	6.4	Nov. 20	Dot products
14	6.5	Nov. 25	Trigonometric form of complex numbers
		Nov. 27-28	Thanksgiving break
15	10.7	Dec. 2	Polar coordinates
	10.8	Dec. 4	Graphs of polar equations
16		Dec. 9	Applications
		Dec. 11	Final exam review
17		Dec. 16	<b>Final exam on December 16 at 6:00pm in JTB 130!!</b>

**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 Services, 162 Olpin Union Building, 801-581-5020. CDS 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 Services.