Course Syllabus
MATH 1060, Section 04, Spring 2017
Trigonometry

Instructor: Samantha Hill
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TA: Veronica Riker (ronnee.riker@utah.edu)

Class Hours/Location: MWF 9:40am - 10:30am, ST 104

Office Hours: TBD

Textbook: *Precalculus*, 9th Edition, 2013 Larson. Chapters 4,5,6,10

- Purchase the textbook and WebAssign here: http://www.cengagebrain.com/course/1603486
- **Required:** Enhanced WebAssign access is $75 through the above link. This **includes** an online version of the textbook (ISBN-13: 9781285858319) and is how you will complete the homework. There is a free two week trial if you are undecided about taking this class.
- If you have taken 1050 or 1060 before with this textbook, you will not need to repurchase WebAssign/textbook when you set up your account.
- **Optional:** If you would like, at the above link you may additionally purchase a hard copy (ISBN-13: 9781285892283) for an extra $40. You would still need to purchase WebAssign access for $75.
- See textbook flier for more information.

Calculators: Calculators will be useful for homework, but will not be permitted on exams.

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

Course Goal: Improve quantitative reasoning and prepare for future math learning in calculus, linear algebra, and discrete mathematics.

Topics: Trigonometry, Conics, and the Complex Numbers.

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 using radian trigonometric functions.
5. Use trigonometric inverses correctly, understanding the domain/range restrictions.
6. Verify trigonometric identities 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.

Homework: All homework is to be completed on WebAssign. Due dates for homework assignments can be found on WebAssign. **Late homework will NOT be accepted**. You may submit up to 100 attempts per assignment. Come to office hours, work together with classmates, ask the TA, or go to the math tutoring center if you have questions. Please note, homework is a substantial part of your grade for the course (15%). It is to your benefit to do all your homework. Partial credit is better than no credit. **There will be no dropped assignments.**

Quiz: There is a quiz **every Friday** except the first Friday of the semester and the two Fridays we have a midterm. The three lowest quiz scores will be dropped. As a result, **you must be in attendance to take the quiz**. There are no "make-up" quizzes. Students who miss a quiz will receive a "0" on the missed quiz.

Canvas Course Page: This has grades, the link to WebAssign, and other important information.

Important dates: Class will meet every Monday, Wednesday, and Friday, unless otherwise indicated:

January 9 (Monday)	First day of classes
January 16 (Monday)	Martin Luther King Jr. Day (no class)
January 20 (Friday)	Last day to drop (delete) classes
February 17 (Friday)	First Midterm (in class)
February 20 (Monday)	Presidents' Day (no class)
March 3 (Friday)	Last day to withdraw from classes
March 31 (Friday)	Second Midterm (in class)
April 24 (Monday)	Last day of this class
April 27 (Thursday)	Departmental Final Exam (1-3pm, room TBA)

MIDTERMS:

- Friday, February 17
- Friday, March 31

FINAL: (Departmental):

- THURSDAY, APRIL 27, 1:00–3:00pm
- Note this is a departmental final, so it differs from the usual university final exam schedule. You must scroll to the very bottom of the link for the accurate date and time.
  http://registrar.utah.edu/academic-calendars/final-exams-spring.php

Grading Policy: Your grade will be based on:

Homework	15%
Quizzes	15%
Midterm 1	20%
Midterm 2	20%
Final Exam	30%

There are no "make-up" exams: Students who miss an exam or quiz will receive a "0" on the missed exam or quiz.

Grades (Evaluation and criteria): Final letter grades will be determined by overall percentage N as follows:

A	$93\% \leq N \leq 100\%$	B-	$80\% \leq N < 83\%$	D+	$68\% \leq N < 70\%$
A-	$90\% \leq N < 93\%$	C+	$78\% \leq N < 80\%$	D	$63\% \leq N < 68\%$
B+	$88\% \leq N < 90\%$	C	$73\% \leq N < 78\%$	D-	$60\% \leq N < 63\%$
B	$83\% \leq N < 88\%$	C-	$70\% \leq N < 73\%$	E	$N < 60\%$

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, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

Department Video Lectures: Additional resource, available at: http://www.math.utah.edu/lectures/math1060.html

Mathematics Tutoring Center: Drop in, sit down, and if you have a question, someone will come by who can help you. There are also study areas free of tutors, a computer lab, group study rooms available through reservations, and group tutoring sessions that can be arranged to meet at a regular time. Located on 1st Floor of JWB or LCB. Open 8am-8pm MTWH; 8am-6pm F. The tutoring center will open the second week of classes.

Disclaimer: I reserve the right to make reasonable modifications to the syllabus as I deem appropriate. I will notify you if and when any changes are made.