

MAC 1114 - Trigonometry

Instructor: Cayley Robinson

Email: chrobinson@ufl.edu

Office: Little Hall 435

Office Hours: T6, T8, R6, and by appointment

1 Course Description and Objectives

This course is the sequel to MAC1140 Precalculus Algebra and serves as an introduction to trigonometry. Topics include a basic introduction to trigonometric functions, graphing trigonometric functions, inverse trigonometric functions, and analytic trigonometry.

By the end of this course, you will be able to:

1. Define and evaluate trigonometric objects such as trigonometric functions, inverse trigonometric functions, and identities.
2. Use trigonometric objects to model applications.
3. Use trigonometric identities to simplify expressions and verify identities through logical proof.

2 Textbook

There is no required textbook, but a useful reference can be found at <https://openstax.org/details/books/algebra-and-trigonometry> if you would like additional reading.

3 Course Schedule

The following should be considered tentative.

Week 1	8/24	Module 1: Angles and Circles
Week 2	8/29, 8/31	Module 1: Angles and Circles Module 2: Trigonometric Functions
Week 3	9/5, 9/7	Module 2: Trigonometric Functions Module 3: Right Triangles and Reference Angles
Week 4	9/12, 9/14	Module 3: Right Triangles and Reference Angles Module 4: Graphs of Sine and Cosine Functions
Week 5	9/19, 9/21	Module 4: Graphs of Sine and Cosine Functions Exam 1
Week 6	9/26, 9/28	Module 5: Graphs of Cosecant, Secant, Tangent and Cotangent
Week 7	10/3, 10/5	Module 6: Inverse Trigonometric Functions
Week 8	10/10, 10/12	Module 7: Inverse Trigonometric Functions: Applications and Models
Week 9	10/17, 10/19	Module 8: Trigonometric Equations and Identities
Week 10	10/24, 10/26	Exam 2 Module 9: Solving Trigonometric Conditional Equations
Week 11	10/31, 11/2	Module 9: Solving Trigonometric Conditional Equations Module 10: Sum and Difference Formulas - Product to Sum Formulas
Week 12	11/7, 11/9	Module 10: Sum and Difference Formulas - Product to Sum Formulas Module 11: Double Angle, Power Reducing, and Half Angle Formulas
Week 13	11/14, 11/16	Module 11: Double Angle, Power Reducing, and Half Angle Formulas Module 12: Law of Sines and Law of Cosines
Week 14	11/21	Module 12: Law of Sines and Law of Cosines
Week 15	11/28, 11/30	Module 12: Law of Sines and Law of Cosines Exam 3
Week 16	12/5	Return Exam 3

4 Grading

Grades will be based on the following:

Xronos Homework: 30%
Quizzes: 10%
Exam 1: 20%
Exam 2: 20%
Exam 3: 20%

Homework: Homework will be in Xronos and accessed through Canvas.

Quizzes: There will be six in-class quizzes. Your top five scores will be counted.

Exams: There will be three in-class exams.

The grading scale will be:

A	90%
A-	87%
B+	84%
B	80%
B-	77%
C+	74%
C	70%
C-	67%
D+	64%
D	60%
D-	57%
E	Below 57%

5 Administrative Concerns

5.1 Incomplete Policy

A grade of I (incomplete) will be considered only if you meet the Math Department criteria, which are found at <https://www.math.ufl.edu>. If you meet the criteria, you must see the instructor before the beginning of finals week to be considered for an I. A grade of I only allows you to make up your incomplete work. You cannot redo any previously completed work.

5.2 Online Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://gatorevals.aa.ufl.edu/>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open.

5.3 Advising and Help

- For issues with technical difficulties for Canvas, please contact the UF Help Desk at:
 - Website: <https://helpdesk.ufl.edu>
 - Phone: (352) 392-HELP (4357)
 - Walk-in: HUB 132

Note: Any requests for make-ups due to technical issues **MUST** be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

- For all course-related concerns, please talk to your instructor! Office hours will be posted and are regular times when they are available to answer questions, discuss grades, advise students on future classes, or help students in any available way. You do **not** need an appointment to visit during office hours. If you need to meet outside of office hours, please reach out for an appointment.
- In addition, there are several other free resources available to you:
 - The Teaching Center offers free informal tutoring. You may want to attend different hours to find the tutors with whom you feel most comfortable. The Little 215 Tutoring Center also provides free tutoring for courses up to Calculus 3. Go to <https://academicresources.clas.ufl.edu/> to find their hours. You can also request free one-on-one tutoring.
 - A list of qualified tutors for hire is available at <https://www.math.ufl.edu>.
 - Other resources are available at <https://www.distance.ufl.edu/getting-help> for:
 - * Counseling and Wellness resources
 - * Disability resources
 - * Resources for handling student concerns and complaints
 - * Library Help Desk support

5.4 Class Demeanor

All members of the class are expected to follow rules of common courtesy.

5.5 Honor Code

All students are required to abide by the Academic Honesty Guidelines which have been accepted by the University. The academic community of students and faculty at the University of Florida strives to develop, sustain and protect an environment of honesty, trust and respect. Students are expected to pursue knowledge with integrity.

Violations of the Academic Honesty Guidelines shall result in judicial action and a student being subject to the sanctions in paragraph XIV of the Student Code of Conduct. The conduct set forth hereinafter constitutes a violation of the Academic Honesty Guidelines (University of Florida Rule 6C1-4.017). You may find the Student Honor Code and read more about student rights and responsibilities concerning academic honesty at the link <https://www.dso.ufl.edu/sccr/>.

5.6 Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting: <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. If a student does not supply the appropriate documentation in a timely fashion, the instructor may not be able to accommodate the student in a timely manner.

5.7 Changes

I largely reserve the right to make changes as necessary (e.g. cancel a quiz, or change office hours).