# MAC 1114 - Trigonometry

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**Semester**: Fall, 2022
**Section**: 15256- T/R; P5 (11:45-12:35): MAT 0014
**Instructor:** Zachariah Thomas
**Email:** thomas.z@ufl.edu
**Office:** Little Hall 461
**Office Hours:** Little Hall 461; M-P9 and W-P8

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## 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.

## 2 Textbook

In this course, we will be using lecture notes provided in Canvas. There is no required textbook for this course. However, below is linked an open-resource textbook which is a good source for additional explanations and supplementary exercises.

## 3 Attendance

It is expected that all students attend every class meeting and complete all assignments. For any exception, contact the instructor as soon as possible. See the UF attendance policy; `https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/`

## 4 Grading

Grades will be based on the following composition:

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

**Quizzes:** A take-home quiz will be assigned each week, consisting of 3 problems. These problems will be graded based on the work and logic shown. I will assess your ability to justify your reasoning, not your ability to calculate the correct answer. You will scan your hand written work to a pdf format, and submit via the dropbox in canvas.

**Xronos:** Homework will be completed through Xronos. This program should only be accessed through an assignment link in Canvas.

**Exams:** Exams will be in-class. These will be based on the homework assignments as well as the take home quizzes. You should expect to show all work and reasoning on the exam. An answer with little to no reasoning will receive no credit.

**Grading Scale:**

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|---|---|
| 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% |

**UF Grading Policy**
`https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/`

**Late Submissions:** Late submissions for Xronos assignments and Quizzes will face a penalty of 25% per day that the submission is late. No late work will be accepted 3 days after the due date.

**Make-up Exams:** If you are participating in an official UF activity (such as music performances, athletic competition or debate), you must contact the instructor at least one week prior to the event and you must present documentation. A make-up exam will be given soon after the exam date.

If illness or other extenuating circumstances cause you to miss an exam, contact the instructor immediately before the due date. Then, as soon as possible after you return to classes, bring/send the appropriate documentation to the course instructor. Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. No make-up materials will be provided for undocumented/unexcused absences.

# 5 Schedule

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|---|---|---|
| Aug. 25th | Syllabus and Module 0 | Algebra Prerequisites |
| Aug. 30th | Module 1 | Angles and Circles |
| Sept. 1st | Module 1 | Angles and Circles |
| Sept. 6th | Module 2 | Trigonometric Functions |
| Sept 8th | Module 2 | Trigonometric Functions |
| Sept 13th | Module 3 | Right Triangle Trigonometry |
| Sept. 15th | Module 3 | Right Triangle Trigonometry |
| Sept. 20th | Module 4 | Graphs of Sine and Cosine Functions |
| Sept 22nd | Module 4 | Graphs of Sine and Cosine Functions |
| Sept 27th | Exam 1 | Modules 1-3 |
| Sept. 29th | Module 5 | Graphs of Secant, Cosecant, Tangent and Cotangent Functions |
| Oct. 4th | Module 5 | Graphs of Secant, Cosecant, Tangent and Cotangent Functions |
| Oct. 6th | Module 6 | Inverse Trigonometric Functions |
| Oct 11th | Module 6 | Inverse Trigonometric Functions |
| Oct 13th | Module 6 | Applications of Inverse Trigonometric Functions |
| Oct. 18th | Module 7 | Law of Sines and Law of Cosines |
| Oct. 20th | Module 7 | Law of Sines and Law of Cosines |
| Oct 25th | Module 8 | Fundamental Trigonometric Identities |
| Oct. 27th | Module 8 | Fundamental Trigonometric Identities |
| Nov. 1st | Exam 2 | Modules 4-7 |
| Nov. 3th | Module 9 | Solving Trigonometric Equations |
| Nov. 8th | Module 9 | Solving Trigonometric Equations |
| Nov. 10th | Module 10 | Sum and Difference Formulas |
| Nov. 15th | Module 10 | Sum and Difference Formulas |
| Nov 17th | Module 11 | Double Angle, Half Angle, and Power Reducing Formulas |
| Nov. 22nd | Module 11 | Double Angle, Half Angle, and Power Reducing Formulas |
| Nov. 24th | Break | |
| Nov. 29th | Module 11 | Double Angle, Half Angle, and Power Reducing Formulas |
| Dec. 1st | | |
| Dec. 6th | Exam 3 | Modules 8-11 |

# 6 Administrative Concerns

## 6.1 Incomplete Policy

A grade of I (incomplete) will be considered only if you meet the Math Department criteria which is 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.

## 6.2 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.

## 6.3 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 extensions 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 extension.
- For all concerns with this course, 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 contact your instructor for an appointment.
- In addition, there are several other free resources available to you:
  - The Teaching Center Math Lab, located at SE Broward Hall, offers free informal tutoring. You may want to attend different hours to find the tutors with whom you feel most comfortable. Also the Little 215 Tutoring Center provides free tutoring for courses up to Calculus 1. Go to https://www.teachingcenter.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
- Should you have any complaints with your experience in this course please visit https://www.distance.ufl.edu/student-complaints to submit a complaint.

## 6.4 Class Demeanor or Netiquette

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

## 6.5 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/.

## 6.6 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.

## 6.7 Changes

The instructor reserves the right to make changes to this syllabus as necessary. Any such changes will be announced both in-class and as an announcement on Canvas.