

# MAC 1114 Plane Trigonometry

## 1. Semester **Course Information:**

### **Information**

MAC 1114 Plane Trigonometry

3 lecture hours; 3 credit hours

Pre-Requisite: Minimum grade of C in MAC 1105 or Math placement

Division Chair Contact Information: Angelia Reynolds (850) 872-3852

## 2. **Contact Information**

Instructor: Sharon S. Hudson, Professor of Mathematics, employed full time at Gulf Coast State College since 2002; B.A. in Mathematics from Huntingdon College; M.S. in Applied Mathematics from Georgia Institute of Technology

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Instructor Email: shudson@gulfcoast.edu

Division Chair Contact Information Angelia Reynolds (850) 872-3852

Division Admin Assistant Contact Information Scott Spencer (850) 747-3229

## 3. **Approved Course Materials and Resources**

Textbook information: Plane Trigonometry, Harris, Hudson, 2016, Gulf Coast State College. There is no ISBN; the textbook is provided free through Canvas when a student enrolls in the course.

Students have the option of purchasing a printed copy in the GCSC bookstore.

Required Materials: Textbook (e-version through Canvas will suffice); Graphing Calculator (TI-83, TI-84 or TI-84 Plus recommended. On some of the tests, the instructor will provide a formula sheet of trigonometric identities and a blank unit circle.

## 4. **Curriculum**

Catalog Course Description

Prerequisite: Math placement test or minimum grade of "C" in MAC1105. A graphing calculator is required. The TI-83/84 are the only allowable calculators for test days. If a student wishes to use any other calculator they must see their instructor in advance for approval. Topics included are properties and graphs of trigonometric functions, properties and graphs of inverse trigonometric functions, trigonometric identities, conditional trigonometric equations, solutions of triangles, vector algebra, parametric equations, polar coordinates, and applications.

Credit hours: 3

Lecture hours: 3

How the instructor plans to cover the content (pedagogical practices) - This course is primarily a lecture-based course, relying heavily on demonstration of sample problems. There will be some basic proofs where needed. Students will also have access to recorded lectures on Canvas. During pauses in the lecture, students may be asked to work in small groups to master a technique that has been demonstrated. As time permits, students may be allowed a review day prior to the test when they can work on their quizzes related to the test.

The overall goal of this class is to equip students with the tools they will need to be successful in the Calculus sequence, Physics courses, Differential Equations and Engineering classes. Trigonometry is especially important for students who plan to be Electrical engineers.

## **Learning Outcomes for MAC 1114, Plane Trigonometry**

## MAC 1114 Plane Trigonometry

Students will

- correctly apply trigonometric formulas, definitions, identities, and properties.
- correctly use mathematical symbols and structure to examine and solve real world applications.
- illustrate and examine the graphs of: the six trig functions and inverses, parametric and polar equations.
- solve trigonometric equations, right triangles, and oblique triangles.
- perform applications on vectors and complex numbers.

**5. What the Student Can Expect of the Instructor**

Statement about availability outside of class-office hours:

I will be available 10 hours each week in my office. Office hours will be included on the daily schedule which will be distributed the first day of class.

Email/voicemail response time of the instructor.

Monday - Thursday you can expect a response within 24 hours. During the weekends, I don't always check my email for school.

Learning Management System: Students are expected to be able to use Canvas to access course videos, course documents and their grades.

**6. Expectations of the Student**

**ACADEMIC INTEGRITY:**

Honest participation in academic endeavors fosters an environment in which optimal learning can take place and is consistent with the college's mission. Academic misconduct, including cheating or plagiarism, is destructive to the spirit of an educational environment and therefore will not be tolerated. "Cheating" includes but is not limited to use of any unauthorized assistance in completing course work. "Plagiarism" includes, but it not limited to, the use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment. Sanctions for incidences of academic misconduct, depending on the severity of the incidence and/or its repetition, may range from receiving an F grade (or zero) for the test, assignment, or activity, to failure of the course, to suspension or dismissal from the program or the college.

**ACCESSIBILITY:**

Gulf Coast State College supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, reasonable accommodations can be arranged. Prior to receiving accommodations, you must register with Student Accessibility Services. Appropriate academic accommodations will be determined based on the documented needs of the student. For information regarding the registration process, email sar@gulfcoast.edu or call 850-747-3243.

**Recording of Lectures**

**HOUSE BILL 233 RECORDING CLASSES** In accordance with federal and state privacy laws, students may record class lectures for their own personal educational use, in connection with a complaint to the college, or as evidence in internal or external legal proceedings. Students may not publish or upload the recordings or any components thereof without the knowledge and written permission of the faculty member. Failure to obtain permission to publish could lead to the students' having to pay damages, attorney fees, and court costs. For more information about what can be recorded, please see the guidelines on pages 36-38 in the GCSC Student Handbook <https://www.gulfcoast.edu/current-students/student-handbooks/2021-2022-student-handbook.pdf>.

**Attendance and Withdrawal policy**

**a. Attendance Policy:**

Students who are absent from class more than one eighth of a course without the instructor's permission shall be withdrawn. Students who never attend during the first two weeks of class shall be classified as "no show" and withdrawn from the course.

**b. Withdrawal Policy:**

Two withdrawals are permitted per course. After that, a grade will be assigned. Please be concerned

**Incomplete Grade Policy (optional)**

Students have 30 days to complete missing material for an incomplete grade before the grade automatically becomes an F.

**Laptop/Personal Technology Policy (optional)**

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Use of laptop is permitted for note-taking or to access the textbook.

### 7. **Measure of Student Performance**

Method of assessment.

The average of the five or six unit tests will count 75% of your grade. A comprehensive departmental final exam (no exemptions) will count 25% of your grade. The college catalog will be used to convert the numerical average to a letter grade.

GCSC grading scale

A (100-90), B (89-80), C (79-70), D (69-60), and F (59-0)

### **CLASSROOM CONDUCT POLICY**

In order to promote a learning environment in which you as a student may receive the greatest consideration, we will do all we can to prevent unnecessary interruptions and class disruptions. To this end, it is the stated policy of the Division of Mathematics that disruptions, absolutely and unequivocally, will not be tolerated in the classrooms administered by this division. To this end, we remind you that the instructors are obligated to adhere strictly to the following policies:

- i. Turn off cell phones upon entering class!
- ii. Everyone is required to be in class on time.

Anyone entering the classroom after the instructor has begun class is late and is disruption to the class. The instructor must implement an appropriate policy to discourage late arrivals.

- iii. The student must have prior consent of the instructor before leaving the class early.

If you must leave class early, notify the instructor before the beginning of class. We do not conduct "open" classrooms where individuals may arrive and exit at their discretion. This activity is disruptive to those trying to learn and will not be allowed. If you leave early without prior notification to the instructor, you will not be allowed back in the classroom without first obtaining permission from Mrs. Reynolds, Chair of the Division of Mathematics.

- iv. The instructor is not to allow talking or other inappropriate distractions to occur.

Talking or other disruptive behavior (including all electronic devices such as IPODS, Blackberries, cell phones, except approved graphing calculators) is a distraction to other students and has no place in a college environment. Students who engage in such behavior will be asked to stop. If the behavior continues, the student will be asked to leave and confer with Mrs. Reynolds, Chair of the Division of Mathematics, concerning the nature of the behavior before being allowed back in the classroom.

- v. **NO FOOD IS ALLOWED IN THE CLASSROOM.**
- vi. Infractions of discipline may be handled by the instructor as final authority.
- vii. The student has a right to appeal.