

# **Trigonometry**Grand Haven High School



Course Number: E53 Grade Level: 11-12

Credits: 0.5

Prerequisite Courses: Algebra 2B or Honors Algebra 2B

## **Course Description**

This is a one semester class presenting the trigonometric functions first from the unit circle approach and then by using right triangles. In addition to trigonometric functions and their graphs, emphasis is placed on the law of cosine, the law of sines, and applications of trigonometry. A graphing calculator is strongly recommended.

## **Course Objectives**

Trigonometry is the study of triangles and their measurement. We will use the knowledge you bring from Geometry and Algebra, and expand upon it, to look at Trigonometry from two perspectives: as an abstract family of functions and as a more concrete geometric set of problems. Many of the applications of trigonometry are in physics, engineering and other sciences, but uses are also found in the everyday. We will look at the world around us and see the many ways trigonometry is used.

## **Student Expectations**

Students are expected to be active participants in their education, including completion of all assigned work, and best effort on quizzes and tests. Students are also expected to obtain a graphing calculator for this course, see teacher for suggested model. A notebook specific to math is also encouraged.

#### Communication

Students are expected to regularly monitor their progress through the Parent Internet Viewer and teacher blog sites. Parents and students are encouraged to contact teachers through email or phone with any questions or concerns.

The Math Lab is available before and after school, and during all lunches for additional help.

#### **Building Behavioral Expectations**

**TEAM GH... One Team, One Family, One Grand Haven. Be Kind. Always.**It is our expectation that ALL GHHS students, staff and parents will ... always give their best **EFFORT** in everything that they do, work hard to be **INCLUSIVE** of each other, show **RESPONSIBILITY** in class, the hallways, cafeteria and at events, and **WORK TOGETHER** at all times!

## **Grading Policy**

Assignments/Participation 25%

I expect that all students will attempt all homework problems. This means that appropriate drawings and work are required to receive full credit, not just a number or a blank space. Credit will be given based on completion, not right or wrong answers. Homework will not be accepted late unless you had an excused absence. It is your responsibility to check to make sure that your homework is correct, or if it is incorrect, to ask questions during our correction time in class so that you understand the material.

#### Quizzes 25%

We will have several different types of quizzes:

Homework quizzes – an open-note quiz over some of the problems from the previous evening's homework.

Pop quizzes – unannounced quizzes over recent material Cumulative quizzes – announced quizzes, usually over multiple days' worth of material (for example, several sections of a chapter)

#### Chapter Tests 50%

Tests will be given at the end of each chapter or unit, and will be cumulative over the material for the semester. Students who were absent the day before the test (review day) are still expected to take the test. Students who were absent for multiple days before the test should speak to me about how they plan to make up the material

## **Scope and Sequence**

This Semester we will explore:

The Unit Circle
Radian and degree measurements
The family of trigonometric functions
Solving trigonometric equations
Applications of Trigonometry
Vectors and their uses

## **Building Behavioral Expectations**

**TEAM GH... One Team, One Family, One Grand Haven. Be Kind. Always.** It is our expectation that ALL GHHS students, staff and parents will ... always give their best **EFFORT** in everything that they do, work hard to be **INCLUSIVE** of each other, show **RESPONSIBILITY** in class, the hallways, cafeteria and at events, and **WORK TOGETHER** at all times!