# Welcome to TRIGONOMETRY!

**What is Trigonometry?** In general, Trigonometry is a branch of mathematics that studies relationships between the lengths and angles of triangles. We will look at these relationships in detail in both right and oblique triangles, as well as trigonometric and inverse trigonometric functions, graphs, identities, trigonometric equations, vectors, polar coordinates, DeMoivre's Theorem, and applications. To be successful in this class, your algebra skills need to be strong.

[The prerequisite for this course is successful completion (grade of **C** or better) in Math 102 and 103 or equivalent.]

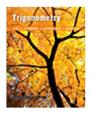
## How much time will this class take?

Trigonometry is a four-unit course. This means that a student taking this class will spend four hours per week in class. In addition to in-class time, a trigonometry student can expect to spend approximately **two hours** working on homework for every one hour he/she is in class. Therefore, a trigonometry student can expect to spend approximately **12 hours** per week on this course. This number may be lower or higher for you, depending on your math preparedness.

## What materials do I need?

Note: You do not need to buy the book, but you must buy the Access Code.

The textbook we will be using is: Lial, Hornsby, Schneider and Daniels, <u>Trigonometry</u>, 10<sup>th</sup> Edition



- Access Code to My Math Lab (Pearson)
- Graph paper: All work for <u>all</u> assignments turned in <u>must</u> be done on graph paper. No exceptions.
- Pencil(s): All work turned in, especially exams, <u>must</u> be done in pencil or they will not be accepted.
- Scientific Calculator (TI84 highly recommended. No TI-89 or cellphones)
- Note: The library has TI84 calculators available to be checked out for the entire semester.

# **Important Upcoming Deadlines!**

- Students who do not sign up at <u>www.pearsonmylabandmastering.com</u> and are up-to-date with course assignments by **Sunday, August 20, 2017** will be dropped. My Math Lab will allow you to enroll on their site with a *temporary access* without buying the access code.
- Any student who enrolls with a *temporary access code* will be **required** to have purchased the access code, be permanently enrolled in the My Math Lab course, and be up-to-date with course assignments by **Sunday, August 27, 2017.** Failure to do so will result in a **drop from the course!**

# How do I earn my grade?

*Homework*: Homework assignments are completed online and the assignments can be found at the *My Math Lab* website, <u>www.pearsonmylabandmastering.com</u>. *It is important to stay current to be successful in the course!* Each assignment has a due date. Late homework will lose **25%** of the points possible *for every day it is late*. You may work ahead if you like.

- All online homework problems are to be written out and worked out completely **on graph paper** (see materials list above) and in pencil.
- The written work for the online homework will be due on the day of the exam.
- No late written homework will be accepted.
- Written work will be graded for completeness, neatness and accuracy.
- <u>Math Center Requirement</u>: A part of your homework grade will be a mandatory one hour in the Math Center (FEM-1) or the Tutorial Center. This will be worth 10 points per week. You will need to log in to and out of the math center or tutorial Center and I will receive a weekly report showing your attendance in either location.

*Quizzes:* There will be online quizzes posted and due on a weekly basis.

**Exams**. There will be 4 -5 exams, worth 100 points each. There are **NO MAKEUPS** for missed exams. If you absolutely <u>must</u> be absent on the day a test is scheduled, you may discuss with me the possibility of taking the test **early**. In addition, a two-hour comprehensive final exam worth 100 points will be given at the end of the semester during finals week.

*Final Grading:* Your final grade in the course is made up of three components: **Homework** and **Quizzes** will <u>each</u> represent 20% of the final course grade, and the **exams and final exam** will represent 60% of the final course grade.

*Example:* If your homework average is 85, the average of your quizzes is 75 and the average of your three exams and the final is 78, then you would compute your grade as follows:

### (.20)(85) + (.20)(75) + (.60)(78) = 17.9 + 15.0 + 46.8 = 78.8

Your grade will then be determined by the following grading scale:

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89.5% - 100% = A 79.5% - 89.4% = B 66.5% - 79.4% = C 54.5% - 66.4% = D 0% - 54.4% = F
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### **CLASS POLICIES I NEED TO KNOW!**

**Attendance:** Trigonometry is a challenging course, but one you can definitely succeed in. The first and most important part of succeeding in this class is to **come to class!** In class we will work on developing your understanding of the key concepts of the course and we will do a lot of problem solving together as a class. Coming to class and participating in class activities will help you prepare for exams and is truly an integral part of your learning process. I expect you to **be on time.** It is distracting, rude and unfair to both me and your fellow classmates when you are late. **Two tardies will be counted as an absence, and five absences may result in being dropped from the course.** *Note: If you decide to no longer be enrolled in the course, it is your <u>responsibility</u> to make the drop official in the Admissions and Records office or else possibly receive a grade of F.* 

**Personal and Technology Emergencies:** I am well aware that sometimes emergencies arise both in your personal life and with the technology that you may be using. To account for these unexpected events, I have made the following allowances:

- The lowest two **homework grades** will be dropped.
- The lowest two **online quiz grades** will be dropped.
- Whatever score you earn on the final exam will be recorded as your final exam score and will replace your lowest of the previous exam scores (if the final is higher than the lowest exam score).
- Missing the final exam will result in a score of 0.
- There are no makeups for **any** missed quizzes, exams, or the final exam.

**Academic Integrity:** You are expected to be honest. The student receiving the grade on their transcript needs to be the person doing the work at ALL times in this class. If not, the student will receive an automatic F in the course, and suffer the utmost consequences of plagiarism as set forth by the college's academic regulations. Reedley College rules on plagiarism will be strictly enforced. Academic dishonesty <u>in any form</u> is a very serious offense and will incur serious consequences, including but not limited to receiving a grade of F in the course.

### Academic Calendar:

		12/11/17	Final Exam 9:00 -11:50
9/4/17	Labor Day – No Classes	11/23 – 11/24/17	Thanksgiving Holiday
8/27/17	Deadline to be PERMANENTLY enrolled in My Math Lab	11/10/17	Veteran's Day Holiday No class
8/25/17	Last day to add a full-term course for Fall 2017	10/13/17	LAST DAY TO DROP AND RECEIVE GRADE OF W
8/20/17	Deadline to be enrolled and be up-to-date with online assignments	9/8/17	Last day to change to Pass/No Pass Grading

**NOTE:** If you have a verified need for an academic accommodation or materials in alternate media per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

#### COURSE OBJECTIVES

Students will be able to:

- apply the trigonometric functions to solve for the parts of a triangle.
- evaluate trigonometric functions of both acute and obtuse angles.
- solve problems involving vectors
- apply the concept of radian measure to circular functions
- apply trigonometric identities to simplify algebraic expressions and solve equations.
- apply the concept of polar coordinates to algebraic operations and graphs.
- apply computing and graphing technology.

#### **COURSE CONTENT OUTLINE**

- Chapter 1: Trigonometric functions
- Chapter 2: Acute Angles and Right Triangles
- Chapter 3: Radian Measure and Circular Functions
- Chapter 4: Graphs of the Circular Functions
- Chapter 5: Trigonometric Identities
- **Chapter 6:** Inverse Circular Functions and Trigonometric Equations
- Chapter 7: Applications of Trigonometry and Vectors
- Chapter 8: Complex Numbers, Polar Equations and Parametric Equations (as time permits)