# Math 4A Trigonometry Fall 2019

Course Syllabus

## General Information

### Instructor

Veronica Andrade-Romeo

### Office

FEM 4A

### Office Hours

Tuesday-Thursday 10:00 – 10:50 in my office and a virtual office hour on Fridays 10:00 – 10:50

Email me if you need to meet with me if my office hours do not work for you.

### Email

maria.andrade-romeo@reedleycollege.edu

### Prerequisites

## Course Description

The study of trigonometric functions, their inverses and their graphs, identities
and proofs related to trigonometric expressions, trigonometric equations, solving
right triangles, solving triangles using the Law of Cosines and the Law of Sines,
polar coordinates, and introduction to vectors.

## Text and Required Material

1. Lial, Hornsby, Schneider & Daniels "Trigonometry" MyMathLab Access Card.
The best and cheapest way to purchase the access card is with a credit card
through CANVAS. You may also purchase it at the bookstore but it will cost a
little more.  You have two options. Option one purchase the MyMathLab Access Card only or Option Two Purchase both
the textbook and the MyMathLab Access Card.  In other words, the MyMathLab access card is required and the actual
textbook is completely optional.  The text book is Lial, Hornsby, Schneider & Daniels "Trigonometry" 11th Edition.
2. Scientific Calculator (sin, cos, tan keys are necessary).
3. Straight edge (ruler)
4. Graph paper

## Reasons for which you may be dropped

I may drop students at any time starting on Wednesday August 14th through Sunday October 13th.  Here are the reasons
for which you may be dropped:

1. You may be dropped if you have not signed up for MyMathLab by Wednesday August 14th.  You DO NOT have to
   purchase it by August 14th but you must be signed up, you may use the two-week free trial for the first two
   weeks.  Also, be sure to register through CANVAS not through Pearson.  Which means that I will not give you a
   course ID, when you sign up through CANVAS MyMathLab will automatically know what course you need to
   enroll in.
2. You may be dropped if you have not purchased the access code by Wednesday August 28th.
3. You may be dropped if you do not start the homework assignments by Wednesday August 14th

4. You may be dropped if you have 2 or more absences by 8/22/2019
5. You may be dropped if you have 3 or more absences by 8/29/2019
6. You may be dropped if you have 6 or more absences by 10/10/2019

NOTE: If you want to drop the class, make sure that you do so on Webadvisor, do not depend on me to drop you.

## Absences and Tardies

- There are no excused absences, emailing me or calling me does not excuse an absence.
- If you arrive after I take attendance but less than 20 minutes late you will be marked tardy, or if you leave less than 20 minutes early you will be marked tardy.  (Make sure to write your name on the board if you arrive tardy so that I remember to change your status from absent to tardy)
- Every 3 tardies count as an absence and it will count towards possibly being dropped; and  towards your participation grade.
- If you arrive more than or equal to 20 minutes late or leave more than or equal to 20 minutes early then you will be marked absent and it will count towards possibly being dropped; and towards your participation grade.

## Classroom Behavior

- Absolutely no cell phones (You may lose participation points for the day, unless we are using them as part of the lesson).
- Do not pack up early.
- In general, be considerate.  We are here to learn.

## Important Dates

8/23/2019: Census-Last Day to ADD/DROP a full-term class for a full refund
8/30/2019: Last day to drop to avoid a "W" in person
9/2/2019: Last day to drop to avoid a "W" on Webadvisor
10/11/2019: Final Drop Deadline, a letter grade will be assigned after this date
12/09/2019: Final Exam 9:00 – 10:50

## Grading

| Grade | Range |
|-------|-----------|
| A | 90 – 100% |
| B | 80 – 89% |
| C | 70 – 79% |
| D | 60 – 69% |
| F | 0 – 59% |

| Grade Category | Weight |
|----------------|--------|
| Tests | 70% |
| Quizzes, Activities and projects | 5% |
| Participation | 5% |
| Homework | 20% |

Your grade is the grade on the CANVAS gradebook (Not the grade on MyMathLab).

## Testing

Follow Directions, be prompt, NO CELL PHONES allowed. Testing must be completed in a single sitting, you may not leave the room. The SCCCD policy regarding ACADEMIC DISHONESTY will be applied when appropriate.

## Academic Dishonesty

**Cheating** is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

**Plagiarism** is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

## Students with Disabilities

If you have any special needs addressed by the American Disability Act and need course materials in alternate modes, or alternate testing circumstances, it is your responsibility to notify me as soon as possible. Upon notification, immediate reasonable efforts will be made to accommodate your special needs.

## Student Learning Outcomes

*Upon completion of this course, students will be able to:*
1. Provide and analyze graphs of trigonometric functions.
2. Apply trigonometric techniques to solve problems in real world contexts.
3. Derive, use and prove trigonometric properties and identities.
4. Produce solutions to equations using skills developed in trigonometry.

## Course Objectives

In the process of completing the course, the student will:

1. Identify special triangles and their related angle and side measures;
2. Evaluate the trigonometric function of an angle in degree and radian measure;
3. Manipulate and simplify a trigonometric expression;
4. Solve trigonometric equations, triangles, and applications;
5. Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs;
6. Evaluate and graph inverse trigonometric functions;
7. Prove trigonometric identities;
8. Convert between polar and rectangular coordinates and equations;
9. Graph polar equations;
10. Represent a vector (a quantity with magnitude and direction) in the form and ai+bj

## Course Outline

Rectangular coordinates, angles and circular/radian measure;

2. Definitions of the six trigonometric functions according to the right   triangle, the unit circle, and the rectangular coordinate system;

3. Applications of the right triangle;

4. Simplification of trigonometric expressions;

5. Proofs of trigonometric identities;

6. Graphs of trigonometric functions: period, amplitude, phase shift, asymptotes;

7. Inverse trigonometric functions and their graphs;

8. Trigonometric equations;

9. Solving Triangles: Law of Sines and Law of Cosines;

10. Polar coordinates and equations; and

11. Introduction to vectors

## Disclaimer

Ms. Andrade-Romeo reserves the right to make changes to the syllabus with whole class notification.