

Math 4A Trigonometry Spring 2020

Course Syllabus

General Information

Instructor

Veronica Andrade-Romeo

Office

FEM 4A

Office Hours

Mondays & Wednesdays 11:00 – 12:50 in my office and a virtual office hour on Fridays 9:00 – 9:50

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

Email

maria.andrade-romeo@reedleycollege.edu

Prerequisites

none

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” eleventh edition 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. Printing Paper (I prefer you do math on non-lined paper) and a few pages (about 5) of graph paper

Reasons for which you may be dropped

I may drop students at any time starting on Wednesday January 15th through Sunday March 15th. 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 January 15th. DO NOT purchase the access code by January 15th use the free trial at this point (this is important if you buy the 18-week access code because this semester has 19 weeks, so it is very important that you use the free trial for a week. 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 January 29th. (Remember if you purchase an 18-week access code use the free trial first and pay for it after 1/20/2019 but before 1/29/2019)

- You may be dropped if you have TWO or more consecutive missing assignments at any point within the dropping period.

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

Important Dates

1/24/2020: Census-Last Day to ADD/DROP a full-term class for a full refund

1/31/2020: Last day to drop to avoid a "W" in person

2/2/2020: Last day to drop to avoid a "W" on Webadvisor

3/13/2020: Final Drop Deadline, a letter grade will be assigned after this date

5/20/2020 Final Exam must be completed by Wednesday May 20th 11:59 pm

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	10%
Homework	20%

YOUR GRADE IS THE GRADE ON THE CANVAS GRADEBOOK (NOT THE GRADE ON MYMATHLAB).

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 $a\mathbf{i} + b\mathbf{j}$

Course Outline

1. 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