Math 4A-56694
Trigonometry

Summer 2022

Course Syllabus

Hi, and welcome to Math 4A, I want to start by letting you know that I am here to support you as you go through this course. You will be challenged in this class, but you will be given multiple opportunities to show mastery as well as support from your instructor. I want to welcome ALL of you right now to reach out to me whenever you have a question, or need help. College is NOT meant to be done alone, we all had help. To support you in this class you will have 7 review sessions throughout the 6 weeks, if you need to meet more than that you can email me and make an appointment. I will also form and set up study groups if a few of you are interested in joining one. I may also contact you via email, especially if you fall behind.

General Information

Instructor

Veronica Andrade

Office

Math and Science room 131 (currently only on zoom)

Office Hours
Virtual Office Hour

None during the summer but you are more than welcome to email me and make

an appointment to meet with me on zoom.

Class Times

We will not have any mandatory meetings since this is an asynchronous class but we will have 7 review sessions which I encourage all of you to attend.   The days and times will be posted on the class calendar under UNIT 0. Here is the link to all of the review sessions:
https://scccd.zoom.us/j/95780252038

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" 11th edition MyMathLab Access Card.
The best and cheapest way to purchase the access card is with a credit card through CANVAS. You do not have to purchase the actual textbook, It is mandatory to purchase only the MyMathLab Access Card and this comes with a digital copy of the book.
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 don't like to drop students but from time to time I have had to, here are the reasons for which you may be dropped:

1. You may be dropped if you have not signed up for MyMathLab by Monday Jane 6th. Please use the 14-day free trial to sign up. Then you can purchase it during the second week of classes (must be purchased by 6/19/22). Purchase it before the free trial expires. Make sure that you sing up through the CANVAS website. From CANVAS click on "MyLab and Mastering" on the left-hand side menu this will take you to the Pearson website, but DO NOT go directly to the Pearson website. This 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 Friday June 19th. To purchase go to MyLab and Mastering then click on "Open MyLab & Mastering" then click on "My courses" in the left-hand side menu. Then you should see a shell with our course with a link in blue in small letters with an option to upgrade your subscription. Here you can either enter a code that was purchased at the bookstore or you can pay for MyMathLab using a credit card. The 18 week is all you need.
3. Finally, I am very flexible and do not have penalties for turning work in late, but I DO expect you to advance at a good pace; so, if you have not turned in AT LEAST TWO tests by Monday 6/20 you may be dropped.

   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

6/6/2022- Make sure to sign up for MyMathLab (do not pay by this date use the 14 day free trial)
6/19/2022- Make sure to pay for MyMathLab by this date
7/13/2022 – Last Day to turn in ALL WORK

Grading

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

Grade Category	Weight
Exams: Tests Only	100%

<mark>YOUR GRADE IS THE GRADE ON THE CANVAS GRADEBOOK (NOT THE GRADE IN MYMATHLAB) AND ONLY TESTS COUNT TOWARDS YOUR GRADE.</mark>

Tests

You may not give or receive help on tests. Tests will make up 100% of your grade. You WILL have multiple opportunities to take the exams. You will NOT be penalized for late submissions.

Homework

Homework WILL NOT be part of your grade but you are required to do the homework to help you prepare for the exam (unit test). You will not have access to the unit tests until you complete all of the unit homework with at least a 75%.

Instruction

I will post the readings and video lessons in CANVAS, please go to the CANVAS homepage and click on the sections <u>to do the readings, watch the videos and take notes. The assignments will also be on CANVAS</u>

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, do 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. Calculate powers and roots of complex numbers using DeMoivre's Theorem
11. Represent a vector (a quantity with magnitude and direction) in the form and ai+bj

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. DeMoivre's Theorem and applications
11. Introduction to vectors

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.

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