

# Math 4A-Trigonometry

Course Syllabus-SPRING 2021 Section #59414

## Class:

Synchronous and Asynchronous: All class materials located on Canvas or google classroom.

## Instructor:

Mr. Garcia

## e-mail:

[jose.garcia@reedleycollege.edu](mailto:jose.garcia@reedleycollege.edu) or [jogarciamath@gmail.com](mailto:jogarciamath@gmail.com)

**MyMathLab ID:** garcia92603

## Virtual Office Hours:

|              |              |
|--------------|--------------|
| M, T, W & Th | 9:00-10:00am |
| F            | 2:00-3:00pm  |

## Course Communication Policy:

The best way to get ahold of me is by sending a message through the messaging system in Canvas. at [jose.garcia@reedleycollege.edu](mailto:jose.garcia@reedleycollege.edu) or at [jogarciamath@gmail.com](mailto:jogarciamath@gmail.com). I will respond to your concerns or questions within 24 hours Monday-Saturday. I may be able to respond to you on Sundays upon an opportunity but I don't promise anything. If you don't hear from me within 24 hours then resend your message via Canvas or email. Remember, this the best communication method to reach me.

## Course Information:

Welcome to Math 4A, Trigonometry! Our section number is 59414. We meet in ZOOM Tuesday and Thursday from 2:10 pm – 2:55 pm.

## 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.

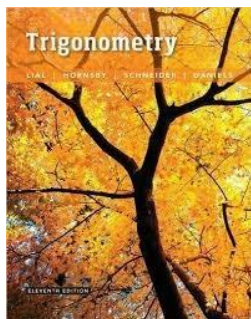
- Advisories: Eligibility for English 125 and 126, or English 128 and 130, or English 132
- Prerequisite(s): Math-103 or equivalent
- Credits: 4 units

## Course Materials:

**Required:** MyLab Access. You will not have to purchase an access code for this course. You will be given an access code during our zoom meeting provided by Dinuba High School. This will give you access to all assignments and an electronic copy of the full textbook. You can use a free temporary 14-day access at first if you wish. Each homework assignment will be completed online and the assignments can be found at the MyMathLab website, [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com). You will need to login in MyLab first then you will add a new course by using the following ID: garcia92603. After this you will, need the access code that will be provided to you by Mr. Garcia during our zoom meeting.

**Required:** Calculator, needs to be at least scientific. You need to bring your calculator to each zoom class meeting every day. You can use a TI-30XIIS at minimum. If you are going to continue taking Math courses then I recommend to use TI-84 or PLUS (can be checked out at Reedley College Library with your RC ID). You will need visit the Reedley College Library website at, <https://www.reedleycollege.edu/campus-life/library/index.html> for more information. **Tips:** Submit a request or fill out a form via online, and they are opened M, W, F 9:00 AM – 12:00 PM, 2:00 PM – 5:00 PM for pick up. You can also find other information on their website. For other questions, you can reach the Reedley College Library at 559-638-0352.

**Optional:** A hard copy of the textbook. This is NOT required for the class. Your MyLab access comes with this book. We are using *Trigonometry* 11<sup>th</sup> edition by Lial, Hornsby, Schneider, and Daniels. Publisher is Pearson, copyright year 2017.



### **Student Learning Outcomes:**

Upon completion of this course, students will be able to:

- Provide and analyze graphs of trigonometric functions.
- Apply trigonometric techniques to solve problems in real world contexts.
- Derive, use and prove trigonometric properties and identities.
- Produce solutions to equations using skills developed in trigonometry.

### **Course Objectives:**

In the process of completing this course, students will:

- Identify special triangles and their related angle and side measures;
- Evaluate the trigonometric function of an angle in degree and radian measure;
- Manipulate and simplify a trigonometric expression;
- Solve trigonometric equations, triangles, and applications;
- Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs;
- Evaluate and graph inverse trigonometric functions;
- Prove trigonometric identities;
- Convert between polar and rectangular coordinates and equations;
- Graph polar equations;
- Calculate powers and roots of complex numbers using DeMoivre's Theorem; and
- Represent a vector (a quantity with magnitude and direction) in the form  $ai+bj$ .

### **Course Content Outline:**

- Rectangular coordinates, angles and circular/radian measure;

- Definitions of the six trigonometric functions according to the right triangle, the unit circle, and the rectangular coordinate system;
- Applications of the right triangle;
- Simplification of trigonometric expressions;
- Proofs of trigonometric identities;
- Graphs of trigonometric functions: period, amplitude, phase shift, asymptotes;
- Inverse trigonometric functions and their graphs;
- Trigonometric equations;
- Solving Triangles: Law of Sines and Law of Cosines;
- Polar coordinates and equations; and
- DeMoivre's Theorem and applications
- Introduction to vectors.

### Homework:

The homework assignments will account for 25% of your grade. Most of the homework assignments will be done through the online Pearson program called MyLab Math. Since they are online, you are still expected to turn the homework in by the due date even if you aren't in class. Once we complete a section, an assignment will be created. Any assignments created during a week will be due the following Monday evening at 11:59 pm. For example, any homework assigned during the week of January 11-16 would be due by Wednesday January 18<sup>th</sup> at 11:59 pm. You will have unlimited time and attempts for all questions in every assignment. At the beginning of class each day students will have a chance to ask questions on problems they have been working on, so take advantage and try to start the problems the day they are given so you have the opportunity to ask questions. MyLab has many great resources, such as **show me an example** and **help me solve this or ask a question to My Professor**. Take advantage of these great tools!

### Importance Notice:

While working on an assignment, you do not have to complete an entire assignment in one seating. If you choose to stop for a while, make sure to click **SAVE** icon and the program will save your work. You can come back to work on the assignment and continue where you left off at another convenient time.

### Tutorial Services and Resources:

[The Math Center in the FEM](#) building at Reedley College

- Free tutoring in the Math Center (virtually).
- **Mr. Garcia's office hours M, T, W, & Th at 9a-10a and F at 2p-3p.** To join and to use the zoom link use the google classroom code: bfemj6s
- Your classmates
- YouTube also has many good videos or other websites you find the are helpful.
- [Video for the Academic Support Centers](#)
- **Note:** If you have any questions you would like to ask of me, your, please ask me during class time or contact me via email and I will do my best to help you.

## Late Homework Policy:

Once the due date and time have passed an assignment is considered late. You can work on all late assignments and earn up to 90% of the credit (it will be based on your effort!) until the final exam at the end of the semester. I strongly recommend to stay on track, and don't put off your assignments because they get accumulated very quickly as we progress throughout the semester.

## Extra Credit:

There will be a few extra credit opportunities upon the teacher discretion and guidelines, so take advantage of them! Extra credit opportunities will be made clear and available to everyone in the class. To be fair, no individual extra credit assignments will be given (so don't count on that at the end of the semester).

## In Zoom Quizizz:

In addition to homework, you will have occasional in class assignments. Sometimes these will be done virtually and individually. Other times will be assigned via Canvas or google classroom. If you are absent when we have an in-class assignment/Quizizz, it is your responsibility to speak with me or check Canvas or google classroom so that you can make it up.

## Exams:

There will be several chapter exams including Chapter 1, Chapter 2, Chapter 3, Chapter 4, Chapter 5, Chapter 6, Chapter 7, and Content covered in Ch 8 will be on the Final Exam, so we won't have a separate exam on chapter 8 and the final exams. All exams will have equal weight in your overall class grade percentage. If you absolutely cannot take a test on the day of an exam is scheduled, you must discuss with me the possibility of taking the exam **early. Please send me an email so I can make the necessary changes and you don't get a zero.**

## Final Exam:

There will be a mandatory final exam at the end of the semester. It will be cumulative meaning on all material covered throughout the class. If a student misses an exam during the semester, then the final exam score will go in for that grade. If a student has not missed any exams, then the final exam will go in for the lowest exam given the final score is higher. **The final exam for this class will take place on the week of May 17-21. The time and due date will be determined upon the finals week.**

## Personal and Technology Emergencies:

I am well aware that sometimes emergencies occur. To account for these unexpected events, I have made the following allowances:

- The lowest **two homework assignments grades** will be dropped.
- The lowest **two quiz grades** will be dropped.
- The lowest **test grade** will be dropped after the final exam is taken.

## Grading Scale:

| Letter Grade | Percent Range | Categories  | Percent of Grade |
|--------------|---------------|-------------|------------------|
| A            | 89.5%-100%    | Assignments | 25%              |
| B            | 79.5%-89.4%   | Quizzes     | 10%              |
| C            | 69.5%-79.4%   | Exams       | 65%              |
| D            | 59.5%-69.4%   |             |                  |
| F            | 0%-59.4%      |             |                  |

### Example:

If your homework assignments average is 85, the average of your quizzes is 70, the average of the **average of your exams and the final exam 76**, then you would compute your grade as follows;

$$(.25)(85)+(.10)(70)+(.65)(76) = 21.25 + 7 + 49.4 = 78.65 \text{ or } 78.7$$

- Your grade will then be determined by reading the above chart with the grading scale. Thus, your grade in the above example will be 78.7% or C.
- Note: To receive college credit you need at least 69.5% or C, or better to pass.
- **My goal for this course is** \_\_\_\_\_

### Important Dates:

|                        |        |   |
|------------------------|--------|---|
| January 11, 2021       | (M)    | First day of school   |
| January 18, 2021       | (M)    | Martin Luther King, Jr. Obs. (no classes held, on campus closed)            |
| January 22, 2021       | (F)    | Last day to drop a Spring 2021 full-term class                              |
| January 25, 2021       | (M)    | Deadline to enroll in MML and complete the first assignments                |
| January 29, 2021       | (F)    | Last day to register for a Spring 2021 full-term in person                  |
| January 29, 2021       | (F)    | Last day to drop a Spring 2021 full-term class to avoid a "W" in person     |
| January 31, 2021       | (SU)   | Last day to drop a Spring 2021 full-term class to avoid a "W" on WebAdvisor |
| February 1, 2021       | (M)    | Deadline to permanently enrolled in MyMathLab                               |
| February 8, 2021       | (M)    | Lincoln's Birthday Obs. (No classes held, on campus closed)                 |
| February 12, 2021      | (F)    | Last day to change a Fall 2020 class to/from Pass/No-Pass grading basis     |
| March 12, 2021         | (F)    | Last Day to drop a full-term class (letter grades assigned after this date) |
| February 15, 2021      | (M)    | Washington Day/Pres. Day (No classes held, on campus closed)                |
| March 29-April 5, 2021 | (TH-F) | Spring Break (No classes held, on campus closed)                            |
| May 17-21, 2021        | (M-F)  | Spring 2021 Final Exams Week  |

### College Policies:

#### Special Needs Requests:

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, you are encouraged to provide me with your notification of authorized services form from DHS counselor and consult with me immediately so that arrangements can be made.

#### Academic Integrity:

You are expected to be honest. In this course, that primarily means you should never submit work that is not your own. This does not mean that you are not allowed to work with other students. I encourage you to collaborate on homework problems! It is often more fruitful and enjoyable to work with other people when trying to figure something out. They can give you a fresh insight or different perspective on the problem. Conversely, explaining your idea to another person forces you to clarify your thoughts and can help to highlight flaws you may have previously overlooked. However, if you work with others to come up with a solution, afterward you should write up your work on your own. You should not base your homework on another's student's homework, and never put your name on something you do not understand.

**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 a 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.

***Disruptive Students:***

Disruptions will not be tolerated. It is my goal to provide the most comfortable and welcoming environment in our class. Cell phones are only allowed in class when taking a picture of something on the board, researching a topic in class, or using them for activities during class (such as Kahoot!). ``Reedley College's Student Code of Conduct Policy (Board Policy 5520 and Educational Code 76032) authorizes an instructor to remove a disruptive student from his or her class for the day of the removal and the next class meeting. The instructor shall immediately report the removal to the Vice President of Student Services. During the period of removal, a student shall not be returned to the class from which he or she was removed without the concurrence of the instructor of the class" (Reedley College Catalog pg 49).

***Student Rights:***

``Student rights are protected by federal and state laws, and by policies established by the trustees of the State Center Community College District. It is therefore essential for the protection of students' rights that procedures be established and followed which would identify violations of student conduct standards and the resolutions of such violations. Students have a right to an oral or written notice (reasons for disciplinary action), an opportunity for a review, and a decision given orally or in writing. For more information contact the Vice President of Student Services' office. (Board Policy 5520, Administrative Regulation 5520)" (Reedley College Catalog pg 49).

**Drop Policy:**

Student Drops: If you choose to drop this course, then it is your responsibility to reach out to Mr. Garcia and Ms. Sanchez as why you want to drop this course. Keep in mind that there are some guidelines that you need to follow as well as drop dates. Please see important dates under the table of important dates on this Syllabus above.

**Notice:** *This Syllabus is subject to change at the discretion of the Math instructor.*