# Math 4A, Trigonometry, Section #52050 – Spring 2024 Course Syllabus

## Instructor's Information

• Instructor: Ms. Monica Cuevas

• Email: monica.cuevas1@reedleycollege.edu

• Office hours: by appointment or email

### Class Time & Location

• Class time: T/TH; 6:00PM - 7:50PM

• Location: CCI-200

### **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: Eligible for English 1A

Prerequisites: Math 103 or equivalent

• Credits: 4 units

#### Course Materials

- **Textbook:** The textbook we will be using for this course is <u>Trigonometry</u>. This textbook is free and it's available online. Our textbook has been adapted from Chapters 7 through 10 of Jay Abraham's <u>Algebra and Trigonometry</u> from OpenStax.
- **Technology:** Students are required to have access to a computer with reliable internet. If you do not have internet access at home, then you need to figure out a place you can access the internet to complete the assignments. Not having internet access is not an excuse for missing assignments.
- **Scientific Calculator:** You are required to have a non-graphing scientific calculator. There are many handheld models that you can buy.
- Other Material: Paper and pencils

### Attendance & Drop Policy

Students are expected to attend every class, be on time, and stay for the entire class. If a student is tardy or absent, it is his/her responsibility to catch up by obtaining notes from a fellow classmate. Students who are absent for 3 or more days (not necessarily consecutive) will be dropped from the class. If you are sick or have an emergency and want to avoid being dropped from the class, then send me an email letting me know that you will be absent. If a student wants to drop the class, it is their responsibility to drop the class by going to Self-Services or Admissions and Records.

### **Communication Policy**

The best way to contact me is via email or using the Canvas inbox. I will respond to your email within 24 hours. If you send an email during the weekend, then I will respond to your email by Monday. I will only check my email Monday through Friday from 8am to 5pm. When sending an email please include "Math 4A" in the subject line.

### Plagiarism & Cheating

Reedley College rules on plagiarism will be enforced. Students who are caught cheating and students that allow others to copy their work will receive a 0% on that assignment (homework, chapter exams, final exams, or any other assignment).

### **Grading Policy**

You can see your overall grade in Canvas any time. Your overall grade is broken down as follows:

- 30% Homework and Discussion Boards
- 10% Quizzes
- 60% Chapter Exams & Final Exam

### **Grading Scale**

A: 90% – 100% C: 70% – 79% F: Below 60%

B: 80% – 89% D: 60% – 69%

## Homework, Quizzes, and Discussion Boards

- **Homework & Quizzes:** Most of the homework assignments and quizzes are available through a platform called MyOpenMath, which is completely free to you. You won't need to make an account or sign up for anything you have access to it through Canvas.
- **Discussion Boards:** All discussion boards will be posted in Canvas. You are required to post a reply on every discussion board and reply to your peer's posts.

### Chapter Exams

All exams are weighted equally and there will be a total of four exams. Exams will be taken in class and students that do not show up for the exam will receive 0%. **Students who are caught cheating will receive 0% on the exam.** 

#### Final Exam

The Final Exam is <u>comprehensive</u> and <u>mandatory</u>. The final exam will be counted as a chapter exam and will be used to replace the lowest chapter exam. A chapter exam cannot replace the final exam. The final exam will be taken in class and students that miss the final exam will receive 0%. Students will not be allowed to make-up the final exam. **Students who are caught cheating will receive 0% on the final exam.** 

### **Late Work Policy**

- Homework/Quizzes/Discussion Boards Late homework, quizzes, and discussion boards will lose a flat 30% and can be turned until the day of the unit exam. Homework, quizzes, and discussion boards must be turned in by the due date to avoid any late penalties.
- <u>Chapter Exams</u> Students are not allowed to take chapter exams after the scheduled time. If a
  student knows in advance that they will not be able to take the exam on the scheduled date,
  then they must schedule a time to take the exam in advance.
- <u>Final Exam</u> The final exam will not be accepted late. Students who do not show up for the final exam will receive a zero.

### RC Math Center – Tutoring

Tutoring will be available this semester and it's free! The Math Center offers both in-person and online tutoring and it's located in the Math/Science Building. Tutors are available for drop-in and appointment-based sessions. To learn more about their services and to view their schedule visit the <u>Tutoring Services</u> <u>website</u>.

#### **Net Tutor**

Net Tutor offers free online tutoring and it's available 24/7. This tool is available to everyone in Canvas, and it's located on the navigation bar.

### **Important Dates**

- January 8 (M) Start of Spring 2024 semester.
- January 15 (M) Martin Luther King, Jr. Day observed (no classes held; campus closed)
- January 19 (F) Last day to drop a Spring 2024 full-term class for full refund.
- January 26 (F) Last day to register for a Spring 2024 full-term class in person.
- January 26 (F) Last day to drop a Spring 2024 full-term class to avoid a "W" in person.
- January 28 (SU) Last day to drop a Spring 2024 full-term class to avoid a "W" on Self-Service.
- February 16 (F) Lincoln Day observance (no classes held; campus closed)
- February 19 (M) Washington Day observance (no classes held; campus closed)
- March 9 (S) Last Day to drop a full-term class (letter grades assigned after this date).
- March 25-29 (M-F) Spring recess (no classes held; campus open)
- May 13-17 (M-F) Spring 2024 final exams week.
- The Final is scheduled for Tuesday, May 14 from 6-7:50pm in CCI-200.

### Accommodation for Students with Disabilities

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

### **Course Objectives**

By the end of this course students will be able to:

- 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.
- Represent a vector (a quantity with magnitude and direction) in the form and ai+bj.

## Student Learning Outcomes (SLO's)

- 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.
- Instructor reserves the right to make minor changes to the syllabus.