# Math 4A – Trigonometry Syllabus (Reedley College Dual Enrollment)

"Pure mathematics is, in its way, the poetry of logical ideas." - Albert Einstein

Instructor: Mr. Joe Schuster, Dinuba High School – Dinuba, CA

Textbook: Lial et al. Trigonometry, 11th ed. Houghton Mifflin: New York, 2019.

Student Learning Objectives: By the end of this course, student's will be able to:

- MATH-4A SLO1: Provide and analyze graphs of trigonometric functions.
- MATH-4A SLO2: Apply trigonometric techniques to solve problems in real world contexts.
- MATH-4A SLO3: Derive, use and prove trigonometric properties and identities.
- MATH-4A SLO4: Produce solutions to equations using skills developed in trigonometry.

### Grading

Each student's grade will be based on their relative scores in each of the weighted categories shown

Grades			<b>Overall Grading Percentage</b>
•	Homework	15%	A = 90% +
•	Quizzes	15%	B = 80% - 89%
•	Tests	50%	C = 68% - 79%
•	Midterm/Final	20%	D = 55% - 67%
			F = 0% - 54%

below on the left. Below on the right is the overall percentage breakdown.

### Contact

If for any reason you need to contact me, you may:

- Call me at: (559) 595 7220 ext. 2536
- E-mail me at: joseph.schuster@dinuba.k12.ca.us

**Homework:** Homework is a vital part of an education in mathematics. It allows the student to practice and achieve mastery over the skill learned in class. Homework will be assigned daily, and due the following Friday at the beginning of class. To receive full credit for assignments, ALL work must be shown and assignments must be turned in on time. Late homework may be turned in up to a week after its due date for 70% credit.

**Quizzes:** We will have one quiz each week, except for weeks where we have a test. If you have an excused absence on the day of a quiz, you may take the quiz on the day you return. If you have an unexcused absence on the day of a quiz, or if you fail to take the quiz on the day that you return, it will be graded as a zero. It is your responsibility to remind me of your need to take the missed quiz.

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**Tests:** We will have one culminating test per unit. These can have multiple choice and/or free response questions. If you have an excused absence on the day of a test, you may take the test on the day you return. If you have an unexcused absence on the day of a test, or if you fail to take the test on the day that you return, it will be graded as a zero. It is your responsibility to remind me of your need to take the missed test.

**Midterm and Final:** We will have a midterm after we have covered approximately half of the course and a comprehensive final exam at the end of the semester. These may not be taken on any day other than the scheduled day.

#### **Student Responsibilities**

- Students are expected to attend class regularly and arrive on time.
- Students are expected to be prepared for class each day, with materials needed to successfully participate.
- Check our Google Classroom regularly and frequently to stay aware of assignments and when those assignments are due.
- Finally... <u>YOU ARE EXPECTED TO STUDY ON YOUR OWN TIME!!!</u> If you expect to do well solely off of your in-class time, you are mistaken. This is a college course, and as such it requires that you spend time outside of class studying!

Academic Dishonesty: Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. The student receiving the grade for this course on their transcript must be the person doing the work at ALL times in this class. Academic dishonesty in any form is a very serious offense and will incur serious consequences ranging from a failing grade on a specific assignment to a failing grade in the course.

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**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 DSP&S and consult with me immediately so that arrangements can be made.

### <u>Math 4A – Trigonometry Outline</u>

- 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;
- 11. DeMoivre's Theorem and applications
- 12. Introduction to vectors.

## Note: This syllabus is subject to change at the discretion of the instructor.