# 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, 11<sup>th</sup> ed. Houghton Mifflin: New York, 2019.

**Objectives:** By the end of this course, student's 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.

### 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	20%	A = 90% +
• Quizzes	10%	B = 80% - 89%
• Tests	50%	C = 65% - 79%
• Midterm/Final	20%	D = 50% - 64%
		F = 0% - 49%

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
- Twitter: @SchusterMath

**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 on Friday, and due the following Friday at 11:59pm. To receive full credit for assignments, ALL work must be shown and assignments must be turned in on time.

**Quizzes:** We will have one quiz each week, except for weeks where we have a test. Quizzes will be assigned on Wednesday, and due Friday of that week at 11:59pm.

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

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

**Tests:** We will have one culminating test per unit. These can have multiple choice and/or free response questions. Tests will be assigned on Wednesday, and due Friday of that week at 11:59pm.

**Final:** We will have a comprehensive final exam at the end of the semester. It will be assigned a week before it is due.

Late Work: Late work will receive a zero. Late is defined as turned in after the due date and time. You have multiple days to turn in work prior to the due date. Do not wait until the last minute.

#### **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.
- Students are expected to participate in class. This includes taking notes during the daily lesson and keeping those notes in a place that is accessible for daily use.
- Check our Google Classroom regularly and frequently to stay aware of assignments and when those assignments are due.
- Academic Dishonesty: If you are suspected of cheating on <u>any</u> assignment you will receive a zero on the assignment and a referral to the assistant principal. This includes copying work of others on homework or assessments.
- 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!

<u>Students with Disabilities:</u> If you have a verified need for an academic accommodation or materials in alternate media (e.g. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please contact your instructor as soon as possible.

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

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

## Math 4A – Trigonometry 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;
- 11. DeMoivre's Theorem and applications
- 12. Introduction to vectors.