



**REQUEST FOR INSTRUCTIONAL MATERIAL ADOPTION AND EVALUATION REPORT**  
**High School**

High School Site	Signature - Principal or Academic AP Designee	Signature - Teacher Leader (enter N/A if no Teacher Leader)	Comments:
American Canyon HS	Theo Dykzeul	Ron Eick	
Napa HS	Kate Gauger	Sean Gregory	
Napa Valley Independent Studies	Susan Wilson	NA	
New Tech HS	Riley Johnson	Jon Southam	
Valley Oak HS	Maria Cisneros	Rafael Garcia Avila	
Vintage HS	Katelyn Estudillo	Brandon DeJesus	

Request submitted by:	Annie Petrie	School Site:	NVUSD Instructional Services
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Executive Director, Secondary Education: \_\_\_\_\_ 

Please review below submission and sign above if you approve or write reason in comment area if you do not.

- NOTE:**
- Approved core materials must be agreed on and used by all high school campuses as the main resource. Approved non-core and supplemental materials must be agreed on by all high schools, but may be used by individual sites to supplement and not "supplant" the core. (core = English, health, mathematics, physical education, sciences, social sciences, and world languages)
  - Since NVUSD has moved toward digital usage, we strongly encourage the review and recommendation of new instructional programs that offer online student textbooks and resources rather than printed materials.

[Instructional Material Information Cover Sheet](#)

COURSE NAME & NUMBER: College Trigonometry CC401 DEPARTMENT: Math

TITLE OF TEXT: Trigonometry GRADE(S): 11-12

Check one: Basic:  Supplementary:  Check one: Hardcover:  Soft cover:  Paperback:

AUTHOR: McTeague PUBLISHER: Cengage

COPYRIGHT DATE: \_\_\_\_\_ ISBN#: \_\_\_\_\_ COST: \$117.00

There are definite criteria to be considered when analyzing and evaluating a prospective text or supplemental instructional material. Give each of the following items listed a rating of 1 (poor) 2 (good) 3 (very good) 4 (the best we have seen).

\_\_\_3\_\_\_ 1. Are the objectives clearly stated?

\_\_\_3\_\_\_ 2. Do the assessments included, either at the end of a chapter or unit, exactly match the stated objectives?

\_\_\_4\_\_\_ 3. Do the objectives for student learning match the outcomes/objectives from the State Framework and Model Curriculum Standards in your content area? If less than a 4, please indicate areas of strength and weakness (be specific).\_\_\_\_\_

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\_\_\_4\_\_\_ 4. Do the teaching suggestions and resources suggested by the teacher's edition match the instructional suggestions of the California State Framework and Model Curriculum Standards in your content area? If less than a 4, please indicate areas of strength and weakness (be specific).\_\_\_\_\_

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\_\_\_4\_\_\_ 6. In your opinion, will students be able to read this book? Yes  No  If no, what adjustments in teaching strategies are necessary to insure student success?\_\_\_\_\_

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\_\_\_4\_\_\_ 7. Is the organization of the text suited to learning and teaching?

\_\_\_3\_\_\_ 8. Are the narrative quality and teaching aids provided interesting enough to engage students?

\_\_\_3\_\_\_ 9. Are the illustrations in keeping with the times?

\_\_\_4\_\_\_ 10. Does the content of this text allow compliance with [NVUSD Board of Education Policy 6144](#) regarding controversial issues and prohibited instruction.

Use this space to compare the development of one important concept in this textbook with the development of the same concept in current textbook:

This is a new course. No previous text.

<u>Concept</u>	<u>Development in Current Text</u>	<u>Development in Recommended Text (including alignment to Common Core standards)</u>

ADDITIONAL COMMENTS:

COMPUTER TITLE: 

H	C	O	L	L	E	G	E	T	R	I	G
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COURSE TITLE: H College Trigonometry  
COURSE NUMBER: CC401 [NVC Math 108]  
GRADE LEVEL: 11 – 12  
LENGTH OF COURSE: 1 College Semester (1 year)  
GRAD REQUIREMENT: Mathematics (H)  
CSU/UC REQUIREMENT: "c" (Mathematics)  
VOCATIONAL ED: No  
CBEDS NUMBER: 2490 (Dual Enrollment College Course –  
Mathematics)  
NCLB: Yes  
NCLB CORE SUBJECT: MT  
APPROVAL DATE:

### Course Description

The course provides a strong trigonometric foundation for the study of Calculus. Included are 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 an introduction to vectors. A graphing calculator is required.

### Course Outline Information

1. Student Learning Outcomes:
  - A. Graph trigonometric equations by hand and by calculator.
  - B. Solve trigonometric equations and triangles.
  - C. Establish trigonometric identities.
2. Course Objectives: Upon completion of this course, the student will be able to:
  - A. Identify special triangles and their related angle and side measures;
  - B. Evaluate the trigonometric function of an angle in degree and radian measure;
  - C. Manipulate and simplify a trigonometric expression;
  - D. Solve trigonometric equations, triangles, and applications;
  - E. Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs;
  - F. Evaluate and graph inverse trigonometric functions;
  - G. Prove trigonometric identities;
  - H. Convert between polar and rectangular coordinates and equations;
  - I. Graph polar equations;
  - J. Calculate powers and roots of complex numbers using DeMoivre's Theorem;
  - K. Represent a vector (a quantity with magnitude and direction) in the form  $a_i + b_j$ .
3. Course Content
  - 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
- 12) Introduction to vectors.

4. Methods of Instruction:

- Discussion
- Lecture
- In-class practice problems.

5. Methods of Evaluation: Describe the general types of evaluations for this course and provide at least two, specific examples.

Typical classroom assessment techniques

Exams/Tests -- For example, an exam on applications of trigonometric functions might include a selection of computational and application problems involving right-triangle trigonometry, The Law of Sines and The Law of Cosines. An exam on graphing trigonometric functions might include a selection of functions to graph involving the six trigonometric functions and their transformations.

Quizzes -- For example, a quiz on angle measurements might include a selection of problems involving the conversion between radian and degree measurement. A quiz on the unit circle might ask the student to identify the coordinates of points on the unit circle corresponding to the common angles.

Class Work -- For example, students might be asked to solve example problems involving The Law of Sines or using DeMoivre's Theorem, either in groups or individually.

Home Work -- A typical homework assignment might include a selection of problems from the corresponding section of the book, or a worksheet or project to be completed outside of class.

Final Exam --

6. Minimal Percentage for Passing: 60%  
Letter Grade Only

7. Assignments: State the general types of assignments for this course under the following categories and provide at least two specific examples for each section.

A. Reading Assignments

Reading assignments will be given from the text or other materials such as:

1. Read the section on the Properties of the Trigonometric Functions.
2. Read the section on The Law of Sines.

B. Writing Assignments

Writing assignments will involve students solving problems from the text or other materials such as:

1. Find the exact value of:  $\sin 90 + \tan 45$
2. Solve the equation on the interval zero to  $2\pi$ :  $\cos(2x) = \cos x$

C. Other Assignments

As needed

***Instructional Materials***

Title: **Trigonometry**, 8th Ed  
Author: **McTeague**  
Publisher: **Cengage**