

**YUBA COMMUNITY COLLEGE DISTRICT
COURSE OUTLINE**

STATIC ID #

DATE EFFECTIVE: SPRING,
2004

DEPARTMENT MATH **NO.** 21 **TITLE:** PLANE
TRIGONOMETRY

DIVISION ATMESH **TOTAL HOURS** 54 **LECTURE** 54
LAB 0 **UNITS** 3

ABBREVIATED TITLE (MAX. OF 20 INCL. SPACES) PLANE TRIG

IS COURSE CROSS LISTED: YES NO **IF YES, DEPARTMENT(S) & #(S):**

NEW COURSE **REVISED COURSE** **TECHNICAL REVISION**
DISTRIBUTIVE ED.

(IF NEW COURSE, COMPLETE NEW COURSE ADDENDUM) (IF ON-LINE/ITV, COMPLETE ON-LINE/ITV
ADDENDUM)

(IF REVISED COURSE, ANNOTATE SECTION):

DEGREE CREDIT **NON-DEGREE** **NON-CREDIT** **GRADING METHOD:**
LETTER **CR/NC**

ARTICULATION: This course is intended to be (respond to all that apply):

- A. General education at: CSU UC Yuba (petition filed?)
B. Transferable to: CSU UC Other

C. Required in transfer major Yes No If yes, in what major?

To what school? _____;

What is the title of that school's equivalent course?

APPROVALS: The following signatures are required:

California Education Code (Title V) Requirements are Met by Course

I have contacted full-time faculty in the discipline and the Instructional Deans at the Lake, Marysville, and Woodland Campuses to inform them of course development/revision.

Signatures (Signed/Printed):

For Office Use

Data Entry By

YCCD Equate Code

TOPS CODE

SAM CODE

Crs. Classification

Transfer Code

UC Trnsfr Code(s)

Unit Limitation _____

CSU Trnsfr Code(s)

Course CAN Code

Author: _____ / _____ Date: _____

Dean: _____ / _____ Date: _____

Articulation Officer's Recommendation:

Articulation: _____ / _____ Date: _____

VPI: _____ / _____ Date: _____

Curriculum Co-chairs:

_____ / _____ Date: _____

_____ / _____ Date: _____

Board Approval Date: _____

Date of Revision/Review: _____

**YUBA COMMUNITY COLLEGE DISTRICT
COURSE OUTLINE**

DEPARTMENT: Math
COURSE NUMBER: 21

TITLE: Plane Trigonometry
CAN NUMBER:

UNITS: 3

TOTAL COURSE HOURS: 54
LAB HOURS: 0

LECTURE HOURS: 54

COREQUISITE(S): None

PREREQUISITE(S): Math 52 or equivalent with grade of “C” or better

PREREQUISITE REVISION: Is there a significant change in the prerequisite? Yes []
No [X]
If yes, validate with a new prerequisite content review summary form. Attach to course outline.

RECOMMENDATION(S):

Language [X]

Mathematics [X]

Other []

I. CATALOG/CLASS SCHEDULE DESCRIPTION (L)

Trigonometric functions, fundamental formulas, identities, solution of triangles and complex numbers.

COURSE CONTENT

A. Course Purpose

To give student an understanding of trigonometric functions for pre calculus and calculus courses.

B. Course Objectives

At the conclusion of this course, the student will be able to:

Define the six trigonometric functions.

Define and describe properties of radian measure.

Graph the six trigonometric functions and identify their basic properties (period, amplitude, phase shift, asymptotes).

Describe fundamental identities and use these identities to prove other trigonometric identities.

Solve triangles using the Law of Sines and Law of Cosines.

Solve trigonometric equations.

Apply the trigonometric form of complex numbers.

If time permits:

Graph in Polar coordinates.

C. Course Topical Outline

Trigonometric functions

Trigonometric identities

Radian measure

Graphs of trigonometric functions

Trigonometric equations

Solution of triangles

Inverse trigonometric functions

Vectors

If time permits:

Complex numbers

Polar coordinates

D. Critical Thinking

Activities that require critical thinking include:

Complete math problems

Understanding the relationship between angles and triangles

Modeling periodic phenomena

III. GENERAL METHODS OF INSTRUCTION

Please indicate all appropriate methods of instruction

Lecture, discussion.

May include group work.

IV. METHODS OF ASSESSMENT

Please indicate all methods of assessment

Quizzes and exams.

May include attendance.

V. MATERIALS OF INSTRUCTION

Textbook(s)

McKeague, Trigonometry, 5th edition

B. Other Material (if applicable)

VI. ASSIGNMENTS

Degree Applicable Course:

A. Reading Assignments

Textbook lectures

B. Writing Assignments

C. Outside Assignments

Problem solving exercises/activities

Skills practice

VII. APPROPRIATENESS TO COLLEGE MISSION (*Check all that apply*):

<input checked="" type="checkbox"/> Lower Division Degree Credit	<input type="checkbox"/> Community Interest
<input type="checkbox"/> Occupational Preparation	<input type="checkbox"/> Upgrade of Skills
<input checked="" type="checkbox"/> Transfer Course	<input type="checkbox"/> Remedial

Revised & Classified (Show the semester this outline will be implemented.)

**Yuba Community College District
Distributive Education Addendum**

Course Dept/Number: _____ **Course Title:**

Telelecture Online Telepackage Enhanced
Telepackage

Course Content and Evaluation

The following will be utilized to replace the traditional face-to-face instruction. For instance, a three-unit lecture class meets students three hours per week. Check the

appropriate areas that are comparable.

- | | | |
|-----------------------------------------------|-------------------------------------------|-----------------------------------|
| <input type="checkbox"/> E-mail searches | <input type="checkbox"/> Calendar | <input type="checkbox"/> Web- |
| <input type="checkbox"/> Quizzes | <input type="checkbox"/> Bulletin Board | <input type="checkbox"/> Chat |
| <input type="checkbox"/> Assignments Lectures | <input type="checkbox"/> Reading Lectures | <input type="checkbox"/> Watching |
| <input type="checkbox"/> Web-browsing | <input type="checkbox"/> Textbook | |

How will On-Line and ITV techniques be used to accomplish the grading method indicated in the course outline.

Student-Instructor Contact

What methods will the instructor use to keep in contact with students?

- | | | |
|---------------------------------|-------------------------------------------------|------------------------------------|
| <input type="checkbox"/> E-mail | <input type="checkbox"/> Message/Bulletin Board | <input type="checkbox"/> Telephone |
| <input type="checkbox"/> Mail | <input type="checkbox"/> Other | |

How will students with disabilities be accommodated?

Both state and federal law require community colleges to operate all programs and activities in a manner, which is accessible to students with disabilities. Accordingly, as the Yuba Community College District develops its capacity for creation of technology based instructional resources and the delivery of distance education, it must proceed with the needs of all students in mind, including the unique needs of students with disabilities.

Title 5, Code of Regulations, Section 55370 et seq. expressly states that the Requirements of the Americans with Disabilities Act are applicable to Distance Education courses. Accordingly, as the Yuba Community College District develops its capacity for creation of technology base instructional resources and the delivery of distance education; it must proceed with the needs of all students in mind, including unique needs of students with disabilities.

How will students have access to course materials?

**Yuba Community College District
New Course Addendum**

Course Dept/Number: _____ **Course Title:**

SITE OF ORIGIN: MARYSVILLE [] WOODLAND [] LAKE [] DISTRICT []

1. For what student population is this course intended?

2. What is the justification for adding this course?

3. Are there existing courses with similar content? Yes [] No []

If yes, list the courses considered and answer the questions below:

- a. Why are they not suitable for the content of this course?

- b. How might they be affected by offering this course?

What new or additional facilities, equipment, staffing or other non-budgeted items will be required to teach the course? How will they be provided?

What new or additional library, media and other district resources will be needed to offer the course?

If this course is started from grant funding, how will it be continued thereafter?

