

SYLLABUS: MATH144- Fall 2008

DATE: Fall, 2008

COURSE NUMBER AND TITLE: MATH144 -Trigonometry

CREDIT HOURS: two

INSTRUCTOR: Dr. Micheal H. Vernon

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- home: <http://www.lcsc.edu/mvernon> **TEXTBOOK:** Precalculus, Sixth Edition, David Cohen

PURPOSE:

This course is designed to introduce trigonometric concepts and techniques from several different viewpoints, including the unit-circle viewpoint, functional viewpoint and the graphical viewpoint. Technology is integrated throughout the course. Use of computer algebra systems or graphing calculators is expected. Students are encouraged to turn in assignments via email and to make inquiries through email.

COURSE OBJECTIVES:

Upon completion of this course, each student will be able to:

1. Understand radian and degree measure.
2. Understand and apply the definitions of the standard trig functions in terms of the unit circle.
3. Understand and apply the definitions of the standard trig functions in terms of ratios of sides of right triangles.
4. Generate graphs of trig functions.
5. Understand and apply inverse trigonometric functions.
6. Utilize fundamental identities in deriving new identities and solving trig equations.
7. Understand and apply sum, difference, multiple angle and product sum formulas.
8. Understand and apply the laws of sines and cosines.
9. Apply trig concepts to the theory of vectors and complex numbers.
10. Apply all the above to practical models.

NOTE: If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please make an appointment as soon as possible.

METHODS OF INSTRUCTION:

The instructor will utilize an average of 100 minutes of interactive lecture/discussion per week. Homework will be assigned from each section covered. Students are encouraged to form study groups to work on the homework and to prepare for quizzes and the final exam.

Grading Scale:

- A: 90% - 100%
- B: 80% - 89%
- C: 70% - 79%
- D: 60% - 69%

All assignments, grades and exams will be available at: [BlackBoard](#) Be sure to visit this site frequently during the semester.

METHODS OF EVALUATION:

The student will be evaluated based upon the results of 3 chapter tests (100 points each), homework (300 points total), attendance (30) and a final exam worth 200 points. Grades will be assigned based upon a percentage of points earned out of the total possible (830).

COURSE OUTLINE:

Chapter:	Title of Chapter
6	Trigonometric Functions of Angles
7	Trigonometric Functions of Real Numbers
8	Analytic Trigonometry
9	Additional Topics in Trigonometry
	Final Exam – December 18, 2008