Math 140 – Trigonometry - Spring 2014

SYLLABUS

Professor:	Eric Lehtonen
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Office:	2763
Office hours:	MW 17:00-18:00
	TR 12:00-13:00

Calculators: The TI-30.
Text: Trigonometry: Lial, 10th ed.

Grading: There will be 3 exams and one final exam. Please note the dates in the class schedule below.

Tests: 60%

Final 30%

Homework 10%

Homework: Homework will be assigned daily.

Attendance: Students not attending the first day of class will be automatically dropped. Students missing more than one week worth of classes, dating from when the student first enters the class will be dropped.

Any student with a documented disability who may need educational accommodation should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible.

COURSE/CATALOG DESCRIPTION:

Right angle trigonometry and applications, unit circle trigonometry, graphs of trigonometric functions, inverse trigonometric functions, trigonometric identities, solving triangles using the Laws of Sines and Cosines, and polar coordinates.

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MEASURABLE COURSE OBJECTIVES AND MINIMUM STANDARDS FOR GRADE OF "C":

Upon satisfactory completion of the course, students will be able to:

1. Define the six trigonometric functions using right triangle and unit circle definitions.
2. Express angles in degrees and radians.
3. Graph trigonometric functions, including those involving vertical and horizontal translations.
4. Solve triangles using the Law of Sines and Law of Cosines, including ambiguous cases.
5. Verify trigonometric identities, including sum and difference formulas, half-angle and power-reducing formulas.
6. Define and graph inverse trigonometric functions.
7. Solve trigonometric equations.
8. Graph polar and equations.
9. Solve application problems.

STUDENT LEARNING OUTCOMES:

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Solve quadratic equations by factoring, completing the square, and quadratic formula. (ILO2)
2. Solve equations involving radicals. (ILO2)
3. Recognize and graph equations of conic sections. (ILO2)
4. Solve three by three linear systems by elimination or/and substitution. (ILO2)
5. Solve an application involving exponential functions. (ILO2, ILO5)

Lecture And Test Schedule

Week 1
Jan 20 **MLKING DAY**

Week 2
Jan 27 Intro 1.1-1.4

Week 3
Feb 3 2.1-2.4.

Week 4
Feb 10 3.1-3.4

Week 5
Feb 17 **Holiday**

Week 6
Feb 24 **Test 1**

Week 7
Mar 3 4.1-4.4

Week 8
Mar 10 5.1-5.3

Week 9
Mar 17 5.4-5.6

Week 10
Mar 24 **Test 2**

Week 11
Mar 31 6.1-6.4

Week 12
Apr 7 7.1-7.3

Week 13
Apr 14 8.1-8.4

Week 14
Apr 21 **Spring Break**

Week 15
Apr 29 **Test 3**

Week 16
May 6 Review

Week 17
May 13 **Final Exam**

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