

**Math 140  
Trigonometry  
Fall 2013**

<b>Instructor:</b> Jill Nelipovich	<b>Text/Author:</b> <i>Trigonometry</i> , 10E Lial, Hornsby, Schneider, Daniels Scientific Calculator
<b>Office:</b> 2768 <b>Phone:</b> (760) 355 - 6297	<b>Chapters Covered:</b> 1 - 8
<b>Office Hours Room 2768</b> M: 4:45 - 6:15 p.m. T: 8 - 8:30 a.m. W: 10:30 - 11:30 a.m. Th: 11:50 - 12:50 p.m.	<b>Class Days/Times:</b> <b>Section 10970 MW: 3:05 - 4:30 p.m.</b>
<b>Prerequisite:</b> MATH 90 or 91 with a grade of "C" or better, or equivalent.	<b>Credit Hours:</b> 3 Lecture <b>Grading Criteria:</b> Letter
<b>Email:</b> <a href="mailto:jill.nelipovich@imperial.edu">jill.nelipovich@imperial.edu</a>	<b>Room:</b> 804

**Course Goals:**

Trigonometry is a fundamental course for advanced mathematics courses, namely calculus. A primary goal of this course is for students to develop an understanding of what it means to prove in mathematics. A second goal of the course is for students to advance in mathematical sophistication through the creation of personally meaningful solutions to problems and by expanding their ways of communicating mathematical thinking and activity to others, both verbally and in writing. Finally, and most important, have fun!

**Required Textbooks and Electronic Resources:**

1. *Trigonometry, 10E, Lial, Hornsby, Schneider, Daniels*
2. Scientific Calculator (non-graphing)

**Course Layout**

- 4 Exams (15% each).....60%
- Homework .....5%
- Projects .....10%
- Final Exam .....25%

**Grades will be assigned as follows:**

A	B	C	D	F
90% and above	80% - 89%	70%-79%	60% - 69%	59% and below

My new best friend's name \_\_\_\_\_ and phone number: \_\_\_\_\_

**Course Description:**

Topics covered include 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.

**Student Learning Outcomes:** Upon successful completion of the course the student will be able to:

1. Verify trigonometric identities
2. Solve a triangle given two sides and the angle in between
3. Show understanding in solving trigonometric equations

**Course Objectives:** Upon successful completion of the course the student 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.

**To be Successful in this course:**

1. Yes, this is obvious -- Attend class every day.
2. In Class – be an active participant. Being in class is only part of the equation – one should also pay attention.
3. The friends you are texting do not have answers to your trigonometry exam or project. The phones under your desk are very obvious to your instructors. I offer no leniency in assigning final grades when students have time to search the internet and text their friends during class time.
4. Keep up with your homework. Falling behind = failing grade.
5. Study regularly and often. There are lots and lots of definitions you must memorize. Do not attempt to do this the night before the exam. You will set yourself up for failure.

**Policies:**

1. IVC Policy states that students are expected to attend every session of class in which they are enrolled. You may be dropped by the instructor if you miss more than 3 unexcused class hours.
2. It is the student's responsibility to add, drop, or withdraw from this class before the appropriate deadlines.
3. IVC policy states that no food or drinks in the classroom.
4. No children are allowed in the classroom.
5. You will be asked to leave class if behavior impedes learning of other students.

**Plagiarism/Cheating:**

1. Simple solution – don't do it! Do your own work. It is better to fail the exam than to be labeled as a "cheater" – and instructors are mandated by law to report cheating.
2. If a student cheats, they will be referred to the college administration for disciplinary action.
3. Collaboratively learning is encouraged, but don't copy homework and assume you will figure it out later.

**Academic Accommodation:**

Any student with a documented disability who may need academic accommodation should notify the instructor and the Disabled Student Services Programs and Services (DSP&S) office in room 2117 in the Health Science building as soon as possible. The DSP&S office phone number is (760) 355-6312.

**Incomplete:**

To receive a final grade of incomplete, you must be passing the class and be unable to take the final exam due to extenuating circumstances – such as a verifiable death in the family.

**Exams:**

There are no make-up tests. If you miss an exam, you will be given an extra supplementary exam on the day of your final. This is not a wise plan for success in this course. Also, if you do poorly on an exam, you also have the opportunity to improve the poor test grade by taking the supplementary portion on the day of the final.

### Fall 2013 Tentative Course Outline Math 140

	<b>Date</b>	<b>Topics</b>
1	Aug 19 - 23	Welcome, Chapter 1.1 – 1.4
2	Aug 26 - 30	Chapter 2.1 – 2.4
3	Sept 2 – 6 No class Sept 2	No Class Sept 2 Chapter 3.1, Review
4	Sept 9 - 13	<b>Exam I</b> Chapter 3.2, 3.3
5	Sept 16 - 20	Chapter 3.4, 4.1 Chapters 4.2, 4.3
6	Sept 23 - 27	Chapters 4.4, Review
7	Sept 30 – Oct 4	<b>Exam 2</b> Chapters 5.1, 5.2
8	Oct 7 - 11	Chapters 5.2, 5.3, 5.4
9	Oct 14 - 18	Chapters 5.4, 5.5, 5.6 Chapters 5.6, 6.1
10	Oct 21 - 25	Chapters 6.2, 6.3, 6.4 Chapter 6.4, 7.1
11	Oct 28 – Nov 1	Chapter 7.2, Review <b>Exam 3</b>
12	Nov 4 - 8	Chapters 7.2, 7.3 Chapters 8.1, 8.2
13	Nov 11 – 15 No Class Nov 11	Chapters 8.3, 8.4
14	Nov 18 - 22	Chapter 8.4, 8.5 Review
15	Nov 25 - 29	<b>Exam 4</b> Review
16	Dec 2 - 6	FINAL EXAM: Cumulative