

MATH 140: TRIGONOMETRY ( 3 units)  
CRN # 30130 Summer 2013  
INSTRUCTOR: Jill Kitzmiller, Math Department  
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### **TEXT & MATERIALS**

Trigonometry, 10E, Lial. A scientific calculator (not graphing) is needed. Graphing calculators will not be allowed on some exams.

### **CATALOG 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.

### **PREREQUISITES**

Prerequisite: MATH 90 or 91 with a grade of "C" or better, or equivalent.

### **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**

#### **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.

### **CONTACTING INSTRUCTOR**

I will be available during office hours for personal discussion. I endeavor to listen to voice-mail and look at email once a day when I am on campus. I DO NOT look at email on the weekends (Friday- Sunday) or on holidays. I do not respond to email regarding absences, unless it is long term. I do not discuss grades over email, this must be done in person.

## **PACE OF COURSE & TIPS FOR SUCCESS**

This course moves rapidly covering the material equivalent to one year of math at the high school level in 6 weeks of summer school. For every hour spent in class, you are expected to spend 2 -3 hours outside of class reading the book, doing homework, and studying the material (that is 4 or more hours each night for summer school). It is critical that you read ahead and ask questions. Avoid falling behind in the material, reading and homework. If you fall behind you will not be able to catch up.

You cannot learn mathematics without doing the problems. Stay organized, take good notes and read your notes after class. If you are having difficulty with the material, get help. You can get help from me during office hours or in the math tutoring center. Work with others outside of class, form a study group if possible. There are study rooms in the math lab where you can work together on homework or study. You are responsible for all material in assigned chapters and all material covered in lecture, even if you are absent, so find someone in class to make you copies of the notes & materials if you can not be in class.

## **ATTENDANCE**

IVC School policy states that students are expected to attend every session of class in which they are enrolled. It is the **student's responsibility** to add, drop, or withdraw from this class before the appropriate deadlines. You may be dropped by the instructor if you have 3 or more unexcused absences. If you decide to withdraw from this class, please let me know as a courtesy. If you fail to withdraw from this course before the deadline, you will be assigned a final grade in the course (even if you stop coming). Check the course catalogue or Blackboard for information on drop dates. Regular class attendance is necessary for success in this course. You are responsible for all material covered in class during your absence.

## **BEHAVIOR**

IVC School policy states that no food or drink is allowed in the classroom. Also no children are allowed in the classroom. You will be asked to leave the class for one or two class meetings if you exhibit behavior that prohibits or impedes any member of this class from pursuing any class assignment, objective or learning opportunity within the classroom **Please be courteous of others, try to be on time, turn off your cell phone or other electronic devices, and avoid talking during lectures. DO NOT TEXT. Texting during class is disruptive to your learning and students around you.**

It is assumed that each student will do his/her own work. If a student is caught cheating on a test, that student will receive a "0" grade on that exam and the score will not be dropped. The student may also be referred to the college administration for disciplinary action. Examples of cheating include, but are not limited to, submitting someone else's work as your own and using unauthorized materials on the exams.

## **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.

## **EVALUATION**

There will be four in class exams (100 points each) and one comprehensive final examination (100 points). Exams are closed book/closed note and each student must work independently. Plan now to be in class on the date of the exams. There are no make-ups on exams. Any missing exam grade will be recorded as a "0".

Your lowest test score will be dropped and the final exam grade will be substituted for this lowest test score. This can be done only **one time**.

There will be homework assigned for each section covered in the chapters from the book. Homework will be due on the day of the test and will be graded for completeness. Each homework assignment will be worth 20 points. You may turn in homework even if you miss the test. There will be 20 points of class participation available. This may include but is not limited to turning in worksheets, doing practice exams, attendance, projects or group work. These activities may or may not be announced in advance, and there are no make up's on class participation if you are absent.

## **GRADING**

To receive a passing grade of "C" or better, you must have 350 points or more based on:

Homework (Math XL)	80 points
Class participation	20 points
Exams	300 points
<u>Final</u>	<u>100 points</u>
Total	500 points

Breakdown: 450 & up = A, 400 - 449 = B, 350 - 399 = C, 300 - 349 = D, below 300 = F.

Attendance, class participation and a subjective instructor's interpretation of work may be used in assigning a final grade to borderline cases.

## SUMMER 2013 – TENTATIVE SCHEDULE TRIGONOMETRY

Monday	Tuesday	Wednesday	Thursday
6/24 Introduction 1.1 – 1.2	6/25 1.3 – 1.4 , 2.1	6/26 2.2 – 2.4	6/27 Review, 3.1
7/1 EXAM 1	7/2 3.2 – 3.3	7/3 3.4, 4.1	7/4 HOLIDAY
7/8 4.2 – 4.3	7/9 4.4, Review	7/10 EXAM 2	7/11 5.1 – 5.2
7/15 5.3 – 5.4	7/16 5.5 – 6.1	7/17 6.2 – 6.3	7/18 6.4, Review
7/22 EXAM 3	7/23 7.1 – 7.2	7/24 7.3, 8.1	7/25 8.2 – 8.3
7/29 8.4, Review	7/30 EXAM 4	7/31 Review	8/1 FINAL