MATH 241 – Trigonometry with Vectors
Spring 2015

Time: 7:15 – 9:20pm Monday & Wednesday (Section 4499)
Place: MSA 109
Instructor: Rex Perez
E-Mail: rexeperez@gmail.com
Office Hours: M & W 6:45pm to 7:10pm

Syllabus

Required Text
Trigonometry 5th edition, Charles P. McKeague and Mark Turner, Thomson
Brooks/Cole.

Course Description:
This course of analytical trigonometry includes solutions of triangle problems,
radian measure, graphs of trigonometric functions, trigonometric equations,
identities, polar coordinates, inverse trigonometric functions, complex numbers
and vectors.

Course Layout & Grading

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>2%</td>
</tr>
<tr>
<td>Homework</td>
<td>8%</td>
</tr>
<tr>
<td>Exams</td>
<td>3</td>
</tr>
<tr>
<td>Final</td>
<td>1</td>
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Grading:
90%-100% A
80%-89.99% B
70%-79.99% C
60%-69.99% D
less than 60% F

Course Work

Quizzes: There will be quizzes given throughout the course. Some will be announced
ahead of time; some will be pop-quizzes. There will be no make up quizzes

Homework: It is very important to do your homework. This is a form of practice for your
quizzes and exams. Also, they are worth 8% of your grade. Homework will be collected each Exam Day.
Exams: There will be 3 exams accounting for 60% of your grade. There are no make-up exams. They will be on Wednesday February 25th, Wednesday April 1st and Wednesday May 13th.

Final: The final will be on Monday June 1st at 7:15pm. The final will be cumulative and will be worth 30% of your grade. You need to take the final in order to pass the class.

Miscellaneous Information:

Prerequisites: Math 125 or equivalent with "C" or better, or appropriate placement level demonstrated through math assessment process.

Calculator: You will need at least a scientific calculator. I strongly recommend a graphing calculator like TI-83plus or TI-89 or TI-92 if you will be taking more math courses such as calculus or statistics.

Absences: More than 2 absences may result in the student being dropped from the class. Each time you are late or leave early from class will count as ½ of an absence.

Accommodations: Academic accommodations are available for students with disabilities. Please identify yourself to your instructor and/or to Disabled Students Programs and Services staff so that the appropriate accommodations can be ensured. If you suspect that you have a learning disability, or require services for any other type of disability, see Disabled Students Programs and Services.

Success in Course

It is important to do all your homework’s, do all the assigned readings, come to class prepared and ready to learn and study for your quizzes and exams. I cannot stress enough the importance of staying on top of your work. Please make all the classes, ask questions and if you feel like you are still not getting the material, see me to get some extra help. By grasping the course material and practicing it during your homework’s, it will make understanding and learning easier. Do not hesitate to ask questions and get extra help. I am here to help you do well.

Course Conduct

It is important to show up to class on time and prepared. You will be better prepared to understand the course material during lecture by doing the required reading before hand. I encourage you to study together and discuss statistics in a group but I expect everybody to hand in their own work and solutions. I do not tolerate cheating. This goes for quizzes, exams and homework.

Course Objectives

By the end of the course, the student should be able to explain concepts, solve problems, and compare and contrast the following topics:

1. The six trigonometric functions
2. Angles, degrees, radians, and angle measurement
3. Right triangle trigonometry
4. Calculators and the values of the trigonometric functions of acute angles
5. Circular functions
6. Arc length and area of sector
7. Graphing and inverse functions
8. Basic graphs
9. Amplitude, period, and phase shift
10. Proving trigonometric identities
11. Solving trigonometric equations
12. The laws of sines and cosines
13. Vectors, an algebraic approach
14. Complex numbers, and trigonometric forms
15. Polar coordinates, and equations in polar coordinates.

SLOs
Student Learning Outcomes

• Apply quantitative thinking processes using basic mathematical operations (addition, subtraction, multiplication, division) to solve common academic, workplace, and family problems. (Theme: mathematical operations)

• Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)

• Select appropriate math strategies for solving and handling real life problems involving finance, economics, and family issues. (Theme: mathematical problem-solving)

Important Dates

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Drop a Class with a refund/no fee owed</td>
<td>Feb 20, 2015</td>
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<tr>
<td>Drop a Class without a &quot;W&quot;</td>
<td>Feb 20, 2015</td>
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<tr>
<td>Drop a Class with a &quot;W&quot;</td>
<td>May 8, 2015</td>
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<td>File Pass / No Pass</td>
<td>Feb 20, 2015</td>
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<td>GRADUATION PETITION ACCEPTED</td>
<td>Nov 17- Apr 24</td>
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<td>GRADUATION CEREMONY</td>
<td>tentatively June 9, 2015</td>
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<td>CAMPUS CLOSED</td>
<td>Presidents' Day: Feb 13 - Feb 16</td>
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<td>Cesar Chavez Day: Mar 31</td>
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<td>Spring Break: April 4 - April 10</td>
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<td>Memorial Day: May 25</td>
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http://www.wlac.edu/Academic/Academic-Calendar.aspx