Syllabus for: Math 25

Semester & Year:	Spring 2013
Course ID and Section Number:	E3442
Number of Credits/Units:	4
Day/Time:	TThF 11:40-12:55
Location:	TTh in FM 106, F in FM 104
Instructor's Name:	Michelle Moreno
Contact Information:	Office location and hours: PS 119C by appointment Email: michelle-moreno@redwoods.edu

Course Description (catalog description as described in course outline):
A study of trigonometric functions, radian measure, solution of right triangles, graphs of the trigonometric functions, inverse trigonometric functions, trigonometric identities and equations, laws of sines and cosines, solution of oblique triangles, polar coordinates, complex numbers in trigonometric form, De Moivre's theorem, and conic sections.

Student Learning Outcomes (as described in course outline) :
1. Read, write, and speak accurately about mathematical ideas and use correct mathematical notation.
2. Use graphing technology to visualize trigonometric curves, explore mathematical concepts, and verify their work.
3. Use the theories of trigonometric functions and conic sections as fundamental problem-solving tools.
4. Demonstrate the characteristics of an effective learner, such as note-taking, critical reading, communication through writing, verbal discussions, etc.
5. Apply the mathematics of trigonometric functions to real-world problems and applications.
6. Use numerical, graphical, symbolic, and verbal representations to solve problems and communicate with others.

Special accommodations: College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS.

Academic Misconduct: Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating (including the use of cell phones) on exams will receive an "F" in the course.

The student code of conduct is available on the College of the Redwoods website at:

http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%2002-07-2012.pdf Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods homepage.
College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

Math 25 – Trigonometry

Spring 2013

Instructor: Michelle Moreno
Contact Info: michelle-moreno@redwoods.edu
Office: PS (Physical Science Building) 119 C
Office Hours: By appointment

Section Number: E3442
Time & Location: TThF 11:40-12:55
TTh in FM 106, F in FM 104

Classroom Conduct: Cell phones are prohibited in class. They are a distraction to you and a nuisance to your classmates. Cell phones have also become a tool for cheaters. Thus, **those using cell phones during a test or quiz will receive an automatic F on that test/quiz**. This is not negotiable! It is expected that you will treat your instructor and classmates with respect. Do not belittle a classmate for asking a question – you will be asked to leave the class. Do not talk amongst yourselves (unless instructed to work in pairs) as this is a distraction and hinders your classmates' ability to learn. You will be asked to leave class for excessive talking.

Prerequisite: Math 120 with a grade of C or better or an appropriate score on the math placement exam.

Course Description: A study of trigonometric functions, radian measure, solution of right triangles, graphs of the trigonometric functions, inverse trigonometric functions, trigonometric identities and equations, laws of sines and cosines, solution of oblique triangles, polar coordinates, complex numbers in trigonometric form, De Moivre's theorem, and conic sections.

Course Learning Outcomes:

1. Read, write, and speak accurately about mathematical ideas and use correct mathematical notation.
2. Use graphing technology to visualize trigonometric curves, explore mathematical concepts, and verify their work.
3. Use the theories of trigonometric functions and conic sections as fundamental problem-solving tools.
4. Demonstrate the characteristics of an effective learner, such as note-taking, critical reading, communication through writing, verbal discussions, etc.
5. Apply the mathematics of trigonometric functions to real-world problems and applications.
6. Use numerical, graphical, symbolic, and verbal representations to solve problems and communicate with others.

Required Materials:

1. **Textbook:** *Algebra & Trigonometry*, 7th or 8th Ed. by Sullivan. These are available for checkout in the library. You do not need to purchase the textbook. I will be using the purple 7th edition in class.

2. **Calculator:** TI-83, TI-84, or TI-89 is recommended. I will be using a TI-84 in class. Other brands of calculators are permissible but will not be supported by the instructor, i.e., I will not troubleshoot your Casio (or whatever else you may be using).

3. **Graph Paper:** All written assignments must be done on graph paper. Later in the course you will also need polar graph paper. All written work (HW, quizzes, exams) must be done in pencil only.

Grading:

Optimath Homework	20%
Written Homework	10%
Quizzes	25%
Trigonometry Final	25%
Analytic Geometry Final	20%

The standard grading scheme will be used. All final percentages will be rounded to the nearest whole number.

Course Layout: The course is broken into 9 sections, 6 for trig and 3 for analytic geometry. Homework will be assigned daily using our Optimath system. Each unit will conclude with a short written assignment and a quiz. Two exams will be given, a trig final after unit 6 and an analytic geometry final after unit 9.

<u>In More Detail</u>

Optimath Homework: Optimath assignments will be assigned daily and are due by the posted due date, **no exceptions**. Optimath provides excellent means for practice and instant feedback. Assignments will be kept short (under 10 problems) and you will be able to work through them as many times as you like before the due date. I will only record your highest score.

Written Homework: A written assignment will be due at the end of each unit. Due dates will be announced in class and on MyCR**. NO LATE SUBMISSIONS WILL BE ACCEPTED!** The written homework must be on the appropriate graph paper, very neat, detailed, labeled, and done in pencil. You will only be assigned 2-5 problems but they will be challenging. I will also include a list of practice problems that will not be required nor turned in but may help in your understanding of the topics presented.

Quizzes: Each unit will conclude with a quiz. These quizzes will be more like mini exams and will be challenging. You will need to keep up on the homework and come to class in order to do well on them. Because the units are kept small we will not review before quizzes. **There will be NO make-up quizzes**.

Trigonometry Final: The trigonometry final will be given after unit 6. It may be given over two days. Those days will be announced in class and on MyCR. You will receive a study guide and suggested practice problems for the exam. **There will be NO make-up exam.**

Analytic Geometry Final: The analytic geometry final will be given after unit 9 during the scheduled final exam time for this course, **Tuesday May 7 10:45-12:45.** Again, you will receive a study guide and practice problems for the exam. **There will be NO make-up exam.**

NOTE: Any work submitted in pen will not be graded! Math should always be done in pencil!

Attendance: Attendance is not directly a part of your grade, though it is a self-correcting problem. Those that attend class and actively participate receive the highest scores. If you miss class **DO NOT** email me asking me what you missed. I will not answer your email. It is your responsibility to get missed information from a classmate. **Missing too much class (one week or more – that is three or more class sessions) may result in your being dropped from the course at any time throughout the semester.**

You may be dropped at any time for not attending class and/or not participating (i.e., not doing homework).

WORKING TOGETHER: I encourage you to collaborate on homework and studying. Math is a highly social enterprise and a great deal of your learning will take place when you work together. I also encourage you to sign up for the Math Lab (Math 52). This will provide for you a place to study with your peers and at the same time have access to help when you need it. Though I encourage you to work together this does not mean for you to copy from each other. The first problem that arises in this is plagiarism or academic dishonesty, which is not tolerated by your instructor or this institution. The other problem is that by merely copying a classmates work you will learn absolutely nothing and almost guarantee that you will have to retake the course. When you work together make sure each student is actively participating. If someone is not participating or simply wanting to copy your work it is your responsibility to ask them to leave the group. Collaboration can be an amazing tool when studying mathematics as long as everyone in the group is learning.

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http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf

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