Syllabus for Math 25 – College Trigonometry – Eureka Campus		
Semester & Year	Fall 2016	
Course ID and Section #	Math 25 E0331	
Instructor's Name	Kyle Falbo	
Day/Time	MW 6:05-8:10pm	
Location	SC 204	
Number of Credits/Units	4.0	
Contact Information	*Office location*	None Available to Associate Faculty
	Office hours	Available by Appointment
	Phone number	None Available to Assoicate Faculty
	Email address	kyle-falbo@redwoods.edu
Textbook Information	*Title & Edition*	Trigonometry *Algebra and Trigonometry (7th edition)*
	Author	W. Ted Mahavier Sullivan, published by Prentice Hall
	ISBN	http://www.jiblm.org/downloads/jiblmjournal/V070101/V070101.pdf

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.

Student Learning Outcomes

1. Analyze and solve problems involving trigonometric functions or analytic geometry.
2. Apply the mathematics of trigonometric functions and analytic geometry to real-world problems and applications.
3. Use graphing technology to visualize trigonometric and polar curves, explore mathematical concepts, and verify results.
4. Write solutions to mathematical exercises in trigonometry and analytic geometry using sound mathematical reasoning with appropriate use of numerical, graphical, and symbolic representations.

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 at 707-476-4280.

Academic Support

Academic support is available at Counseling and Advising and includes academic advising and educational planning, Academic Support Center for tutoring and proctored tests, and Extended Opportunity Programs & Services, for eligible students, with advising, assistance, tutoring, and more.

Academic Honesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services, and scroll to AP 5500. 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 website.

Disruptive Classroom Behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process a disruptive student may be temporarily removed from class. In addition, he or she may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services and scroll to AP 5500.
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 website.

Emergency Procedures for the Eureka campus:

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Eureka **campus emergency map** is available at: (http://www.redwoods.edu/aboutcr/Eureka-Map; choose the evacuation map option). For more information on Public Safety, go to http://www.redwoods.edu/publicsafety. In an emergency that requires an evacuation of the building:

- Be aware of all marked exits from your area and building.
- Once outside, move to the nearest evacuation point outside your building:
- Keep streets and walkways clear for emergency vehicles and personnel.
- Do not leave campus, unless it has been deemed safe by the Incident Commander or campus authorities. (CR's lower parking lot and Tompkins Hill Rd are within the Tsunami Zone.)

RAVE – College of the Redwoods has implemented an emergency alert system. In the event of an emergency on campus you can receive an alert through your personal email and/or phones at your home, office, and cell. Registration is necessary in order to receive emergency alerts. Please go to https://www.GetRave.com/login/Redwoods and use the "Register" button on the top right portion of the registration page to create an account. During the registration process you can elect to add additional information, such as office phone, home phone, cell phone, and personal email. Please use your CR email address as your primary Registration Email. Your CR email address ends with "redwoods.edu." Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions.

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.

TOPICS: Trigonometric functions and their inverses, solving triangles, trigonometric identities and equations, graphs of trigonometric functions, polar coordinates, complex numbers in trigonometric form, and conic sections.

PREREQUISITES: Grade of C or better in Math 120 (Intermediate Algebra), or passing score on the appropriate assessment exam. Prerequisites will be enforced.

TEXTBOOKS:
Journal of Inquiry-Based Learning In Mathematics No. 1 (Mar. 2007)
Trigonometry, by W. Ted Mahavier, Lamar University. Available for download at:
http://www.jiblm.org/downloads/jiblmjournal/V070101/V070101.pdf

Algebra and Trigonometry (7th edition), by Sullivan, published by Prentice Hall. Chapters 6-8, part of 9, and 10 will be covered in the course. The corresponding *Student Solutions Manual* is also recommended. Alternatively, you may use the 8th edition of the textbook with its corresponding *Student Solutions Manual*. Study guidelines will be provided for both the 7th and 8th editions.
A limited number of 7th edition textbooks are available on loan from the library. You can also find both the 7th and 8th editions online at a very low price ($5-15). For detailed textbook information, see the department course page at *http://msenux2.redwoods.edu/MathDept/courses/math25.php*
Do **not** purchase the textbook from the CR bookstore – you will pay 10 times the price at the bookstore. Also, do **not** purchase the 9th edition. Study Guidelines will **not** be provided for the 9th edition.

COURSE STRUCTURE:
The Course will consist of two parts. To begin we will be exploring Trigonometry by an Inquiry-Based Learning approach. There will be some discussion on the first day of what this entails and the Mahavier text describes what the method of instruction will be like. I expect we will remain in this text through to its completion. At which point we will then switch to the Sullivan text. Which will more likely resemble a more traditional classroom environment.

In the traditional mode of instruction, you will have a chance to ask questions about homework problems at the beginning of each class period. The remainder of the session will be for instruction, practice, and/or assessment. Homework will usually be due a couple of times each week, and there will sometimes be a quiz, class activity, or an exam. A link to each week's schedule will be provided on both the Canvas page associated with the course and handed out in class when we make the switch to the traditional mode of instruction.

HOMEWORK:
Inquiry-Based Mode: You must turn in exactly one *new* problem each week. A *new* problem means one that you have not turned in before. If this problem has been presented in class, label it *writeup*. If it has not been presented, label it *original*. If you receive a grade of less than "B," you may resubmit this problem the following week and I will record the higher of the two grades. You only get one chance to resubmit. Please write *resubmit* at the top. Be sure that everything you turn in is double-spaced with your name, problem number, and problem statement on it. Be sure and write either *write-up*, *original,* or *resubmit*, at the top of each problem turned in.

Traditional Mode: There will usually be two assignments each week. In general, one assignment will be a written assignment, and the other one will be completed using OPTIMATH, our online practice and testing system (information about the online system will be provided later). The homework problems will be indicative of the type and difficulty of material that you need to know for the exams. For the written assignments, be sure to follow the homework guidelines. Late written assignments will not be accepted.

EXAMS:
There will be three midterm exams and one final exam. The final exam will be comprehensive over the entire semester. Makeup exams will only be given if there is a very good and verifiable reason for missing the exam. Notify me immediately if you cannot take an exam.
Calculators will be allowed (and may be necessary) on most quizzes and exams. However, there may be some quizzes and portions of exams on which a calculator cannot be used.

GRADING:
Inquiry-Based Mode:
Written Homework: 25% of your final grade:
2 Exams 10% each of your final grade:

Traditional Mode:
Homework/Optimath: 20% of your final grade:
Midterm Exam: 10% of your final grade
Final Exam: 25% of your final grade

Your course grade is guaranteed if you make the grade cutoffs given in the table below.
90-100% A
77-89% B
67-76% C
55-66% D

USE OF CALCULATORS: For the traditional mode of instruction, a good graphing calculator is required. The calculator must be able to do polar and parametric plots in addition to usual plots of functions, and should be able to solve equations numerically (i.e., find intersections of curves). The TI-83+ or TI-84+ is an excellent, easy-to-use calculator that meets these requirements, and is the standard calculator that we use in other math courses at College of the Redwoods. However, if you already have another good graphing calculator that meets the above requirements, that may be used instead. If you don't have a graphing calculator, and don't wish to purchase one, there are a limited number of calculators available for rent from the Mathematics Department for
$20 per semester.

ATTENDANCE POLICY: Any student who is absent from class for the amount of time equal to two weeks of classes through week 10 will be withdrawn from the course, unless there are extenuating circumstances that are communicated to the instructor in a timely manner. This policy conforms to Mathematics Department guidelines regarding Faculty Withdrawal of students after census day.

DISABILITIES: Any student who feels that s/he may need an accommodation based on the impact of a disability should contact the instructor as soon as possible. The student will also need to visit the Disabled Student Programs and Services office (476-4280) and obtain a DSPS Support Services Agreement. Every effort will be made to meet accommodation requests. However, no retroactive accommodations will be provided.