Syllabus for Math 25 ~ Trigonometry

Course Information

Semester & Year:	Spring 2020
Course ID & Section #:	Math 25 – E7507 – Trigonometry
Instructor's name:	Amber Buntin
Day/Time or *Online:	Tues/Thurs/Fri 8:45-10am
Location or *Online	Science Building SC 210
Number of units:	4 units

Instructor Contact Information

Office location or *Online:	SC 216K
Office hours:	Mon/Wed 1-2pm, Tues/Thurs 10-11am, and by appointment
Phone number:	707-476-4207
Email address:	Amber-Buntin@redwoods.edu

Required Materials

Textbook title:	Algebra and Trigonometry
Edition:	7th Edition (avail to checkout for semester from library)
Author:	Sullivan
ISBN:	0131430734
Other requirements:	TI 83/84 graphing calculator recommended.

Catalog 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, DeMoivre's theorem, and conic sections.

Course 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.

Evaluation & Grading Policy

Please see weighted grade policy in syllabus below.

Prerequisites/Co-requisites/Recommended Preparation

MATH-120 – Intermediate Algebra or equivalent.

Changing Preferred Name in Canvas

Students can have an alternate first name and pronouns to appear in Canvas. Fill out the Student Information Update form and turn in to Admissions & Records. Your Preferred Name will only be listed in Canvas. It does not change your legal name in our records.

Math 25 ~ College Trigonometry

Tues/Thurs/Fri – 8:45~10:00am – SC 210 (Course number 047507)

Instructor Contact Info

Amber Buntin, Professor of Mathematics

Email: *amber-buntin@redwoods.edu* **Canvas message** is the preferred way to contact me!

Phone: *707-476-4207*

Office hours (SC 216K): Mon/Wed 1-2pm, Tues/Thurs 10-11am

Math Lab Hours (Located in the back of ASC): The drop-in Math Lab is typically open Mon-Thurs 10-5pm and Friday 10-3pm during the regular Fall/Spring semester. **Link to check open hours during any given semester:** https://www.redwoods.edu/math/Lab

***Note: You must be **signed up** for Math 252 (FREE non-credit) or Math 52 (Credit) to utilize the math lab. In the Math Lab there are little red flags on the tables that you raise when you have a question.

Classroom Environment

It is essential to our class that both the students and teacher behave in a manner that will provide a comfortable learning atmosphere. You are expected to be courteous to each other and to the instructor. You should not hesitate to ask questions nor feel embarrassed to ask for help. You will be asked to leave the class for display of behavior the instructor deems as disruptive to the learning environment.

Class time is valuable, and while sometimes we will work on in-class activities, I ask that you DO NOT complete homework during lecture to avoid falling behind on the current material. You are expected to arrive on time and to leave upon dismissal. Arriving late or leaving before class is dismissed is disruptive and disrespectful to your classmates as well as your teacher. Please be prepared with your headphones put away and cell phones SILENCED. If you have a job where you must have a radio/walkie (such as an emergency responder), or your phone on, please let me know right away!

Participation, and Attendance

Attendance and participation are essential to the learning process as material builds between class sessions. An important aspect of this course is the incorporation of active learning in class including taking notes, completing worksheets, activities, and quizzes in class and working with others.

The best way to insure having a successful experience in any course is to come to every class meeting and keep up with the assignments. I realize that sometimes things come up and getting to class is impossible. In those cases, just communicate with me as soon as you possibly can. ALL students remain responsible for ALL assignments given and those assignments are expected to be turned in ON TIME. If you miss a class, the assumption is that you will get the necessary information to complete the assignment by the due date and be prepared to continue in the normal flow of the course.

Grades

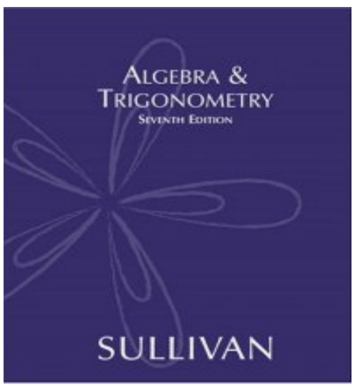
Homework/Activities…….....15%
Quizzes……………...…..........15%
Exams ………………..….........45%
Final Exam……………….........25%

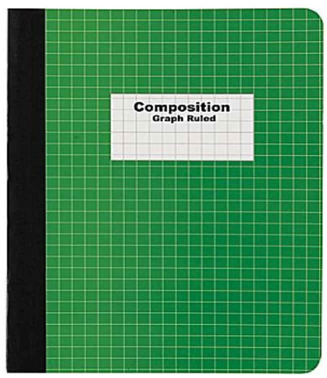
93-100%...........A
90-92%.............A-
88-89%.............B+
83-87%.............B
80-82%.............B-
78-79%.............C+
70-77%.............C
0-69%...............D-F

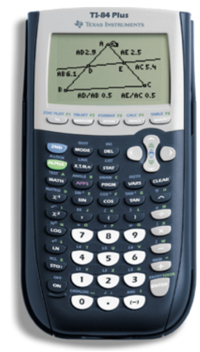
*** Final grade is at the professional discretion of the instructor ***

Required Materials

Textbook: *Algebra and Trigonometry*
Author: Sullivan, published by Prentice Hall
7th Edition ISBN #0131430734







- There are a LIMITED number of 7th edition textbooks available for check out for the semester at the library. There are also books on 2-hour reserve at the library.
- Order your **textbook online for very cheap** on amazon etc. If you are going to order online, I suggest you do so ASAP since there's HW due right away.

Supplies:

- Lined paper and graph paper
- Pencil, erasers, and straight edge
- Composition notebook OR binder (used specifically as a reference book)
- A graphing calculator is **required** (TI-83+ or TI-84 recommended) and available to rent for $15 per semester (see Emily Chang in the back of the Library in the Math Lab). https://www.redwoods.edu/math/Mathematics-Home/Resources/Calculator-Rentals
- Access to a computer with internet and printing capabilities is also a requirement as there will be assignments submitted online.
- Binder/folder for returned work
- DESMOS Graphing APP (not for use on exams): https://www.desmos.com/

Homework and Activities

Activities, online homework and written homework will be assigned throughout the semester. Homework will be assigned and due nearly every class period. You are encouraged to work collaboratively on your homework but be sure to NOT COPY other students' work. We will have about 5-10 minutes for homework questions each class. At the end of the semester, your **2** lowest homework scores will be dropped from your grade.

Online Homework:

Online homework will be assigned and completed in a FREE online homework site called MyOpenMath. **The online assignments will provide for the following incentives:**

- Integrated in Canvas for instant feedback/grading.
- Ability to submit answers multiple times to improve score.
- Infinite set of practice problems/solutions for studying after due date.
- I will set up individual/small group tutorials **if needed** to make sure students have ample support for MyOpenMath.

****Late work policy:** 5 Late Passes will be allowed for **online assignments only.** Late passes can be used at any point during the semester and extend due date by 7 days.

Written Homework:

Written homework will be due nearly every class period.
Grading Rubric for HW: Written assignments will be graded mainly on neatness, proper notation, and completeness and deductions will occur if I notice multiple incorrect answers or errors or incomplete assignments. **Please see "Written Homework Guidelines" section for further details about expectations.**

- For ***most*** online MOM assignments, I will select a few problems for you to **write up solutions for** and hand in at the beginning of class on the due date.
- Written work will typically include material covered in recent homework/notes/activities.
- In addition to written solutions to online HW, problems may be assigned from the textbook. Check answers to ODD numbered problems in the back of the textbook and to help with even-numbered problems.
- **No late written work will be accepted.**

Exam corrections:

- Assigned after each exam is returned (if time allows)
- Graded as an activity and **do not improve actual exam score**.

Activities:

- We will have activities in and outside of class time. Activities that are completed in class cannot be made up if missed. For many activities you will be working in pairs or groups and therefore it is important you come to class everyday!

Handing in work early and the Math dropbox

It is your responsibility to ensure that you get your work turned in on time; if you know you will be missing class, you should submit/turn in work **before the due date, send it with a friend to class, or hand it in to the Mathematics dropbox** in the hallway of the 2nd floor of the Science Building **before** class time on the due date. **If you use this option, be sure to put MY NAME on it at the top and email me to let me know you dropped the homework.**

Canvas

Our course canvas page will be updated regularly and will contain a variety of items such as: course announcements, class documents, assignments, review resources and much more. Be sure to turn on your notifications if you'd like to be notified about things like new announcements, changes to assignment due dates etc. If you find you are getting too many (or too few) announcements, remember this is an individual setting that you must modify in Canvas. I can help to adjust your settings…just ask!

You will be expected to check canvas regularly and be aware of announcements made.

Link to Canvas: https://redwoods.instructure.com/

Quizzes

There will be frequent in-class and take-home quizzes (at least one per week). In-class quizzes will be announced at least one class period in advance. For take-home quizzes, you may use your composition notebook, notes and textbook. You **MAY NOT** work with other students in class or get help at the math lab, the LIGHT center or from a tutor. All work shown on quizzes should be your own and should follow the HW guidelines. If I even suspect students work together on an in-class or take-home quiz, both parties will receive a score of zero and may be reported to the dean of students for further consequence.

Exams and the Final

There will be 2-3 in-class exams (45% of grade) throughout the semester and a **required** comprehensive final examination (25% of grade). I will notify the class **at least one week** in advance as to the date of each in-class exam. Before each exam, you will receive a study guide and/or practice problems. **I will schedule an optional study session before each exam typically outside of class.**

All exams need to be taken in class ON THE DAY OF THE EXAM unless you have made prior arrangements with me to take it early. Be sure to make all travel plans accordingly as there will be no make-ups for missed exams except in extreme or emergency cases (must provide documentation). If you take exams in the LIGHT center, you need to make sure you make an appointment in advance so that you take the final exam at the designated time. **Exams will be graded within 2 weeks of all members of class completing the exam.**

*****Final Date: Tuesday May12th, 8:30-10:30am*****

Testing Accommodations

If you have a documented disability or believe you can benefit from any of the services offered by DSPS such as extended test taking time, tutoring services, quiet space for exams etc, please contact the DSPS office at 476-4280 (phone), 476-4418 (fax), TTY 476-4284 or view their webpage: http://www.redwoods.edu/dsps

If you are already approved for accommodations through Disabled Services & Programs for Students (DSPS) then **during the first or second week of class** you will need to submit your paperwork to me and arrange to take exams in the testing center and make sure that you take Exams at the same time our class meets.

Faculty Withdrawal of Students

It is the policy of the College of the Redwoods Department of Mathematics to exercise a "Faculty Withdrawal" for any student who has missed more than 15% of the class meeting time (~8 days) due to the severely diminished likelihood of a successful course outcome. Missing 1 or more classes in the first two weeks of school may result in withdrawal as well. It is important to note that, if it is your intention to withdraw from the course, you are responsible to ensure the proper paperwork has been filed – that is, you should not assume the teacher will file the "Withdrawal" automatically.

Tutoring Options – Improve Course Success!

The Math Tutoring Lab:

The math lab is located in the ASC in back of the Library. **Sign up in webadvisor for one of the courses below & show up first week of class to fill out paperwork.** Course options:

- **MATH 252** Open Mathematics Lab. This is a FREE, no credit option to get drop-in math tutoring in the math lab. **If you do not need units** or you want math help but cannot fulfill hour requirements for mathlab, then this is the option for you!
- **MATH 52** Math Lab for Elementary Algebra. Register in webadvisor for this for-credit drop-in tutoring course held in the math lab. Available for .5 unit (22.5 hours ~ 1.5 hrs a week req) or for 1 unit of credit (45 hours ~ 3 hrs a week req).

Other Tutoring Options:

- **FREE ASC tutoring** by appointment. Call **707-476-4106 or 707-476-4154.**
- **EOPS Tutors.** You must be part of EOPS (Extended Opportunity Programs and Services) to receive this tutoring. Please contact your EOPS couselor to set up tutoring. If you are unsure if you are eligible for EOPS, call them at **707-476-4270** check out their webpage: https://www.redwoods.edu/eops
- **LIGHT Center Tutoring.** Please contact the LIGHT center if you are interested in their tutoring services. There is a GUID course you must enroll in to receive services. **Phone:** 707-476-4290 **Webpage**: https://www.redwoods.edu/dsps/Light-Center
- **OPTIMATH** practice assignments give immediate feedback and written out solutions: http://msenux2.redwoods.edu/cgi-bin/online/s18/OTportal.cgi
- The **CR Math Jam** webpage is a great way to prepare for exams and contains lessons as well as OPTIMATH assignments: http://msenux2.redwoods.edu/mathjam/?s=public
- **Private tutoring** is always an option but is of course more costly. If you are interested in hiring a private tutor, let me know and I will ask around to see if I can find anyone!

Final Words

A few words about my expectations for you and myself in this course: My responsibilities include coming to class prepared to teach you mathematics, giving clear lectures, assigning carefully chosen homework problems that are relevant to our course and carefully preparing exam questions that accurately measure your progress in the course. Additionally, I am responsible to be available to you outside of class for consultation in office hours (by appointment…just email me ☺).

Likewise, I believe that you are ultimately responsible for your college education and I expect you to come to class motivated to learn the material. This involves keeping up with homework assignments, seeking additional help, either from me or from the many resources available to you here on campus, before it is too late.

********** **Syllabus Subject to Change** **********

Announcements will be made in class and often followed up in Canvas. When absent, students are expected to check email, Canvas, and/or with fellow classmates concerning missed work!

Guidelines for Written Homework

Please follow these guidelines when completing homework assignments.
It makes my grading experience much more pleasant ☺

1. Complete all written assignments on a **separate sheet of paper.** You **may use both sides** of the paper. Do NOT complete assignments on the pages of your textbook.
2. **Staple** all homework in the upper left hand corner.
3. **Label** your homework with your name, course number, and section number in the upper right-hand corner (see example below).
4. **Copy down original problem and directions** (summarize word problems)!
5. Write your problems in order **DOWN** the page. Please **skip a line** between problems.
6. **Circle**, **box,** or **highlight** your answers to each exercise so I can find your answer quickly.
7. Please use **pencil** when writing your homework, and please write legibly and neatly. Presentation is a component of your homework score. NO PENS!
8. Be sure to **show your work** when solving a problem. A problem with just the answer and no work shown will receive NO CREDIT.
9. **Cut or tear off** any frilly edges on paper torn from a notebook.
10. When creating a graph, you **MUST USE GRAPH PAPER AND A RULER** or you will get a ZERO on the assignment.
11. If you are ever given two assignments due on the same day make sure complete them, and **staple them SEPARATELY**.

Staple in upper left corner.

Ima Student
Math 25
Section 1.2

HW 1.2: 4, 11, 20, 41

4. Solve $-26x + 84 = 48$

$$-26x + 84 = 48$$
$$-26x = -36$$
$$\boxed{x = \frac{36}{26}}$$

11. Solve $19x + 35 = 10$

$$19x + 35 = 10$$
$$19x = -25$$
$$\boxed{x = -\frac{25}{19}}$$

20. Solve $-8 - 8(x - 3) = 5(x + 9) + 7$

$$-8 - 8(x - 3) = 5(x + 9) + 7$$
$$-8 - 8x + 24 = 5x + 45 + 7$$
$$-8x + 16 = 5x + 52$$
$$-13x = 36$$
$$\boxed{x = -\frac{36}{13}}$$

41. Solve $Ax + By = C$ for y

$$Ax + By = C$$
$$By = C - Ax$$
$$\boxed{y = \frac{C - Ax}{B}}$$