Syllabus for: Math 25	
Semester & Year:	Fall 2015
Course ID and Section	MATH-25-E7999
Number:	
Number of Credits/Units:	4
Day/Time:	TTh, 6:05-8:10,
Location:	SC 204
Instructor's Name:	David Arnold
<b>Contact Information:</b>	(707) 476-4222. David-arnold@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. 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.
- 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.

**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 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.



# **David Arnold**

# **Mathematics**

- <u>Department Home Page</u>
- Canvas
- WebAdvisor
- Optimath
- David Arnold Home

# Math 25: Instructor's Syllabus

#### The Adobe Reader

To use the textbook and Optimath system in this course, you must have properly installed and configured the Adobe Reader on your computer. You will need to <u>download</u> a free copy of the Acrobat Reader to read them. Click the following icon to obtain a free copy of the Acrobat Reader.



It is important that you have the most current version of the Acrobat Reader that your system will allow. The above links will take you to the Adobe site. The Adobe site will analyze your system, but you may be asked to choose the appropriate version of the reader for your system. If this happens, carefully select the appropriate version of the reader for your system.

#### **Official Course Outline**

The official course outline for Trigonometry, including content, objectives, and student learning outcomes, can be viewed online via the following link. Please take some time to read the

#### Math 25 Course Outline

You'll find the following course learning outcomes on the course outline:

- 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.

# **Prerequisite Classes**

Math 120 or Math 194 (or equivalent) with a grade of "C" or better or appropriate score on the math placement exam. In lieu of this prerequisite, students can take an assessment test in the Academic Support Center (the ASC is in the library) to insure proper placement in the course. Students are advised to see a counselor as they can be quite helpful in placing students in a course commensurate with their ability and background in mathematics.

#### **Instructor's Schedule**

The following link contains a copy of my schedule, including office hours.

#### Schedule and Office Hours

Note: These are "official" office hours. However, I will make myself available whenever I can. Please do not be afraid to ask for help at any time as I am always eager to help.

### Office Location and Phone

- Science building SC 216H
- Office phone: (707) 476-4222

#### **Cancelled Classes**

Those driving long distances to attend classes are advised to call (707) 476-4210 before driving to the CR campus. Choose #5 from a menu of choices. You will then be advised of any cancelled classes for the day in the Physical Sciences complex (math/science). Thus, you can avoid the frustration of driving to campus, only to find that your class has been cancelled.

#### **Email**

My email address is: <u>David-Arnold@redwoods.edu</u>

# **Getting Help**

Help is available in many forms.

- Your instructor is always available for help in SC 216H when he isn't teaching class or attending a meeting. Take advantage.
- The Academic Support Center (ASC) in the library provides individual and group tutoring. You need to check in at the ASC desk and make an appointment to meet with a tutor.
- Guidance 205 (GUID 205) is a non credit course which can be taken for free. This qualifies you to get help in the Mathlab. If you simply go to the Mathlab (in the ASC -- CR Library) and tell the instructor who is working when you get there that you would like to enroll in GUID 205, you will be given a form to fill out. No need to do anything else.
- The "Mathlab" resides along the windows in the ASC. You must first go to registration (Forum Building) and register for Math 52 to make use of the mathlab. You can either register for 1/2 unit or a full unit. You can also register via Webadvisor.
  - 1. If you register for 1/2 unit, you must complete 22.5 hours in the mathlab. This amounts on average to 1.5 hours per week.
  - 2. If you register for 1 unit, you must complete 45 hours in the mathlab. This amounts on average to 3 hours per week.

After you complete the registration process, proceed to the Mathlab which is located in the Academic

Support Center (ASC) of the Learning Resource Center (LRC). There will be an instructor there who will give you an information page, and a contract to sign.

If you have already taken Math 52, and passed the corresponding course while you took Math 52, you cannot take it again. In this case, use GUID 205 (described above).

Comprehensive information on the Mathlab is available at the following link:

#### Information on the MathLab

You can find a list of instructors who work in the Mathlab and a schedule for the hours that Mathlab is open at the following links:

#### Mathlab Instructor Schedule and Hours

The mathlab is not the place to get personal, extensive, one-on-one tutoring (you should make an appointment with an ASC tutor for that), but it is a great place to work on your homework and get quick help when you are stuck. People work on their homework, then raise their hand when stuck, and tutors come by as soon as they are available. Tutors are trained to jump around from student to student, hopefully not taking too much time with each question, so it's likely that you can get quick attention as you need it.

#### **Classroom Environment**

It is expected that everyone involved in this class, teacher and students alike, will act in a manner conducive to providing a comfortable environment for learning, a classroom where students feel free to ask and answer questions without fear of embarrassment or ridicule.

It is important to stay on task when class is in session. Hence, conversation not pertaining to the subject at hand should be taken outside the classroom.

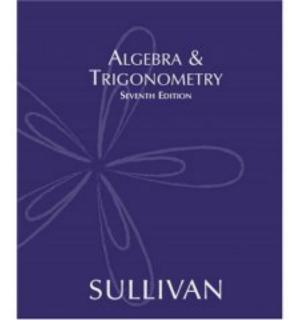
I understand that students will have to get up and leave the room for various reasons and I also understand that students will arrive late from time to time. However, courtesy requires that you enter and leave as quietly as possible, without disturbing discussion or lecture.

It is essential for student success to maintain a good environment in the classroom. If you have any personal difficulties with the learning environment in the classroom, please visit me in my office to discuss them.

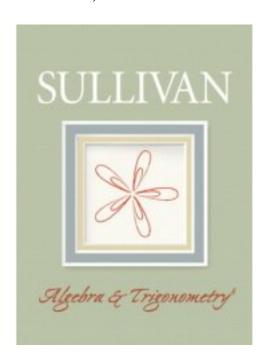
#### **Textbooks**

The Mathematics Department continues to be concerned with the rising prices of textbooks. Students in Math 25 have several options for obtaining a textbook:

- The **CR** Library has a limited number of textbooks that can be checked out for the entire semester.
- Our bookstore has no copies of the text, so you will have to go online to order one.
- ISBN Information
  - Algebra and Trigonometry (7th edition), by Sullivan, published by Prentice Hall (ISBN #0131430734)



Algebra and Trigonometry (8th edition), by Sullivan, published by Prentice Hall (ISBN #0132329034)



- Assignments will be keyed to either text, so it does not matter which one you purchase.
- Online purchase recommendations:
  - Online searches for the 7th edition. Important: When doing online searches for the text, search by the ISBN #0131430734.
    - A search of <u>Amazon.com</u> revealed <u>these prices and availability</u>.
    - A search of <u>campusbooks.com</u> found <u>these prices and availablity</u>.
    - A search of **BookFinder.com** revealed these prices and availability.
    - A search of <u>half.com</u> revealed <u>these prices and availability</u>.
  - Online searches for the 8th edition. Important: When doing online searches for the text, search by the ISBN #0132329034.
    - A search of <u>Amazon.com</u> revealed <u>these prices and availability</u>.
    - A search of <u>campusbooks.com</u> found <u>these prices and availablity</u>.
    - A search of **BookFinder.com** revealed these prices and availability.

As you can see, prices for the eighth edition (which is the current edition on the market and the edition available in the CR Bookstore) are much higher than the quoted prices for the seventh edition. If you can find a good used seventh edition, that will be your best buy and will be perfectly suitable for the course. Remember, search by ISBN!

# **Reading the Textbook**

It is important that you read and work the examples in the textbook before attemping the exercises. Many

students will work the process in reverse. That is, they begin working the exercises, then if stuck, they page back through the narrative in the text seeking a similar example to the exercise on which they are working. This is **not** a recommended approach to the study of mathematics.

#### **Calculators**

The TI graphing calculator is required in all mathematics courses (at or above Math 380) at College of the Redwoods. If you have a TI82, it will suffice, as will a TI83, TI83+, TI84, or TI84+. However, if you plan on purchasing a new calculator, we recommend the TI84 Plus.

I probably cannot provide help on other versions of the graphing calculator during class other than on those mentioned above. However, I am always willing to help the student outside of classtime on calculators such as Casio, HP, or high end TI's (e.g., TI89). Just stop by my office and be sure to bring the manual for your calculator.

Kevin Yokoyama has developed a calculator help tutorial. The web address is

http://msemac.redwoods.edu/~kyokoyama/TIHelp/index.htm

Bruce Wagner also has a calculator tutorial at the following link. It's slanted towards students in Math 120, but students in Math 25 will also find it useful.

#### **Graphing Calculator Help**

For help constructing inline formulas, see the <u>Inline Formula Practice</u> page.

#### **Calculator Rentals**

The Mathematics Department has a limited number of calculators that it rents to students each semester. There is a one-time, non-refundable fee of \$20. Rental instructions are available at the following link:

#### Graphing Calculator Rental Program

#### **Examinations**

We will have two midterm examinations and a comprehensive final examination. Students should sit for all examinations on the day that they are administered. If you miss an examination, there is no guarantee that you will be allowed to make up the examination. Indeed, makeup examinations are given only at the instructor's discretion. If you know ahead of time that you have a conflict that will prevent you from sitting for an examination, please meet with me to discuss alternatives.

Students who need special arrangements for examinations are expected to meet with the instructor before **each** examination to insure that all examination materials are on file in the Academic Support Center (the ASC is in the Learning Resource Center (library)).

Every student will be required to sit for a final, cumulative examination. The time and day of this examination is posted in the Schedule of Classes and students are expected to sit for the exam at the time and on the day posted. No exceptions. Any student failing to sit for the final examination will receive an F in the class. Please keep this in mind when making travel plans for the end of the semester. Plan ahead!

# Quizzes

We will have frequent quizzes throughout the semester. Some you will work on at home, others will be administered during class.

#### Homework

Homework will be assigned daily and will be due the next class meeting. Each homework will be assigned a grade ranging from 0-10 points, bases on completeness, the following of directions, and the quality of work.

It is essential that students keep up with the homework on a daily basis. Each time you come to class without your homework, you are not prepared to take part in the class at a level geared to your success. Therefore, students are encouraged to hand in homework on time. However, I am acutely aware of the responsibilities that many students have to deal with outside the classroom. Consequently, I do allow a "grace period" of one class period for late work. That is, if you hand your homework in by the next class period, I will still accept the assignment. However, there is an automatic 2-point deduction for late work. Homework later than one class period will not be accepted.

If you are experiencing difficulty getting your homework in on time, or if you know an upcoming event will interfere with getting your homework in on time, please discuss this with your instructor. We can possibly make some arrangment to help facilitate the completion of your work.

In order to facilitate the recording of homework scores, students are required to place their name in the upper right-hand corner of their homework assignment and staple the pages together with a single staple in the upper left-hand corner. On the first line of the of the first page of your homework, please write down the assignment number, the pages that encompass the assignment, and list each exercise number assigned. For example, the first line of your homework might read:

Assignment #12, Page 150, #1, 3, 5, 7, 8, 10, 11, 23, 45

# **Attendance Policy**

A student who is absent from class for the amount of time equal to two weeks of classes, will be withdrawn from the course, unless there are extenuating circumstances that are communicated to the instructor in a timely manner. This "faculty withdrawal" can occur between Week 4 and Week 10 of the semester.

Attendance will be recorded each class session. If you know you will be missing class, you should let your instructor know.

#### Grades

To determine your grade in the class, points from homework, exams, quizzes, will be totaled. You can determine your current grade on a daily basis on your gradebook.

#### When Problems Arise

Should problems arise during the semester, always contact your instructor to let me know what's going on. That's the only way I can help.

# **Emergency Procedures**

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room) and review <a href="http://www.redwoods.edu/safety/">http://www.redwoods.edu/safety/</a> for information on campus Emergency Procedures.

During an evacuation:

• Be aware of all marked exits from your area and building. Know the routes from your work area to the nearest exits.

- 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. (Be aware CR's lower parking lot and 101 frontage are within the Tsunami Zone).

RAVE - College of the Redwoods has implemented an emergency alert system. Everyone is entered already to receive a message at their CR email address. In the event of an emergency on campus, you can also elect to receive an alert through your personal email, and/or phones at your home, office, and cell. This emergency alert system will be available to all students, staff, and other interested parties.

Registration is necessary in order to receive emergency alerts. Please go to <a href="https://www.GetRave.com/login/Redwoods">https://www.GetRave.com/login/Redwoods</a> 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."

We will test the system each semester to be sure that you are getting alerts at all of your destinations. Please contact Public Safety, 707-476-4112, security@redwoods.edu, if you have any questions.

# The Syllabus is Subject to Change

As your instructor, I reserve the right to make adjustments to the syllabus should things not proceed as smoothly as expected. However, in general, I do not anticipate making changes.

Last Revision: 8/22/15 | Email Webmaster | © Design by Andreas Viklund