Syllabus for Math 30 - College Algebra – Eureka Campus		
Semester & Year	Fall 2017	
Course ID and Section #	Math 30 E3167	
Instructor's Name	Kyle Falbo	
Day/Time	Monday, Wednesday 6:05-8:10pm	
Location	SC202	
Number of Credits/Units	4.0	
Contact Information	Office location	SC 216G
	Office hours	WF 3-4:00pm, Th 5-6:00pm
	Phone number	(707) 476-4351
	Email address	kyle-falbo@redwoods.edu
Textbook Information	Title & Edition	Algebra and Trigonometry (7th edition)
	Author	Sullivan
	ISBN	0131430734

Course Description

College level course in algebra for majors in science, technology, engineering, and mathematics: polynomial, rational, radical, exponential, absolute value, and logarithmic functions; systems of equations; theory of polynomial equations; analytic geometry

Note: Graphing calculator required, TI-83 or TI-84 recommended.

Student Learning Outcomes

1. Analyze and investgate functions and equations both graphically and algebraically to include rational, linear, polynomial, radical, absolute value, exponential, and logarithmic.

2. Solve equations, systems of equations, and inequalities containing rational, linear, polynomial, radical, absolute value, exponential, and logarithmic relations.

3. Apply techniques for finding zeros of polynomials and roots of equations.

4. Apply functions and other algebraic techniques to model real world STEM applications. 5. Define a sequence as a function of the natural numbers and apply appropriate formulas to find sums of finite and infinite series.

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 <u>Disabled Students Programs and Services</u>. Students may make requests for alternative media by contacting DSPS at 707-476-4280.

Academic Support

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

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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:

www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProcedure srev1.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 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:

www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProcedure srev1.pdf

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Emergency Procedures for the <u>Eureka</u> 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:

(<u>http://www.redwoods.edu/Eureka/campus-maps/EurekaMap_emergency.pdf</u>). For more information on Public Safety, go to <u>http://redwoods.edu/safety/</u> 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.

Prerequisite:

Math 120 or Math 194 with a grade of C or better or appropriate score on the assessment test. Expected Skill Set: Ability to solve linear, quadratic, polynomial, rational, radical, exponential, and logarithmic equations analytically, graphically, numerically, and verbally in real-world settings. Ability to use technology in the study of these.

Text:

The required textbook for the course is Algebra and Trigonometry (7th edition), by Sullivan, published by Prentice Hall, ISBN #0131430734.

A limited number of textbooks are available on loan from the library. The textbook can also be purchased very inexpensively from various online book sellers.

Recommended: Student Solutions Manual for the 7th edition, ISBN #0131430793

Objective:

A course in first-degree and absolute value equations and inequalities; composite and inverse functions; polynomial, rational, exponential, and logarithmic functions; systems of equations; matrices; sequences and series; mathematical induction; binomial expansion theorem; and complex numbers are explored. Technology is integrated into all aspects of the course.

In this course we will study:

- 1. A multiple-step problem-solving process.
- 2. The presentation of mathematical solutions in a logical and coherent structure, including the use of writing skills, grammar, and punctuation.
- 3. The use of the graphing calculator as a problem-solving tool.
- 4. The connection between graphs and properties of functions.
- 5. Application of concepts to real-world problems.
- 6. Knowledge of functions to include definitions, graphs, properties, and their application to the problemsolving process.
- 7. The recognition that the use of proper algebraic skills is an important tool in problem-solving situations.

Materials:

You are required to have a graphing calculator for this course. I recommend a TI-83, TI-84 or TI-89. I will be using a TI-84 in class.

Calculators are available for rent from the math department for \$15/semester; pay at the cashier's office and pick it up from Betsy Buchanan in the ASC. Also, check local pawn shops, Craigslist, Ebay, etc.

Cell phones are not allowed to be used as your calculator.

You are required to submit written homework assignments on only the front half of Engineering Paper from an Engineering Pad.

The bookstore and other retailers will have Engineering Pads in stock:

Roaring Spring Engineering Pad, 8.5x11 inches, Green 200 Sheets.

You will need a ruler or straight edge for all lines in which you draw in the course.

You will need a binder to keep your notes and work in.

You will need lots of pencils and erasers. No Pens Allowed.

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 outside of class to discuss them.

Homework:

Regular practice of mathematics is the tried and true way for understanding the material. Having good mathematical penmanship will make your ability to communicate mathematics effectively that much greater. The first part of the semester we will emphasize handwritten assignments, accompanied by biweekly Optimath assignments. As the semester progresses we will transition into Optimath assignments at a greater rate with handwritten assignments submitted for each chapter. It is very important that you become familiar and comfortable with the Optimath platform immediately. The majority of your homework grade will result from submitted Optimath assignments. Late homework will not be accepted. I do understand that life happens and you may be unable to submit an assignment by it's due date. To compensate for these times I will drop the two lowest homework assignments from your grade at the end of the semester.

Quizzes/Activities:

I reserve the right to give quizzes throughout the semester on material covered in the previous week. I also intend to provide you with group activities that allow you the chance to work together with your fellow classmates on problems that are real-world in nature and would take a bit more thought and dedication than your normal homework would provide. These quiz/activities would be included in your homework score.

Exams:

There will be 3 in class exams given throughout the semester in addition to the comprehensive final exam. These exams will be closed book. At times I may ask that some portion of an exam be done without the aid of a calculator. These exams will make up the majority of your final grade so it is in your best interest that you prepare for these exams. I will provide time for in-class review before each exam. See the course schedule for dates regarding exams. No Makeup Exams Will Be Given.

Final Exam:

The day and time of the final exam for this course is **Monday**, **December 11th**, **5:30-7:30pm**. This is a hard date. You must be at this arranged time and date in order to take the final exam. Plan your travel accordingly.

Attendance:

While attendance to this course is not required. You will find that missing any class especially in a two day a week course, it will be hard to catch up. If you miss a class you should contact one of your fellow classmates immediately to get a copy of the notes for that day, as well as to find out any important in class announcements that were made.

Grade System:Homework:30%Exams (3 in-class):45%Final Exam:25% of your final grade.

If you wish to discuss your grades, contact me to arrange a time outside of class to discuss grades in person.

Tutors and Math 52:

There is tutoring services available for this class. I highly recommend that you take advantage of them. Math 52 is a lab course that offers 0.5 to 1.09 units of credit to get assistance with your math skills. If math has been a struggle or you are in search of the A grade, I strongly recommend Math 52. It has been very successful in helping students achieve their goals in mathematics. In addition to Math 52, other non-credit Math Lab options and free 1-on-1 tutoring is made available through the ASC.

Study Groups:

Mathematics is very much like a language. Speaking mathematics amongst your peers is one of the best ways to solidify the material in your own mind. Hearing the material explained in a voice other than your instructor can give you insight that you might miss only hearing it once. I encourage my students to form study groups. Some of my closest friendships that I have today were formed through math study groups in college. Take advantage of the opportunity to socialize while learning. It's a lot more fun that way.

Canvas:

I will primarily be using the course canvas page as a course document depository. The syllabus, study guides, and copies of any in-class projects will be posted to Canvas for additional access. If I choose to use Canvas in another capacity I will use email to let the class know.