Syllabus for Math 30 – Eureka Campus			
Semester & Year	Spring 2017		
<b>Course ID and Section #</b>	Math 30 – E1113	3	
Instructor's Name	Bruce Wagner		
Day/Time	MWF 1:15-2:30		
Location	SC 204		
Number of Credits/Units	4		
Contact Information	Office location	SC 216K	
	Office hours	W 12:30-1:00, ThF 11:30-12:30	
	Phone number	707-476-4207	
	Email address	bruce-wagner@redwoods.edu	
Textbook Information	Title & Edition	Algebra and Trigonometry, 8 <sup>th</sup> ed. or 7 <sup>th</sup> ed.	
	Author	Sullivan	
	ISBN	#0132329034 (8 <sup>th</sup> ed.) or #0131430734 (7 <sup>th</sup> ed.)	

### **Course Description**

A course covering 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.

### **Student Learning Outcomes**

1. Evaluate and interpret a difference quotient symbolically, numerically, and graphically.

2. Find and interpret the real and complex roots of a polynomial symbolically, numerically, and graphically.

3. Produce an accurate graph of a rational function by hand, and identify all salient features.

4. Demonstrate and interpret the inverse relationship between exponential and logarithmic functions.

5. Solve problems and applications involving exponential and logarithmic functions.

6. Solve 3x3 linear systems of equations using matrices and elimination, and interpret the nature of the solution set geometrically.

7. Recognize and solve problems involving arithmetic and geometric sequences and 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.

### 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: <u>http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</u>, 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: <u>http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</u> 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 <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/aboutcr/Eureka-Map</u>; choose the evacuation map option). For more information on Public Safety, go to <u>http://www.redwoods.edu/publicsafety</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 <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." Please contact Public Safety at 707-476-4112 or <a href="mailto:security@redwoods.edu">security@redwoods.edu</a> 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.

# Math 30: College Algebra Spring 2017

(section E1113)

**Instructor**: Bruce Wagner Phone: 707-476-4207 **Office:** Science 216K Email: bruce-wagner@redwoods.edu **WWW**: *http://mse.redwoods.edu/wagner* 

**Course homepage**: *http:// mse.redwoods.edu/wagner/math30* Class Sessions: MWF 1:15-2:30 in SC 204

**TOPICS**: 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; complex numbers.

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

**TEXTBOOK**: Algebra and Trigonometry (7th edition), by Sullivan, published by Prentice Hall. Chapters 1, 3, 4, 5, 12, and part of 11 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://www.redwoods.edu/math/Math-Course-Details

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**: 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 be due most days, and there will usually be a quiz, class activity, or an exam each week. A link to each week's schedule is provided on both the homepage and the "Detailed Schedule" page on the course web site.

EXAMS: There will be four midterm exams and one final exam. The final exam will be comprehensive over the entire semester. There may also be a quiz or class activity in weeks in which there is no exam. Dates for the quizzes, activities, and exams will be listed on the "Detailed Schedule" page on the course web site.

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.

Makeup quizzes and class activities will not be given. However, I will not count the two lowest quiz/activity scores when computing your final grade.

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.

**HOMEWORK**: There will two or three assignments each week. About half of the assignments will be written assignments, and the other half 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. After grading your written assignment, I will give you a chance to rewrite it for full credit.

Late written assignments will be accepted up through the next class period following the due date. However, a 20% penalty will be assessed in that case, and you will not be allowed to rewrite the assignment.

#### **GRADING**:

Written Homework:	80 points
Online Homework:	80 points
Quizzes and Class Activities:	50 points
4 Midterm Exams:	160 points (40 points each)
Final Exam:	80 points

Your course grade will be determined by the grade cutoffs given in the table below. However, in addition, you must earn a cumulative exam score of at least 50% to receive a grade of C or above.

87-100%	A
75-86%	В
64-74%	С
54-63%	D

**AVAILABLE HELP**: Personal help will be available in the Academic Support Center and from the instructor. You are also highly encouraged to sign up for *Math Lab (Math 30L)*. *Math 30L* is a lab course that offers 0.5 to 1.0 units of credit to get assistance with your mathematics skills. The lab is located in the Academic Support Center. If mathematics has been a struggle for you in the past, or if you are in search of an A grade, then I strongly recommend *Math 30L*. It has been very successful in helping students achieve their goals in mathematics.

Alternatively, you can register for the *non-credit version of Math Lab* (*Math 252*). This is exactly the same as *Math 30L*, but there are no minimum hour requirements.

See the "Help" page on the course web site for more details on help resources.

**USE OF CALCULATORS**: A good graphing calculator is required. The calculator must be able to plot graphs of functions, and must 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 \$15 per semester.

**COURSE INFORMATION ON THE WEB**: Course information will be available throughout the semester on the World Wide Web. You should consult the homepage for this course (listed above) regularly for information on homework assignments, exams, etc.

**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.