Syllabus for: Math 30	
Semester & Year:	Spring 2015
Course ID and Section Number:	E7025
Number of Credits/Units:	4
Day/Time:	MWF 1:15-2:30
Location:	SC 204
Instructor's Name:	Bruce Wagner
Contact Information:	Office location: SC 216K
	Office hours: M 12:45-11:05, F 11:00-11:30 & 12:45-11:05
	Phone: 707-476-4207
	Email: bruce-wagner@redwoods.edu

Course Description (catalog description as described in course outline):
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 (as described in course outline) :
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 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://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf

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 2015
(section E7025)

Instructor: Bruce Wagner
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Office: Science 216K
Email: bruce-wagner@redwoods.edu
WWW: *http://msemac.redwoods.edu/~wagner*

Course homepage: *http:// msemac.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://msenux.redwoods.edu/mathdept/courses/math30.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: 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 sometimes be a quiz, class activity, or an exam. Exams and quizzes will usually be on Fridays. 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 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. 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:	60 points
4 Midterm Exams:	160 points (40 points each)
Final Exam:	80 points

Your course grade is guaranteed if you make the grade cutoffs given in the table below.
   90-100%   A
   80-89%   B
   70-79%   C
   60-69%   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 math skills. The lab is located in the Academic Support Center. If math 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 Lab*, 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 $20 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.

OTHER COURSE RESOURCES:
- Mathematics Department: *http://msenux.redwoods.edu/mathdept*
- Mathematics Department Math 30 course page:
    http://msenux.redwoods.edu/mathdept/courses/math30.php