Syllabus for: Elementary Algebra	
Semester & Year:	Fall 2012
Course ID and Section Number:	MATH 380 – #032456
Number of Credits/Units:	5
Day/Time: **Location:**	M, W, F 9:00 a.m. – 10:40 a.m. Room 114, Mendocino Coast Education Center
Instructor's Name:	Richard Ries
Contact Information:	Office location and hours: Room 102, M-TH, 8 – 10 a.m. Phone: 707-962-2681 Email: richard-ries@redwoods.edu

Course Description (catalog description as described in course outline):
A study of the real number system, first-degree linear equations and inequalities, polynomial expressions and equations, factoring, radicals, quadratic equations and the quadratic formula, interpretation of graphs, and problem-solving techniques. Small group work and exploratory activities (including the use of the graphing calculator) are involved in this course.

Student Learning Outcomes (as described in course outline) :

1. Use properties of real numbers to solve linear equations, inequalities, and systems of linear equations.
2. Solve non-linear equations by factoring.
3. Draw and interpret graphs and solve problems graphically.
4. Use sound mathematical writing and appropriate use of symbolism in presenting solutions of mathematical exercises and applications.

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.

Math 380 Syllabus

Fall 2012

Instructor: Richard Ries
Section #: 032456
Unit Value: 5
Office Hours: M,T,W,Th 8:00a.m -10:00a.m.
Office Location: 102
E-mail: Richard-Ries@redwoods.edu

Class Days: M, W, F
Class time: 9:00a.m. – 10:40 a.m.
Class location: 114
Phone: 707-962-2681

Textbook:
Online at *http://mathrev.redwoods.edu/ElemAlgText/*
Graphing calculator TI 83/ TI 84 required

Course Description: A course in which functions are investigated graphically, numerically, symbolically and verbally in real-world settings. Linear, quadratic, polynomial, rational, radical, exponential, and logarithmic equations and functions are explored. Technology is integrated into all aspects of the course.

Prerequisite: Appropriate score on Math placements or qualifying through Individual Math Program.

Course Learning Outcomes:

1. Students should be able to read, write, and speak accurately about mathematical ideas using correct mathematical notation.

2. Students should be able to apply the mathematics they have learned to real-world problems and applications.

3. Students should be able to use graphs and the graphing calculator to explore mathematical concepts and to verify their work.

4. Students should be able to demonstrate competency in the required prerequisite skills for all transfer level math courses.

5. Students should be able to demonstrate the characteristics of an effective learner, such as note-taking, critical reading, etc.

6. Students should be able to explain the concept of function, identify the characteristics of different classes of functions, and use functions to solve problems in mathematics.

7. Students should be able to demonstrate the algebraic skills that will support success in the other outcomes.

Instructor Philosophy: The focus of learning is the student's analysis of experiences. Skill is required to combine first hand experiences, dialogue, thoughtful analysis and interpretation to give meaning and application of these experiences to life. Learning as an adult is an expansion of one's knowledge (facts and ideas), thinking (ability to assess)

and behaviors (skills). Successful learning requires the cooperative efforts of both teachers and students. I am here to provide resources and facilitate the pursuit of your education. Studies have shown that the most successful students are those who ask questions and participate in discussions. I look forward to working with a class who, as adults, understand that the acquisition of knowledge is a matter of personal responsibility that requires active participation.

Goals of This Course: The goal of this course is to help you to become proficient in the foundations of algebra and prepare you for other future math classes. Many mistakes that cost students dearly in terms of their grades in more advanced courses are basic algebraic mistakes. Since mathematics is a subject that builds upon itself, a strong foundation in algebra is essential for the rest of your math education. The best way to master any math topic is to practice by doing problems. The more you practice, the better you will become. Other successful learning strategies include forming study groups and outlining reading materials. If you are having difficulty with any topic, please come see me early to get you back on track as soon as possible. You can either see me during my office hours, or make an appointment by email at richard-ries@redwoods.edu . Catching me after class is best. I can also be reached at my voice mail (951) 739-7825 that I check twice a day. With the right attitude, math can be fun^2!

Attendance: It is imperative and vital to your academic success that you attend all classes. Attendance will be monitored through pop quizzes that will be given during class. Prompt arrival and remaining throughout the entire class is required. Tardiness will be counted as an absence. You are allowed 3 absences before you are dropped from the class, so save your absences for emergencies. Any student missing more than 8 classes will receive a grade of "F" for the class with no exceptions.

Student Responsibilities: You are expected to come to class prepared by having read the assigned chapters and handouts, and completed all prior assignments. Proper adult behavior is expected at all times. The instructor reserves the right to dismiss a student from class permanently for disruptive behavior. Disruptive behavior is any behavior that distracts the instructor or other students. The instructor has an obligation to promote the learning of the students of the class and anyone who is disrupting the learning process will be dropped for lack of academic effort. A lack of academic effort also includes, but is not limited to the following: missing or failing assignments, excessive absences, arriving late to class, exiting class before its termination, cheating, plagiarism or other disruptive behaviors. Also, please have your cellular phones off while in class and do not bring food or drink to class. If you wish to be dropped from the class it is your responsibility to do so.

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. 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.

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Homework: Homework will be assigned daily and is due the following class session. For each section that is covered, you will be expected to complete every 3rd problem in your book as well as the hand out assignments that will be distributed after the completion of each section. There will be 20 homework assignments worth a total of 5 points each. Points will be awarded based on two criteria: 3 points will be awarded for the student's attempt to complete the assignment and 1 point for each correct answer of 2 problems selected for grading from each assignment. So, 100 points, or 10% of your class grade, will come from homework.

Quizzes and Group work: There will 10 scheduled quizzes in accordance to the dates posted and an additional 10 Pop quizzes or group activities that will be given at random and unannounced. Quizzes will be generated from the previous two homework assignments. The questions that appear on quizzes will be similar in nature to your homework. During group work, you will be asked to work cooperatively with two, or three, of your classmates to solve a problem that I will assign to you. Your group will then present the solution and explain how your group solved the problem to the rest of the class. Grades from quizzes and group work are worth 5 points each for a total of 100 points, or 10% of your class grade.

Tests: There will be 4 midterm tests and a final in this class. See the attached handout for the dates. Please remember that **only under extreme emergency will I give a make up exam**. Documentation must be provided (e.g. police report, proof of hospitalization, etc.). Calculators are not allowed on any of the exams. Cheating is a very serious offence and anyone caught cheating will receive a grade of "F" for the course, and will be reported to the committee of academic honesty. I expect all problems to be worked out completely and legibly. Please also note that the final is cumulative. Each Midterm exam will be graded out of 150 points and will count for 15% of your class grade. The final will be worth 200 points and will count as 20% of your class grade.

Grade Breakdown:

			Grade Record				
Homework	10%	100 pts.	____	____	____	____	____
			____	____	____	____	____

			____	____	____	____	____		
			____	____	____	____	____	(5 each)	
Quizzes/Class projects	10%	100 pts.	____	____	____	____	____		
			____	____	____	____	____		
			____	____	____	____	____		
			____	____	____	____	____	(5 each)	
Midterm 1	15%	150 pts.	____						
Midterm 2	15%	150 pts.	____						
Midterm 3	15%	150 pts.	____						
Midterm 4	15%	150 pts.	____						
Final Exam	20%	200 pts.	____						
Total	100%	1000 pts.				Total _____			

If you need your course grade as soon as possible, please e-mail me at Richard.Ries@redwoods.edu**.**

Upon successful completion of the course, students should be able to:

1. Use properties of real numbers to solve linear equations, inequalities, and systems of linear equations.
2. Solve non-linear equations by factoring.
3. Draw and interpret graphs and solve problems graphically.
4. Use sound mathematical writing and appropriate use of symbolism in presenting solutions of mathematical exercises and applications.

College of the Redwoods – Tentative Calendar Fall 2012

Week#	Monday	Tuesday	Wednesday	Thursday	Fri	Sat
1	Aug 27 **Math Classes Begin** **Intro, Info Cards, Section 1.1**	Aug 28 Section 1.2	Aug 29 Section 1.3, 1.4	Aug 30 Section 1.5	Aug 31	
2	Sep 3 **Labor Day** (CR/HSU Holiday)	Sep 4 Step by Step Evaluate/Simplify Activity	Sep 5 Tentative Optimath Demo	Sep 6 Section 2.1	Sep 7 Last Drop Day w/Refund (drop by Sep 9 w/o '**W**')*	
3	Sep 10 **Census Day** Section 2.2	Sep 11 Section 2.3	Sep 12 Step by Step Solving Activity, Section 2.4	Sep 13 Section 2.4, 2.5	Sep 14	
4	Sep 17 Section 2.5	Sep 18 Section 2.6	Sep 19 **TLAP** Review	Sep 20 Opportunity 1	Sep 21	
5	Sep 24 Section 3.1 Applications of Graphing	Sep 25 Section 3.2 Applications of Graphing	Sep 26 Section 3.3 and Popcorn Lab	Sep 27 Slope as Speed	Sep 28 **Native American Day** ‡	
6	Oct 1 Section 3.4	Oct 2 Section 3.5	Oct 3 Section 3.6	Oct 4 Review	Oct 5	
7	Oct 8 Opportunity 2	Oct 9 Section 4.1	Oct 10 ***Powers of 10* Day** Section 4.2	Oct 11 **10/11/12** Section 4.3	Oct 12	**Oct 13 CMCFN Conf@ MMS** (Tent.)
8	Oct 15 Section 4.4	Oct 16 Section 4.4	Oct 17 Review	Oct 18 Opportunity 3	Oct 19	
9	Oct 22 Section 5.1	Oct 23 Section 5.2	Oct 24 ***2*^{10} Day** Section 5.3, 5.4	Oct 25 Section 5.5	Oct 26	
10	Oct 29 Section 5.6	Oct 30 Pascal's Triangle	Oct 31 **Halloween** Section 5.7	Nov 1 Section 6.1	Nov 2 Last Day for Student-Initiated Drop*	
11 DST ends Nov 4#	Nov 5 Section 6.2	Nov 6 ***Election Day*** Section 6.3	Nov 7 Section 6.4	Nov 8 Factoring Lab	Nov 9	
12	Nov 12 ***Veterans Day*** (CR/HSU Holiday)	Nov 13 Section 6.5	Nov 14 Section 6.6	Nov 15 Section 6.7	Nov 16	
13 HSU off 19-23	Nov 19 Review	Nov 20 Opportunity 4	Nov 21 Section 7.1, 7.2	Nov 22 Thanksgiving	Nov 23 (CR Holidays)	
14	Nov 26 Section 7.3	Nov 27 Section 7.4	Nov 28 Section 7.5	Nov 29 Section 8.1, 8.2	Nov 30	Dec 1 ***Putnam***

15	Dec 3 Section 8.3	Dec 4 Section 8.3, 8.4	Dec 5 Section 8.4	Dec 6 Review	Dec 7
CR & HSU FINALS WEEK	Dec 10 Final 10:45-12:45	Dec 11	Dec 12 ***12/12/12***	Dec 13	Dec 14

NOTE: *GRADES DUE December 21* *(Grades Available January 4, estimated)*

** Drop Deadlines here are for full-term classes only (from http://redwoods.edu/Admissions/documents/AdmissionsandRecordsCalendar2012F.pdf')*

*‡ If the district does not close on the **4th Friday in September**, "**Native American Day**," appropriate observances should be held in commemoration.*

 # 2011 Daylight Saving Time is in effect (in USA) from March 11, 2012 to Nov 4, 2012.

Math 380 Homework

Assigned	Due	Section and Exercises
		1.1: 1-4, 13-16, 25-28, 33-36
		1.2: 1-3, 8, 11-13, 17-23, 28, 29, 39, 40, 59-61, 65, 66, 75, 76
		1.3: 1-3, 7-9, 13, 14, 19, 22, 25-27, 31-34, 39, 40, 71-74
		1.4: 33-40, 49-54, 63-66
		1.5: 27-30, 35, 36, 39-48, 59-61
		2.1: 1-3, 19-22, 33-37, 45-50
		2.2: 1-8, 17-20, 25, 26, 35-39, 45-50
		2.3: 4-6, 7-12, 19-25
		2.4: 3-5, 19-22, 31-36
		2.5: 1, 4, 5, 10, 11, 14, 15, 18, 21, 29, 30, 33, 34
		2.6: 6, 7, 9, 12, 15, 20, 22, 23, 26, 27, 40, 41, 45-48, 66-68, 75-80
		3.1: 1, 2, 11, 12, 20, 21, 24, 33, 36
		3.2: 3, 6, 12, 14, 17, 18, 22, 26-28
		3.3: 1-8, 20, 21, 28, 29
		3.4: 2, 3, 7, 8, 21, 24

		3.5: 1-3, 7-9, 14, 15, 19-21, 25, 26
		3.6: 1-6, 17-22, 23-26, 31, 32
		4.1: 1-4, 19-22, 25-27
		4.2: 5, 6, 11, 12, 16, 17, 29, 30, 37-40
		4.3: 1-3, 9-11, 17-19, 25, 26, 35-38
		4.4: 6, 8, 14, 16
		5.1: 1, 2, 7, 8, 11, 14, 19, 20, 23, 26, 31, 32