Syllabus for: Elementary Algebra				
Semester & Year:	Spring 2013			
Course ID and Section Number:	MATH 380 – M2846 (032846)			
Number of Credits/Units:	5			
Day/Time:	M, W, F from 12:30 – 2:20 PM			
Location:	Room 114			
Instructor's Name:	Diana Dominguez			
Contact Information:	Office location and hours: Room 130 by appointment			
	Email: diana-dominguez@redwoods.edu			
Course Description (catalog description as described in course outline): A comprehensive review of				
arithmetic involving whole numbers, fractions, decimals, and signed numbers. Students will solve problems				
involving ratios proportions percents and geometry Basic algebra concepts and techniques such as				

involving ratios, proportions, percents and geometry. Basic algebra concepts and techniques such as variables, simplifying expressions, solving equations will also be introduced. Problem solving, estimation and the communication of mathematical ideas are an integral part of the course. Use of a scientific calculator will be introduced.

Student Learning Outcomes (as described in course outline):

- 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.

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: <u>http://www.redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%2002-07-2012.pdf</u>

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

Textbook:

Online at <u>http://mathrev.redwoods.edu/ElemAlgText/</u> Graphing calculator TI 83/ TI 84 required

Student Learning Objectives: 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.

Homework provides you with the practice necessary to reinforce the skills and processes discussed in class. Exam questions will be chosen to be similar in difficulty as those assigned from the homework. Therefore, it is to your advantage to complete every assignment. Homework will be collected every Monday at the beginning of class from the previous week's material. No makeup or late homework will be accepted. See the attached schedule of homework. Each week's homework packet will be graded out of 10 points. Homework will be spot checked for completeness and one randomly selected problem assigned from each section will be checked for accuracy; if improperly done, one point will be deducted from the homework packets value. Please write each original problem and show all work for full credit.

Quizzes: In class quizzes will be given throughout the semester. There is no way to predict when a quiz will be given, therefore it is to your advantage to be in attendance the entire class time. No make-up quizzes will be given; the lowest quiz score will be dropped.

Classwork: During group work, you will be asked to work cooperatively with two, or three, of your classmates to solve a problem(s) that I will assign to you. No make-up classwork is available, however the lowest classwork score will be dropped.

Tests: There will be 4 midterm tests and a final in this class. See the attached handout for the dates. Please remember that <u>only under extreme emergency will I give a make up exam</u>. 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.

Grade Breakdown:		I will be using the plus/minus grade system. The break down is as follows		
Homework Quizzes	15% 10%	A 93-100% B 83-86.9%	A- 90-92.9% B- 80-82.9%	B+ 87-89.9% C+ 77-79.9%
Class projects	10%	C 70-76.9%	D 60-69.9%	F 0-59.9%
Midterm 1	10%			
Midterm 2	10%			
Midterm 3	10%			
Midterm 4	10%			
Final Exam	25%			
Total	100%			

Grades will be updated after each exam. Please see me for your results.

Attendance: Attendance is essential for success, so please come, I want to see you!! In-class activities and quizzes cannot made-up, you can only earn your credit if you attend.

Mathematics Department Policy Regarding "Faculty Withdrawal" of Students after Census Day: 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. Please do not assume that I have dropped you. Students who choose not to continue in the course are responsible for dropping. Failure to officially drop the course may result in an "F".

How to be successful in this course:

Take Responsibility : Your success in this course is dependent upon your choices. I recommend that you attend class every day and keep up with the homework; it is up to you to make this happen. **Getting Assistance:** If you're not understanding a concept, ask for help immediately. Don't' wait until the day before the exam. Your helpers should be coaches, not crutches. When you go to office hours, a study group or the Lab, bring your book, notes, and have a specific list of questions prepared in advance. You should run the session as much as possible. Poor question: "how do you do number 23?" Better question: "I'm having trouble setting up number 23, can you help me?" or "I tried number 23 but am not getting the correct answer. Can you help me find my mistake?" **Make the most of your time:** If you are done with your class work or quiz early, get a head start on your homework, or work on a summary or study guide for the lesson. When doing homework write out complete solutions. Don't just scribble a few lines and write down an answer. The more time you take doing your homework, the less time will be needed going back to review when you study for an exam.

There is a lot you can do to make this a successful experience. Let me know if you would like to hear more tips or suggestions.

Disabilities: If you are a student with a disability or if you think that you could benefit from disability-related services, you may either speak to me or you may contact our Disabled Student Programs and Services Office on campus.

Cheating: Cheating is a very serious offense and violates the Student Academic Integrity Code. If you are caught cheating you will receive a zero for that exam or assignment. The offense will be reported. A second instance of academic dishonesty may result in your being dropped from the course.

Math 380 Homework

	3.4 1-23 odd	6.2 1-57 odd
1.1 1-51 eoo	3.5 1-25 odd	6.3 1-43 eoo
1.2 1-67 eoo, 75	3.6 1-33 odd	6.4 1-45 eoo
1.3 1-71 eoo	4.1 1-29 eoo	6.5 1-83 eoo
1.4 1-67 eoo	4.2 1-47 eoo	6.6 1-59 eoo
1.5 1-61 odd	4.3 1-39 odd	6.7 1-21 eoo
2.1 1-49 eoo	4.4 1-15 odd	7.1 1-75 eoo
2.2 1-55 eoo	5.1 1-45 odd	7.2 1-41 odd
2.3 1-31 eoo	5.2 1-59 eoo	7.3 1-47 odd
2.4 1-37 eoo	5.3 1-15 odd	7.4 1-25 eoo
2.5 1-33 eoo	5.4 1-37 odd	7.5 1-29 eoo
2.6 1-83 eoo	5.5 1-57 odd	8.1 1-41 eoo
3.1 1-25 odd	5.6 1-55 odd	8.2 1-39 eoo
3.2 1-25 eoo	5.7 1-77 eoo	8.3 1-55 odd
3.3 1-29 odd	6.1 1-75 eoo	8.4 1-39 eoo

Note: Odd means 1, 3, 5, 7, While eoo (every other odd) means 1, 5, 9, 13, ...

Monday	Wednesday	Friday	
1/14 Intro, Syllabus, 1.1, 1.2 An Intro to Integers, Order of Ops	1/16 1.3, 1.4 The Rational Numbers, Decimal Notation	1/18 1.5 Algebraic Expressions Summary of Chapter 1	
1/21 No Class	1/23 2.1, 2.2 Solving Equations	1/25 2.3, 2.4 Clearing Fractions and Decimals, Formulas	
1/28 2.5 Applications	1/30 2.6 Inequalities and Review	2/1 Exam Chapter 1 and 2	
2/4 3.1, 3.2 Graphing Equations	2/6 3.3 Rates and Slope	2/8 3.4 Slope-Intercept Form of a Line	
2/11 3.5 Point slope form of a Line	2/13 3.6 Standard Form of a Line	2/15 No Class	
2/18 No Class	2/20 4.1, 4.2 Solving Systems by Graphing and Substitution	2/22 4.3 Solving Systems by Elimination	
2/25 4.4 Applications of Linear Systems	2/27 Review	3/1 Exam Chapter 3, 4	
3/4 5.1 Functions	3/6 5.2, 5.3 Polynomials and some Application	3/8 5.4 Adding and Subtracting Polynomials	
3/11 Spring Break	3/13 Spring Break	3/15 Spring Break	
3/18 5.5 Laws of Exponents	3/20 5.6, 5.7 Multiplying Polynomials and Special Products	3/22 6.1 The Greatest Common Factor	
3/25 6.2 Solving Nonlinear Equations	3/27 6.3, 6.4 Factoring Trinomials	3/29 6.5 Factoring Special Forms	
4/1 6.6 Factoring Strategy	4/3 6.7 Applications of Factoring	4/5 Review	
4/8 Exam Chapter 5 and 6	4/10 7.1 Negative Exponents	4/12 7.2 Scientific Notation	
4/15 7.3 Simplifying Rational Expressions	4/17 7.4, 7.5 Solving Rational Equations, Direct and Inverse Variation	4/19 8.1, 8.2 Introduction to Radical Notation, Simplifying Radical Exp.	
4/22 8.3 Completing the Square	4/24 8.4 The Quadratic Formula	4/26 Review	
4/29 Exam Chapter 7 and 8	5/1 Review for Final	5/3 Review for Final	
5/6 Finals Week	5/8 Finals Week	5/10 Finals Week	

This schedule is subject to modification and revision depending on the needs of the course. Announcements of changes will be made in class.