Syllabus for: Elementary Algebra Review

Semester & Year:	Summer 2013
Course ID and Section Number:	MATH 302 (033745)
Number of Credits/Units:	1
Day/Time:	M, T, W, Th / 1:00p.m. – 3:05p.m.
Location:	Room 114
Instructor's Name:	Richard Ries
Contact Information:	Office location and hours: Room 104B M,T,W,Th 11:30a.m. – 1:00p.m. Phone: 707-962-2681 Email: richard-ries@redwoods.edu

Course Description (catalog description as described in course outline): A review course covering material from Math 380 (Elementary Algebra). This review course is designed for students preparing to place into Math 120 (Intermediate Algebra). Content will include: review of inear equations and linear inequalities in one variable; review of linear equations in two variables; review of systems of linear equations ; review of integer exponents and polynomials; review of factoring; and review of radical expressions and equations.

Student Learning Outcomes (as described in course outline):

1) Demonstrate the skills required to pass the placement exam which will allow the student to enroll in the proper level of mathematics. This will be assessed at the end of each module. These assessments will include: solving linear equations, graphing linear equations, polynomials and factoring and, simplifying radical expressions.

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/AP%205500%20Conduct%20Code%20final%2002-07-2012.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.

ATTENDANCE: 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. For our short courses this constitutes 1/8 of the class. It is important that you attend class regularly.

PREREQUISITES: NONE

Textbook, Workbook and Computer programs:

Basic Fast Track by Bill Coe and Lisa Lovejoy (available in class at no expense to student)
Optimath (available in class at no expense to student)

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 necessary for success in future math classes and prepare you for other future academic endeavors. 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 exercises. The more you practice, the better you will become. Other successful learning strategies include forming study groups and outlining reading materials. There is a high coorelation between students that utilize our math labs and those who do well in math classes. If you are having difficulty with any topic, please come see me early to get you back on track as soon as possible.

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.

Homework: will be assigned every class meeting, and is due at the beginning of the next class meeting.

Late homework will *not* be accepted! If you can't get the assignment in on time make sure you know the material because you will still be held responsible for the information.

Quizzes: Quizzes will be given on material covered in class and in the homework. Make up quizzes will not be given! We may be using the OPTIMATH testing system for some of the homework and quizzes.

Exams: We will have Two exams in this short session. Let me know in advance if you are going to miss an exam. Make-ups will only be given at *my* discretion.

Attendance: I reserve the right to drop from the course any student that has more than three unexcused absences. Reference: Title 5, Sections 55024 and 58004. Approved: 05/01/2012

******* I expect you to attend every class meeting on time and ready to learn. If you are absent, continue with the homework schedule. ********

GRADE SYSTEM: Pass/No Pass will be awarded upon based on class performance, Homework, quizzes, and Exams. In order to receive a Pass (P) for your grade you must successfully complete both exams for this course.

This information is subject to change depending on class circumstances.

MATH 302 Weekly Schedule

NOTE: This schedule is approximate and may be modified as the semester progresses.

Monday June 3

Review of Pre algebra and number systems

Module 1: Linear Equations and Inequalities in One Variable

1. **Solving Equations**

   A review of solving linear equations and checking their solutions.

2. **Solving Inequalities**

   A review of solving linear inequalities in one variable, presenting their solutions in interval notation, and graphing their solutions on the number line.

3. **Solving Formulae**

   A review of solving formulae for a specified variable.

Tuesday June 4

Review of Pre-Algebra

Module 2: Linear Equations in Two Variables

4. **Graphing**

   A review of graphing linear equations in two variables including: vertical, horizontal, parallel and perpendicular lines.

5. **Slope**

   A review of the slope and the equation of a line given a graph.

6. **Equations of a Line**

A review of how to write the equation of a line given two points on that line.

Wednesday June 5

Module 3: Systems of Linear Equations

7. **Solving Graphically**

A review of solving a system of two equations with two unknowns graphically.

8. **Solving by Elimination and Substitution**

A review of solving a system of two equations with two unknowns using elimination or substitution.

Thursday June 6

Review of Fractions and rational numbers

9. **Applications**

A review of how to solve real world problems using systems of equations.

Monday June 10

Exam 1

Continue review of number systems

Module 4: Integer Exponents and Polynomials

10. Polynomial Identification and Properties of Exponents

A review of the properties and characteristics identifying polynomials and the properties of exponents.

11. Polynomial Arithmetic

A review of polynomial arithmetic (addition, subtraction, and multiplication) and dividing a polynomial by a monomial.

12. Evaluating Polynomial Expressions and Scientific Notation

A review of how to evaluate polynomial expressions for specific values of the variable(s) and scientific notation.

Tuesday June 11

Module 5: Factoring

13. **Common Factors**

A review of how to determine common factors and factoring by grouping.

14. **Special Products**

A review of the special products and how to factor them.

15. **Solving Equations**

A review of solving polynomial equations by factoring.

Wednesday June 12

16. **Square Roots**

A review of simplifying radical expressions with square roots.

17. **Factoring**

A review of simplifying radical expressions by factoring out perfect square factors.

18. **Pythagorean Theorem**

A review of the Pythagorean Theorem.

Thursday June 13

Final review

Exam 2