Syllabus for: Intermediate Algebra Review

Semester & Year:	Summer 2013
Course ID and Section Number:	MATH 303 (034615)
Number of Credits/Units:	1
Day/Time:	M, T, W, Th / 3:3p.m. – 5:35p.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 120 (Elementary Algebra). This review course is designed for students preparing to place into a transfer level mathematics course. Content will include: review of linear equations and inequalities in one variable; review of logic; review of linear functions; review of quadratic and polynomial functions; review of rational functions; review of exponential and lo

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: linear equations and inequalities in one variable; logic; functions; quadratic and polynomial functions; review of rational functions; exponential and logarithmic functions; radical functions.

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 303 Weekly Schedule

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

Monday July 8

Review of elementary algebra and number systems

Module 1: Linear Equations and Inequalities in One Variable; Logic

1. **Solving Equations and Inequalities**

   A review of solving linear equations and inequalities both algebraically and graphically.

2. **Logic Notation**

   A review of correctly using the conjunctions "and" and "or" to describe solution sets using both set builder and interval notation.

3. **Solving Compound Linear Inequalities**

   A review of solving compound linear inequalities.

Tuesday July 9

Module 2: Linear Functions

1. **Equations of Lines**

   A review of finding the equation of a line in slope-intercept, point-slope, and standard form given the graph or two points.

2. **Graphing Lines**

   A review of graphing linear functions; including vertical, horizontal, parallel and perpendicular lines.

   3. **Domain and Range**

Wednesday July 10

Module 3: Quadratic and Polynomial Functions

1. **Graphing**

   A review of determining domain, range, vertex, and axis of symmetry of a quadratic function and drawing its graph.

2. **Zeros and End Behavior**

   A review of determining the zeros and end behavior of polynomial functions and sketching the graph.

3. **Applications**

   A review of finding maxima and minima of quadratic functions and solving optimization problems.

Thursday July 12

Review of Fractions and rational numbers

1. **Applications**

   A continued review of finding maxima and minima of quadratic functions and solving optimization problems.

Monday July 15

Exam 1

Continue review of number systems

Module 4: Rational Functions

1. **Graphing**

   A review of determining the domain, vertical and horizontal asymptotes, and zeros of a given rational function, and sketching the graph.

2. **Arithmetic of Rational Expressions**

   A review of arithmetic operations (addition, subtraction, multiplication, and division) on rational expressions.

3. **Solving Equations**

A review of solving rational equations.

Tuesday July 16

Module 5: Radical Functions

1. **Radicals and Rational Exponents and Expressions**

A review of simplifying expressions involving radical notation and rational exponents.

2. **Domain, Range, Intercepts, and Evaluation**

A review of determining the domain and range of the square root function.

3. **Solving Equations**

A review of solving equations containing radical expressions.

Wednesday July 17

Module 6: Exponential and Logarithmic Functions

1. **Inverse Functions**

A review of finding inverse functions, sketching their graphs, and composing two functions.

2. **Graphing**

A review of determining the domain, range, and asymptotes of an exponential or logarithmic function and sketching the graph.

3. **Evaluating and Solving Equations**

A review of evaluating logarithms and using logarithms to solve exponential equations.

Thursday June 13

Final review

Exam 2