

| <b>Syllabus for: Intermediate Algebra</b>  |  |
|--|--|
| <b>Semester &amp; Year:</b>  | Fall 2012  |
| <b>Course ID and Section Number:</b>   | MATH 120 – M2454 (032454)  |
| <b>Number of Credits/Units:</b>  | 4  |
| <b>Day/Time:</b>   | T, TH 1:00 p.m. – 3:05 p.m.  |
| <b>Location:</b>   | Room 114, Mendocino Coast Education Center   |
| <b>Instructor's Name:</b>  | Richard Ries   |
| <b>Contact Information:</b>  | Office location and hours: Room 102, M-TH, 8 – 10 a.m.<br>Phone: 707-962-2681<br>Email: <a href="mailto:richard-ries@redwoods.edu">richard-ries@redwoods.edu</a> |
| <b>Course Description (catalog description as described in course outline):</b>  |  |
| 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.   |  |
| <b>Student Learning Outcomes (as described in course outline) :</b>  |  |
| <ol style="list-style-type: none"> <li>1. Evaluate and interpret general functions symbolically, numerically, and graphically.</li> <li>2. Produce an accurate graph of each function type introduced in the course, identifying and plotting all salient features.</li> <li>3. Demonstrate appropriate use of technology in analyzing the behavior of functions presented in the course.</li> <li>4. Use mathematical models to analyze and interpret real-world situations.</li> <li>5. Use sound mathematical writing and appropriate use of symbolism in presenting solutions of mathematical exercises and applications.</li> </ol>                   |  |
| <b>Special accommodations:</b> 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. |  |
| <b>Academic Misconduct:</b> 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:<br><a href="http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%202-07-2012.pdf">http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%202-07-2012.pdf</a>   |  |
| 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 120 Syllabus**

**Fall 2012**

**Instructor:** Richard Ries

**Section #:** 032454

**Unit Value:** 4

**Office Hours:** M,T,W,Th 8:00a.m -10:00a.m.

**Office Location:** 102

**E-mail:** [Richard-Ries@redwoods.edu](mailto:Richard-Ries@redwoods.edu)

**Class Days:** T, Th

**Class time:** 1:00p.m. – 3:05 p.m.

**Class location:** 114

**Phone:** 707-962-2681

**Textbooks**

Students will be given a **free** Intermediate Algebra textbook on the first day of classes in the form of a CD. The book is written by the mathematics department and will be given free of charge to all students in intermediate algebra in the spring semester, 2009. When you load the CD into your computer, double-click the file **start.html** to view a table of contents.

The textbook files on the CD are in PDF format. You will need to **download** a free copy of the Adobe Reader to read them.

The Intermediate Algebra textbook is also available online at:

**<http://msenux.redwoods.edu/IntAlgText/>**

The online files are identical to the files on the CD and include:

1. A file for each chapter, which includes exercises and short answers.
2. Separate files for each section in each chapter.
3. Separate files for exercises and short answers for each section.
4. Separate files for exercises and complete solutions for each section.
5. A single file that contains all exercises and short answers for each chapter.
6. A single file that contains all exercises and full solutions for each chapter.

This is a third edition of the text, but errors will still exist.

**Student Learning Outcomes:** Students should take some time to read the course learning outcomes on the official course outline, listed here for convenience.

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.

#### *Prerequisite Classes*

Elementary Algebra (formerly Math 105 or 106, now Math 380 (or equivalent)) with a grade of "C" or better or appropriate score on the math placement exam.

**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 algebra and prepare you for other future math classes, if your major requires it. Many mistakes that cost students dearly in terms of their grades in more advanced courses are 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](mailto:Richard-Ries@redwoods.edu). Catching me after class is best. With the right attitude, math can be fun<sup>2</sup>!

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**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.

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**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.

**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 several exams plus one final exam this semester. Let me know in advance if you are going to miss an exam. Make-ups will only be given at *my* discretion. Do ***not*** miss an exam! The cumulative final exam is scheduled during finals week December 10 - December 14. Do NOT plan on leaving town until after your last final exam.

**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. \*\*\*\*\*

**Grading Weights:**

|                             |     |
|-----------------------------|-----|
| Homework/Quizzes/Activities | 20% |
| Midterm Exams               | 65% |
| Final Exam                  | 15% |

**Grades will be assigned as follows:**

|           |   |
|-----------|---|
| 90-100%   | A |
| 80-89%    | B |
| 70-79%    | C |
| 60-69%    | D |
| Below 60% | F |

*This information is subject to change depending on class circumstances.*

**MATH 120 Weekly Schedule**

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

| <b>Week</b> | <b>Topics and Sections</b>                               |
|-------------|--|
| 1           | Section 1.1<br>Section 1.2<br>Section 1.3<br>Section 1.4 |
| 2           | Section 2.1<br>Section 2.2<br>Section 2.3<br>Section 2.4 |

|   |  |
|---|--|
| 3 | Section 2.5<br>Section 2.6<br>Section 3.1<br>Section 3.2 |
| 4 | Review for Exam 1<br>Exam 1                              |
| 5 | Section 5.1<br>Section 5.2<br>Section 5.3<br>Section 5.4 |
| 6 | Section 5.5<br>Section 5.6                               |
| 7 | Section 6.1<br>Section 6.2<br>Section 6.3                |
| 8 | Section 7.1<br>Section 7.2                               |
| 9 | Section 7.3<br>Section 7.4                               |

| <b>Week</b> | <b>Topics</b>   |
|-------------|---|
| 10          | Review for Exam 2<br>Exam 2<br><br>Section 7.5<br>Section 7.6<br>Section 7.7<br>Section 7.8 |
| 11          | Section 8.1<br>Section 8.2<br>Section 8.3<br>Section 8.4                                    |
| 12          | Review for Exam 3<br>Exam 3   |
| 13          | Section 8.5<br>Section 8.6<br>Section 8.7<br>Section 9.1<br>Section 9.2                     |
| 14          | Section 9.4<br>Section 9.5  |

| <b>Week</b> | <b>Topics</b>                                 |
|-------------|---|
| 15          | Continue section 9.5<br>Review for Final Exam |
| Finals Week | Review for Final Exam<br>Final Exam           |

**Homework assignments: TBA**