| Syllabus for Intermediate Algebra (v1) | |
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| **Semester & Year:** | Fall Semester Aug 22 – Dec 12, 2015 |
| **Course ID and Section Number:** | MATH 120 E7987 |
| **Number of Credits/Units:** | 4 |
| **Day/Time:**<br>**Location:** | MTWTh 02:50PM - 03:55PM<br>Sciences Bldg. SC 210 |
| **Instructor's Name:** | Associate Faculty Carter |
| **Contact Information:** | robin-carter@redwoods.edu |

**Course Description:** A course in which functions are investigated graphically, numerically, symbolically and verbally. Linear, quadratic, polynomial, rational, radical, exponential, and logarithmic equations and functions are explored. Technology is integrated into all aspects of the course.
Prerequisite: MATH380 Elementary Algebra (or equivalent) with a grade of "C" or better, or appropriate score on the math placement exam.

**Student Learning Outcomes:**

1. Evaluate and interpret general functions symbolically, numerically, and graphically.
    1. Produce an accurate graph of each function type introduced in the course, identifying and plotting all salient features.
    2. Demonstrate appropriate use of technology in analyzing the behavior of functions presented in the course.
    3. Use mathematical models to analyze and interpret real-world situations.
    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 accommodations document to me as promptly as possible so that necessary arrangements can 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.

**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.

**OBJECTIVE**: This algebra class is the third in the four part algebra series. It has an Elementary Algebra prerequisite (MTH 380) and is designed to prepare you for College Algebra or any of the Associates Degree level mathematics courses. Our primary goal will be to learn more of the language called algebra.

Get ready! The topics we look at include linear functions, absolute values equations and inequalities, quadratic functions, polynomial and rational functions, radical functions, composite and inverse functions, exponential and logarithmic functions.

Mathematics is a powerful language that transcends culture and time. Along with music, it is one of the two universal languages. Learning algebra is a lesson in logic. Writing algebra symbolically recreates the form of computer programming. Data analysis using algebra can yield insights into science and technology, while graphing algebra equations can communicate those insights.

MATH 120 Math Department Resource Page
http://msenux.redwoods.edu/mathdept/courses/math120.php

**MATERIALS**: The Intermediate Algebra textbook is available free online at:
http://msenux.redwoods.edu/IntAlgText/

You will need to obtain the following for this class:

- A scientific calculator with a graphing package. The TI-83+ or TI-84 are HIGHLY recommended. If you are going to buy a new calculator, buy a TI-84. You can buy a used one at the pawn shope, or, you can also rent one for the semester for $20.
- Graph paper

**CLASSROOM**: It is expected that everyone involved in this class, teacher and students alike, will act in a manner conducive to providing a comfortable environment for learning, a classroom where students feel free to ask and answer questions without fear of embarrassment or ridicule. It is important to stay focused when class is in session. If you need to leave the classroom, or, you arrive late, courtesy requires that you do so as quietly as possible, without disturbing discussion or lecture. Excessive lateness, or leaving early, may be a cause for grade reduction. If you have any personal difficulties with learning environment in the classroom, please let me know and we can discuss them. Cell phones should also be turned off during class time.

**HOMEWORK**: The students who do well in mathematics courses are ones who are consistently practicing their homework problems. Learn this powerful tool of business and science now, and you will reap years of success later. But like anything, it takes practice. There is no special skill needed to learn math, except patience with yourself to try and try again, to see that pattern that one only sees through repeated practice.

Your homework assignments are online at Optimath. You can do each assignment as many times as you like before the due date. I will record only your best score available after that.

There will also be written work each week to be handed in during class. These will be given to your instructor in class for grading.

Suggested textbook exercises should be done for practice, checking your own answers in the textbook.

**TESTS**: We will have in-class chapter tests and a cumulative final exam during the semester. Questions will be based on homework assignments, quizzes and examples from class. Whatever your lowest test score, that will be replaced with the Final Exam score, if the Final Exam score is better.

There are no make-up tests. If you are sick, or go out of town, and you cannot take a test, we will replace your missing test score with the Final Exam score, which will most certainly be better.

**ATTENDANCE**: In algebra, each new concept is dependent upon a previous set of concepts. Thus, to really succeed in a math class, you need to attend every class meeting, because missing one class will surely cause a hole in the sequence. But if you have to miss class, make arrangements with a fellow student beforehand to get any notes or materials covered that day. Remember, you are responsible to learn the material for each class period, even if you can't attend, but active class participation will contribute positively to your course grade, and increase your skill.

Check the course website on MyCR to download homework assignments, see grades, and keep up with class lecture materials.

**GRADING**: Grades are posted on the class MyCR site and will be determined by the following percentages:

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| Assignments/Quizzes | 40% |
| Chapter Tests | 45% |
| Cumulative Final Exam | 15% |

In assigning course letter grades, the AP Slide will apply: Attitude and Participation will determine if borderline grades slide up or slide down.

**GETTING HELP**: There are free resources available for extra help. First and foremost, see me about any issues you have with the course. Don't be shy about asking for help. You can't afford to waste time!

Excellent tutors are located in the Academic Support Center located in the library. You need to check in at the ASC desk and make an appointment to meet with a tutor.

Forming a study group with other students in your class is a great way to learn math. Helping each other is important as when you verbalize the process, you really know whether you know it or not. This course requires two hours of study for every hour of class. That's a lot of study!

**MATH LAB:** You can also sign-up for Math Lab. You may sign up for 0.5 - 1.0 units of credit. The Math Lab is located in the Academic Support Center in the library and is a great place to study or do your homework. You can receive help from one of the instructors on your homework, study for exams, or use computers to complete OPTIMATH assignments.

Math Lab computers are configured for OPTIMATH, making math practice exercises easy to complete. If there is a problem, math lab staff can help you. Additional information about configuring your own computer to complete OPTIMATH assignments is given in another file here.