

Syllabus for: Math 120 Intermediate Algebra

| | |
|--------------------------------------|---|
| Semester & Year: | Summer 2014 |
| Course ID and Section Number: | Math 120 – E5790 |
| Number of Credits/Units: | 4 |
| Day/Time: Location: | MTWTh 9-10:30 in SC210 |
| Instructor's Name: | Michelle Moreno |
| Contact Information: | Email: moreno.cr.math@gmail.com |

Course Description (catalog description as described in course outline):

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.

Student Learning Outcomes (as described in course outline) :

1. Evaluate and interpret general functions symbolically, numerically, and graphically.
2. Produce an accurate graph of each function type introduced in the course, identifying and plotting all salient features.
3. Demonstrate appropriate use of technology in analyzing the behavior of functions presented in the course.
4. Use mathematical models to analyze and interpret real-world situations.
5. 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 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/Ap5500.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.

Math 120 - Intermediate Algebra
Summer 2014
Section E5790

Instructor: Michelle Moreno
Email: moreno.cr.math@gmail.com
Time & Location: MTWTh 9-10:30 in SC 210

TOPICS: Functions are investigated graphically, numerically, symbolically and verbally in real-world settings. Linear, quadratic, absolute value, polynomial, rational, radical, exponential, and logarithmic equations and functions are explored. Technology is integrated into all aspects of the course.

At the end of this course students should be able to do the following:

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.

These seven items are known as the student learning outcomes. For more details go to <http://msenux.redwoods.edu/mathdept/outlines/current/math120.php>

PREREQUISITES: Math 380 (Elementary Algebra) with a grade of "C" or better, or satisfactory performance on the math assessment exam. Prerequisites will be enforced.

TEXTBOOK: The textbook and solutions manual are available online at <http://msenux.redwoods.edu/IntAlgText>

- If you are unable to access the textbook online, I can provide you with a free CD containing the textbook and solutions manual.
- If you WANT a printed version of the textbook you can obtain it in the following ways: The printed version comes in two parts. Each part can be purchased from the CR bookstore or directly from *lulu.com*:
 - purchase part I of the textbook from lulu.com (\$18 plus shipping)
 - purchase part II of the textbook from lulu.com (\$15 plus shipping)

REQUIRED MATERIALS:

- A Graphing Calculator: a TI-83/84 is recommended
- Access to an internet connected computer
- Graph Paper
- Lots of Pencils
- Colored Pencils

HOMEWORK ASSIGNMENTS:

Homework assignments will be due at the beginning of most class sessions. The homework is divided into two parts, problems to turn in and problems that I recommend that you do to master your skills. Students who do both problem sets have a greater chance of success. You should keep a separate notebook for recommended practice problems - and do them neatly.

Homework must be done neatly and clearly, showing all work. Failure to do so will result in no credit. If I cannot follow your logic you will receive no credit. All homework problems must be done on **graph paper only**. You must **label** your paper with your **first AND last name, Math 120, and textbook section number** (as shown below). Failure to do so will result in no credit.

First and Last Name
Math 120
Section 1.1

Homework guidelines must be followed. This guide should help you: <http://msemac.redwoods.edu/~mmoreno/HWguidelines.html>

I will also show you in class how your steps should be written out so that others can understand how you arrived at your solution. Being able to clearly communicate your work is just as important as being able to do the work.

QUIZZES:

You can expect to occasionally be given a quiz covering any material already discussed in class up to that point. Quizzes may be given with or without notice. Quizzes may be given in class or as a take-home using our Optimath online system. **Quizzes cannot be made-up** regardless of the reason for your absence.

EXAMS:

There will be a midterm exam and a final exam as follows:

Midterm: Chapters 1, 2, 3, 5 (tentatively Thursday June 25)

Final Exam: Chapters 1-3, 5-9 (Thursday July 31 ONLY)

Exams generally cannot be made-up!

FINAL EXAM: Chapters 1-3, 5-9 on **Thursday July 31 9:00-10:30 AM**. The final will **ONLY** be given at this time.

GRADING:

| | | | | | | | |
|------------|-----|----------|----|----------|----|----------|----|
| Homework | 20% | 93-100% | A | 90-92.9% | A- | | |
| Quizzes | 20% | 87-89.9% | B+ | 83-86.9% | B | 80-82.9% | B- |
| Midterm | 30% | 77-79.9% | C+ | 70-79.9% | C | | |
| Final Exam | 30% | 60-69.9% | D | < 60% | F | | |

Rounding up to the next grade will be considered for each student and the decision will be based on effort, attitude, and attendance. In other words, don't ask!

TIME: Like all math classes, this class will require a great deal of your time. Make sure that you stay organized, make a schedule, and stick to the deadlines.

CLASSROOM CONDUCT: I very much believe in the socratic method of learning, that is your participation is necessary in order for you to learn. With that said, it is imperative that we have an understanding of mutual respect. Students should feel free to answer questions without being ridiculed. Disrespectful behavior toward your professor and/or classmates will not be tolerated.

FACULTY INITIATED DROP:

1. Students missing the first day of class, Tuesday **May 27, 2014**, **WILL** be dropped that day.
2. Students displaying poor attendance during census **MAY** be dropped. If your intention is to drop you should do so - do not expect me to do it for you.
3. It is the policy of the College of the Redwoods Math Department to exercise a "Faculty Withdrawal" for any student who has missed more than 15% of the class meeting time (prior to the drop deadline of **July 8, 2014**), due to the severely diminished likelihood of a successful outcome in the course. Again, I may or may not exercise this option and so if your intention is to withdraw from the course you should do so yourself - do not expect me to do it for you.

STUDENT INITIATED DROP:

June 8: This is the last day to drop this course without receiving a W.

July 8: This is the last day to drop this course. You will receive a W on your transcript and it will count as an attempt. **If you have already taken this course you should talk to your professor and/or your counselor before dropping.**

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/Ap5500.pdf>

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.