

Syllabus for: Math 120 — Intermediate Algebra	
Semester & Year:	Spring 2016
Course ID and Section Number:	MATH-120-E9082
Number of Credits/Units:	4
Day/Time:	MW 6:05Pm-8:10pm
Location:	SC 210
Instructor's Name:	Dr. Ken Owens
Contact Information:	Phone: (707) 826-4249 Email: ken-owens@redwoods.edu
Course Description (catalog description as described in the 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. <i>Note: graphing calculator/application required. TI-83 or TI-84 recommended.</i>	
Student Learning Outcomes (as described in course outline):	
<ol style="list-style-type: none"> 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://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.	
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MATH-120, INTERMEDIATE ALGEBRA
COLLEGE OF THE REDWOODS

Instructor: Dr. Ken Owens

Email: ken-owens@redwoods.edu

Textbook: *Intermediate Algebra* by the College of the Redwoods mathematics department. Online at www.msenux2.redwoods.edu/IntAlgText

Prerequisite: Grade of “C” or better in Math 380, or passing score on the appropriate assessment exam.

Office Hrs: After Class 8:20-9pm

1. Course Description

This course will cover the following topics

- i.* review of basic ideas in algebra
- ii.* functions
- iii.* linear functions
- iv.* absolute value functions
- v.* quadratic functions
- vi.* polynomial functions
- vii.* rational functions
- viii.* exponential and logarithmic functions
- ix.* radical functions

Generally speaking, we will discuss the above topics, emphasizing definitions, coherence, and precision. We will also discuss basic ideas in Number Theory as appropriate if time permits.

2. Expectations

Homework: Homework in this course will be done online with Optimath. You will receive one assignment per week and will have one week to complete the assignment. You can resubmit Optimath assignments until the due date if you missed some questions. **In my experience, students that earn the mark of “A” typically have at least $\approx 90\%$ of the homework points at the end of the semester. Moral: do your homework.**

Examinations: There will be two mid-term exams and a final exam. No make-up exams will be given. In extreme cases, with substantial evidence, if you miss an exam I can base the exam portion of your grade on the exams you did take. You must inform me of your absence as soon as you know.

3. Grades

In order to pass this class, you must pass the final. The figures below are not necessarily fixed—in case exams are difficult and scores are low, fewer points would be required for A, B, etc.

- A = *excellent*. This grade requires a lot of study time. You did excellent work throughout the semester and had an excellent understanding of the course material. 90%+
- B = *very good*. Your understanding was good but there were small gaps. 80 – 89%
- C = *passing*. Your understanding was okay but there were significant gaps. 70 – 79%
- D = *almost passing*. Your understanding of the course material was not enough to pass the class. 60 – 69%
- F = *clearly not passing*.

I will use the following grading scheme:

Optimath homework: 25%

Exam 1: 20%

Exam 2: 20%

Final Exam: 35%

4. Available help

Personal help will be available in the Academic Support Center and from me. You are also highly encouraged to sign up for Math Lab (Math 120L). Math 120L is a lab course that offers 0.5 to 1.0 units of credit to get assistance with your math skills. The lab is located in the Academic Support Center. If math has been a struggle for you in the past, or if you are in search of an “A” grade, then I strongly recommend Math 120L. It has been very successful in helping students achieve their goals in mathematics. See the Help page on the course web site for more details on help resources.

5. Use of calculators

A good graphing calculator/app is required. The recommended calculator for Math 120 is the TI-83+ or TI-84+. However, if you already have another good graphing calculator, then you may use that instead. If you don't have a graphing calculator, and don't wish to purchase one, there are a limited number of calculators available for rent from the Math Department for \$20 per semester. You can also install a calculator app. On your phone.

6. Advice

Success in mathematics usually requires a large amount of work on your part. There are many definitions and ideas that you will be expected to know. You are highly encouraged to see me if you think you are struggling with the course. It is far better not to wait until the end of the semester for this!

Also, I think life will be easier if you get to know each other and form study groups. Indeed, learning mathematics by one's self can be quite difficult, but with a study group you will have a regular place for discussion and problem solving, and this will be good for everyone.