

## Syllabus for: Math 120 (online)

<b>Semester &amp; Year:</b>	Fall, 2015
<b>Course ID and Section Number:</b>	MATH-120- D8473
<b>Number of Credits/Units:</b>	4.0 units
<b>Day/Time:</b>	M, T, W, 5:30-6:45
<b>Location:</b>	
<b>Instructor's Name:</b>	Heinz Falenski
<b>Contact Information:</b>	Office location and hours: DC-1: T,Th 4:15-5:15 Email: heinz-falenski@redwoods.edu

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

Course description: This is an online course, in which 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.

### 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://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.

## Welcome to Math 120—Intermediate Algebra—Fall 2015

**Instructor:** Heinz Falenski

Email: [heinz-falenski@redwoods.edu](mailto:heinz-falenski@redwoods.edu)

**Office hours:** In Math Lab, TTH 04:15pm-05:15pm and W 08:30am - 11:30am in DC-1, Also, by Appointment. I will respond to emails within 48 hours during weekdays.

### Required Text and Materials:

- Intermediate Algebra, Parts 1 and 2 (Ch. 1-5 and 6-9), by Dave Arnold, 2007
- Online text with solutions : <http://msenux.redwoods.edu/IntAlgText/>  
The textbook links are located near the bottom of this page.
- TI-83 or 84 Graphing Calculator
- pencils and erasers
- stapler with staples
- 8.5x11 paper
- graph paper
- reference book

**Course description:** A course in which 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.

### Course Learning Outcomes:

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.

## Course Grading Scale:

Homework	10%
Class participation (including activities)	10%
Reference books	10%
Quizzes (including online testing)	10%
Midterms	45%
Final	15%

Letter Grades will be assigned no stricter than the following:

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

**Homework:** Homework due dates will be posted. You will have one week to complete the assignment from the time it is assigned. Group-work assignments will include various due dates. Homework will be graded within a week of the due date, and the results made available for your review. Let me know if you have a problem getting the homework in on time. Late homework will be assessed a 10% penalty.

**General expectations:** This is a 4 unit class: expect to spend at least 12 hours a week on the assignments, which will include group work and quizzes. If you cannot take a test for any reason, contact me as soon as possible before the test and we will make other arrangements.

## Math 120 Homework Assignments

Part (A): Even problems 10 pts total; 2 pts for each problem

Part (B): Odd problems 2 pts total

Separate even problems from odd problems on your scanned homework

Section #	Part (A)	Part (B)
1.1	6, 10, 16, 18, 24	3, 5, 11, 13, 17, 23, 25, 29, 31, 33, 35, 37, 39, 41
1.2	12, 16, 32, 42, 46	3, 7, 15, 17, 19, 25, 27, 33, 39, 41, 47, 49, 53
1.3	2, 22, 30, 40, 42	9, 17, 19, 23, 25, 27, 29, 33, 35, 41, 43, 51, 53
1.4	10, 34, 50, 56, 62	1, 5, 9, 13, 15, 17, 19, 27, 31, 33, 39, 49, 51, 55, 59
2.1	20, 46, 56, 68, 76	3, 5, 17, 19, 43, 45, 49, 57, 61, 67, 73, 75, 77, 79, 81
2.2	4, 6, 14, 18, 22	1, 5, 9, 11, 13, 15, 21
2.3	2, 12, 18, 20, 24	3, 5, 9, 11, 15, 17, 19, 21, 23, 25, 29
2.4	8, 14, 20, 24, 38	7, 9, 13, 15, 21, 25, 29, 31, 37, 41
2.5	8, 18, 22, 24, 34	1, 3, 5, 9, 17, 19, 21, 25, 27, 29, 31
2.6	4, 10, 18, 22, 28	1, 3, 5, 7, 17, 21, 25, 27
3.2	8, 14, 20, 22, 24	9, 11, 13, 17, 19, 21, 23, 25
3.3	2, 8, 20, 26, 36	5, 9, 11, 23, 25, 29, 35, 39, 41, 43, 45, 47
3.4	8, 16, 22, 26, 30	5, 7, 13, 15, 19, 23, 25, 29
3.5	2, 4, 6, 8, 10	1, 3, 5, 7, 9
5.1	10, 16, 32, 38, 46	7, 13, 21, 23, 25, 29, 33, 37, 41, 45, 47, 53, 55
5.2	10, 22, 32, 34, 46	1, 3, 9, 13, 21, 23, 25, 27, 35, 37, 39, 41, 45, 47, 73, 77
5.3	16, 20, 24, 42, 56	3, 7, 11, 13, 17, 19, 23, 27, 33, 35, 39, 45, 55, 57, 61
5.4	18, 38, 44, 56, 64	1, 7, 9, 13, 17, 21, 37, 39, 41, 45, 51, 57, 63, 65, 67, 71
5.5	6, 24, 26, 34, 40	1, 5, 11, 17, 19, 23, 27, 31, 33, 39, 51, 53
5.6	12, 22, 30, 32, 36	3, 7, 13, 15, 23, 25, 27, 31, 35
6.1	10, 12, 16, 18, 20	3, 5, 7, 9, 11, 15, 17, 21, 25, 29
6.2	10, 18, 28, 36, 40	7, 9, 15, 17, 27, 29, 33, 35, 41
7.1	4, 18, 30, 38, 42	3, 7, 11, 15, 19, 23, 29, 33, 37, 39, 41
7.2	16, 24, 28, 34, 52	3, 7, 13, 15, 19, 23, 27, 31, 33, 35, 43, 49, 51
7.4	16, 34, 38, 44, 64	3, 7, 11, 15, 19, 21, 27, 31, 35, 37, 39, 41, 45, 63
7.5	4, 14, 20, 28, 38	3, 5, 13, 15, 17, 19, 23, 27, 31, 35, 39
7.6	8, 10, 26, 38, 44	7, 9, 11, 13, 26, 35, 37, 39, 43, 45
7.7	6, 16, 20, 26, 32	3, 5, 7, 9, 15, 17, 19, 25, 27, 29
7.8	4, 10, 14, 18, 30	1, 7, 13, 19, 23, 25
8.1	18, 50, 58, 70, 76	3, 5, 13, 17, 29, 31, 41, 45, 51, 57, 63, 65, 69, 73, 77
8.2	12, 16, 24, 26, 36	1, 11, 13, 17, 21, 23, 25, 35, 37
8.3	8, 12, 16, 32, 38	1, 3, 13, 25, 29, 35
8.4	16, 30, 44, 50, 60	3, 7, 13, 15, 23, 25, 29, 33, 37, 39, 47, 49, 67
8.5	4, 10, 32, 34, 38	1, 3, 5, 7, 11, 17, 19, 23, 27, 31, 33, 37, 41
8.6	22, 24, 26, 30, 46	3, 9, 13, 19, 23, 27, 29, 31, 39, 43, 49
8.7	2, 4, 22, 24, 38	3, 5, 11, 13, 25, 27, 31, 33, 35
9.1	6, 8, 16, 32, 40	1, 3, 5, 15, 19, 25, 27, 29, 33
9.2	30, 36, 62, 70, 74	5, 9, 13, 21, 25, 27, 29, 35, 45, 55, 57, 59, 67, 77, 79
9.3	22, 36, 38, 44, 52	5, 7, 13, 17, 21, 27, 29, 33, 41, 43, 49, 51, 55
9.4	40, 46, 56, 68, 72	3, 7, 15, 21, 29, 33, 39, 43, 47, 53, 55, 63, 67, 69, 73
9.5	12, 20, 24, 32, 40	7, 9, 11, 17, 19, 21, 23, 29, 35, 37
9.6	2, 12, 18, 24, 38	1, 5, 9, 11, 17, 19, 23, 25, 29, 33, 39, 41

note: schedule of homework due dates will be set within a week of the first day of class.

If a student believes that he or she may need an accommodation for a disability, please see me or initiate contact with Disabled Student Programs and Services at 476-4280.

**Academic Misconduct:** Any violation will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods.

**Student Resources (student services links)**

- Academic Support Center (and testing center):  
<http://www.redwoods.edu/Eureka/ASC/index.asp>
- Counseling Services:  
<http://www.redwoods.edu/eureka/counseling/services.asp>
- Distance Education:  
<http://www.redwoods.edu/departments/distance/>
- DSPS (Disabled Students Programs and Services):  
<http://www.redwoods.edu/district/dsps/>
- Library (including online databases):  
<http://www.redwoods.edu/eureka/library/>
- Orientation for online students: <http://www.redwoods.edu/orientation/>
- Student help and tutorials for using Canvas:  
<http://guides.instructure.com/m/8470>
- Support for online students:  
<http://www.redwoods.edu/departments/distance/StudentResources.asp>
- Veterans' Resource Center: <http://www.redwoods.edu/vets/>
- Writing Center: <http://www.redwoods.edu/departments/english/writingcenter/>

**Important Course Dates:**

October 1<sup>st</sup>: Midterm 1

November 10<sup>th</sup> Midterm 2

December 11<sup>th</sup> Final

*I reserve the right to modify this syllabus.*