Syllabus for: Intermediate Algebra

Semester & Year:	Spring 2015
Course ID and Section Number:	Math-120-E7004
Number of Credits/Units:	4.0
Day/Time: **Location:**	TThF/1:15-2:30pm SCSC 210
Instructor's Name:	Kyle Falbo
Contact Information:	Office location and hours: By appointment Phone: NA Email: Kyle-Falbo@redwoods.edu

Course Description:

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. *Note: Graphing calculator required, TI-83 or TI-84 recommended.*

Student 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.

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.

Prerequisite:
Math 380 with a grade of C or better or appropriate score on the assessment test.

Text:
Intermediate Algebra Textbook, College of the Redwoods, Department of Mathematics. Available on disk or online (http://msenux.redwoods.edu/IntAlgText). You can also buy a printed copy from Lulu.com or the bookstore. Check out your options at http://msenux.redwoods.edu/mathdept/courses/MathTextbooks.html.

Objective:
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.
In this course we will:

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.

Materials:
You are required to have a graphing calculator for this course. I recommend a TI-83, TI-84 or TI-89. I will be using a TI-84 in class. Calculators are available for rent from the math department for $20/semester; pay at the cashiers office and pick it up from Betsy Buchanan in the ASC. Also, check local pawn shops, Craigslist, Ebay, etc. Cell phones are not allowed to be used as a calculator.
You will need lots of graph paper, cheap stuff is fine but an Engineering Pad is encouraged.
You will need a ruler or straight edge for all lines in which you draw in the course.
You will need a binder to keep your notes and work in.
You will need lots of pencils and erasers. No Pens Allowed.

Classroom Environment:
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 on task when class is in session. Hence, conversation not pertaining to the subject at hand should be taken outside the classroom. I understand that students will have to get up and leave the room for various reasons and I also understand that students will arrive late from time to time. However, courtesy requires that you enter and leave as quietly as possible, without disturbing discussion or lecture. It is essential for student success to maintain a good environment in the classroom. If you have any personal difficulties with the learning environment in the classroom, please visit me outside of class to discuss them.

Homework:
Having a consistent approach to presenting mathematics is important to both you the student as well as to those that may read your mathematics. In this course homework will be presented in two ways. In the beginning of the semester, handwritten assignments will be emphasized with submissions for each section. In addition to this an Optimath assignment will be given for each chapter. Later in the semester we will emphasize Optimath assignments with a written assignment given for each Chapter. It is expected at this point that you will be diligent in following the following Homework Guidelines for written submissions.

1. Homework is to be completed in pencil only. No pen!
2. Homework is to be presented neatly with plenty of room for any comments from the grader. Please do not have any more than 2 columns of work on any one page.
3. Mathematics is to be done vertically down the page, not horizontally across the page.
4. You should be stating the both the question as well as any relevant directions for each problem.
   Ex. Problems 1-7 : Simplify the following
   1. $5(x-7)+3(y+4)$
   ⋮
   ⋮
5. Only submit assignments that are due, when they are due. Do not submit any section early or late. They will not be accepted or graded.
6. Submit your work in chronological order.

Additional guidelines for graphing will be provided during the semester.

Quizzes/Activities:
Timed around each exam will be a small Project that explores applications based on the material in the course. You are encouraged to work together on these projects, although each student will need to submit their own work. You will be given some in class time to work on these assignments.
The instructor maintains the right to quiz the students at any point during the semester. While this will not be done regularly, it is a tool primarily used to gauge student participation during lecture and homework assignments.

Exams:
There will be 3 in class exams given in addition to the final exam. These dates are already fixed in the course schedule. Please plan your travel plans accordingly. There will be in class time for review prior to each of these exams. Please come to these review sessions prepared with questions that you may have. **NO MAKEUP EXAMS WILL BE GIVEN**.

Final Exam:
A two hour comprehensive final exam will be held in class on Thursday, May 14th from 1:00pm – 3:00pm. Please plan travel plans accordingly. **NO MAKEUP FINAL WILL BE GIVEN**.

Attendance:
While regular attendance will not be recorded past the Census date, be aware that any student missing 6 or more classes may be dropped from the course without warning. Since homework is regularly collected in class, it is in your best interest to attend regularly as well. If you are the type of student who does not enjoy coming to class regularly and participating, you may want to consider taking a different course.

Grade System:
Quizzes/Homework/Activites 30% of final grade

3 Exams 10%, 15%, 15% respectively of final grade

Final 30% of final grade

Grades will be assigned as follows:

90 - 100% A

80 - 89% B

70 - 79% C

60 - 69% D

Below 60% F

MATH 120L - The Math Lab for Intermediate Algebra:
All students in this class are encouraged to enroll in Math 120L, The Math Lab for Intermediate Algebra. 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 open every day. The Math Lab 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 brush-up on your study skills by using one of the many computer programs installed on the network.

Study Groups:
I highly encourage you to form your own study groups. Communicating mathematics to each other is by far the best way for the material to solidify within you. Additionally you will get to know each other better and be social which, in all honesty is what college is all about any way.

Canvas:
A canvas page will exist for this course. I primarily will use this site as a location to store course documents and send out important class announcements via email. Please do not use MyCR or Canvas messaging services to communicate with me. Email me directly at kyle-falbo@redwoods.edu

Emergency Procedures:
Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room) and review www.redwoods.edu/safety.asp for information on campus Emergency Procedures.
During an evacuation:
· Be aware of all marked exits from your area and building. Know the routes from your work area to the nearest exits.
· Once outside, move to the nearest evacuation point outside your building.
· Keep streets and walkways clear for emergency vehicles and personnel.
· Do not leave campus, unless it has been deemed safe by the Incident Commander or campus authorities. (Be aware CR's lower parking lot and 101 frontage are within the Tsunami Zone).

RAVE - College of the Redwoods has implemented an emergency alert system. Everyone is entered already to receive a message at their CR email address. In the event of an emergency on campus, you can also elect to receive an alert through your personal email, and/or phones at your home, office, and cell. This emergency alert system will be available to all students, staff, and other interested parties.

Registration is necessary in order to receive emergency alerts. Please go to https://www.GetRave.com/login/Redwoods and use the "Register" button on the top right portion of the registration page to create an account. During the registration process you can elect to add additional information, such as office phone, home phone, cell phone, and personal email. Please use your CR email address as your primary Registration Email. Your CR email address ends with "redwoods.edu."

We will test the system each semester to be sure that you are getting alerts at all of your destinations. Please contact Public Safety, 707-476-4112, security@redwoods.edu, if you have any questions.

Math 120 - E7001 - TThF 10:05-11:20 - Falbo – Spring 2015

Week#	Mon	Tuesday	Wed	Thursday	Friday	
				Jan 15 *Flex Day*	Jan 16 *Flex Day*	Jan 17 CR Classes "Begin"
1	Jan 19 MLK Holiday	Jan 20 CR Math Classes Begin Lecture: 1.1 Due:	Jan 21	Jan 22 Lecture: 1.2, 1.3 Due: First Day Quiz	Jan 23 Lecture: 1.4 Due: 1.1	
2	Jan 26	Jan 27 Lecture: 2.1, 2.2 Due: 1.2, 1.3, Optimath Browser Test	Jan 28	Jan 29 Lecture: 2.3 Due:1.4	Jan 30 *Deadline to Drop w/o "W" & rec've refund* Lecture: 2.4 Due: 2.1, 2,2	
3	Feb 2 CENSUS DAY	Feb 3 Lecture: 2.5, 2.6 Due: 2.3 Optimath 1	Feb 4	Feb 5 Lecture: 3.1, 3.2 Due: 2.4	Feb 6 Lecture: 3.3 Due: 2.5, 2.6	
4	Feb 9	Feb 10 Lecture: 3.4 Due: 3.1, 3.2 Optimath 2	Feb 11	Feb 12 *Deadline for P/NP option* Lecture: 3.5, Project 1 Due: 3.3	Feb 13 No Classes (Lincoln)	
5	Feb 16 CR Holiday (Washing-ton)	Feb 17 Review for Exam 1 Due: 3.4	Feb 18	Feb 19 Exam 1: Ch. 1 - 3 Due: 3.5	Feb 20 Lecture 4.1, 4.2	
6	Feb 23	Feb 24 Lecture: 4.3, 4.4 Due:Project 1	Feb 25	Feb 26 Lecture: 5.1 Due: 4.1, 4.2	Feb 27 Lecture: 5.2 Due: 4.3, 4.4	
7	Mar 2	Mar 3 Lecture: 5.3 Due: Optimath Ch. 4	Mar 4	Mar 5 *Deadline to Petition to Graduate/Apply for Cert* Lecture: 5.4 Due: Optimath 5.1, 5.2	Mar 6 Lecture: 5.5 Due: Optimath 5.3	
8 DST*	Mar 9	Mar 10 Lecture: 5.6, Project 2 Due: Optimath 5.4	Mar 11	Mar 12 Review for Exam 2 Due: Optimath 5.5	Mar 13 Exam 2 Due: Optimath 5.6	Mar 14 *π Day!*
CR/HSU Spr Brk	Mar 16	Mar 17	Mar 18	Mar 19	Mar 20	Mar 21
9	Mar 23	Mar 24 Lecture: 6.1, 6.2 Due: Written Ch. 5	Mar 25	Mar 26 Lecture: 6.3 Due: Project 2	Mar 27 Lecture 7.1, 7.2 Due: 6.1, 6.2	
10	Mar 30	Mar 31 (CA/HSU Holiday) ***Cesar Chavez Day‡*** Lecture: 7.3 Due: 6.3, Written Ch. 6	Apr 1	Apr 2 Lecture: 7.4 Due: 7.1, 7.2	Apr 3 *W/drawal Deadline* Lecture: 7.5 Due: 7.3	
11 5th Easter	Apr 6	Apr 7 Lecture: 7.6 Due: 7.4	Apr 8	Apr 9 Lecture: 7.7 Due: 7.5	Apr 10 Lecture: 7.8 Due: 7.6	
12	Apr 13	Apr 14 Review Exam 3 Due: 7.7	Apr 15	Apr 16 Exam 3 Due: 7.8	Apr 17 Lecture: 8.1, 8.2 Due:Written Ch. 7	
13	Apr 20	Apr 21 Lecture: 8.3 Due: Project 3	Apr 22	Apr 23 Lecture: 8.4 Due:8.1, 8.2	Apr 24 Lecture: 8.5 Due:8.3	Apr 25 *Humboldt Math Festival?*
14	Apr 27	Apr 28 Lecture 8.6 Due:8.4	Apr 29	Apr 30 Lecture: 8.7 Due:8.5	May 1 Lecture: 9.1, 9.2, 9.3 Due:8.6	
15	May 4	May 5 Lecture: 9.3, 9.4, 9.5 Due:8.7, Written Ch. 8	May 6	May 7 Lecture: 9.5, Review for Final Due:9.1, 9.2	May 8 CR Finals begin Review for Final Due:9.3, 9.4	
CR/HSU FINALS WEEK	May 11	May 12	May 13	May 14 Final Exam 10:45a - 12:45p	May 15	May 16 CR Eureka Commencement

*‡**Cesar Chavez Day:** If the holiday is not taken at CR, appropriate observances should be held instead.*

April 25, 2015: possible date for Humboldt Math Festival <http://www.humboldtmathfestival.org/>

CR Commencement: May 15, DN, MC; May 16, Eureka and KT. **CR Grades Due: May 22, 2015**.

Math 120 Homework Assignments

1.1: 3, 5, 6, 10, 11, 13, 16, 17, 18, 23, 24, 25, 29, 31, 33, 35, 37, 39, 41

1.2: 7, 12, 15, 16, 17, 19, 25, 27, 33, 39, 41, 42, 47, 49, 53

1.3: 9, 12, 17, 19, 22, 23, 27, 29, 30, 33, 35, 41, 42, 51, 53

1.4: 1, 5, 9, 10, 13, 15, 17, 19, 27, 31, 33, 34, 39, 49, 50, 51, 55, 56, 59, 62

2.1: 5, 17, 19, 20, 43, 45, 46, 49, 56, 57, 61, 67, 68, 73, 75, 76, 79, 81

2.2: 1, 4, 5, 6, 9, 11, 13, 14, 15, 18, 21, 22

2.3: 2, 3, 5, 9, 11, 12, 15, 17, 18, 19, 20, 21, 23, 24, 25, 29

2.4: 7, 8, 9, 13, 14, 15, 20, 21, 24, 25, 29, 31, 37, 38, 41

2.5: 1, 3, 5, 8, 9, 17, 18, 19, 21, 22, 24, 25, 27, 29, 31, 34

2.6: 1, 3, 4, 5, 7, 10, 17, 18, 21, 22, 25, 27, 28

3.1: 2

3.2: 9, 11, 13, 14, 17, 19, 20, 21, 22, 23, 24, 25

3.3: 2, 5, 8, 9, 11, 20, 23, 25, 26, 29, 35, 36, 39, 41, 43, 45, 47

3.4: 4, 5, 7, 8, 13, 15, 16, 19, 22, 23, 25, 26, 29, 30

3.5: 2, 4, 6, 8, 10 1, 3, 5, 7, 9

4.1: 5, 9, 10, 11, 13, 15, 16, 17, 19, 20

4.2: 1, 3, 5, 6, 9, 11, 14, 15, 17, 18

4.3: 1-39; every other odd(1, 5, 9, 13, …).

4.4: 1-54; every other odd(1, 5, 9, 13, …).

5.1: 16, 32, 38, 46
5.2: 22, 32, 34, 46
5.3: 20, 24, 42, 56
5.4: 38, 44, 56, 64
5.5: 24, 26, 34, 40
5.6: 22, 30, 32, 36

6.1: 12, 16, 18, 20
6.2: 18, 28, 36, 40
6.3: 12, 16, 18, 20

7.1: 18, 38, 42
7.2: 24, 34, 52
7.4: 34, 44, 64
7.5: 20, 28, 38
7.6: 26, 38, 44
7.7: 20, 26, 32
7.8 14, 18, 30

8.1: 18, 58, 76
8.2: 12, 24, 26, 36
8.3: 8, 16, 38
8.4: 16, 44, 50, 60
8.5: 32, 34, 38
8.6: 26, 30, 46
8.7: 2, 4, 22, 38

Extra Credit.
9.1 6, 8, 16, 32, 40
9.2 30, 36, 62, 70, 74
9.3 22, 36, 38, 44, 52
9.4 40, 46, 56, 68, 72
9.5 12, 20, 24, 32, 40