

| Syllabus for: Math 120 | |
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| Semester & Year: | Spring 2013 |
| Course ID and Section Number: | Math-120-E2697 |
| Number of Credits/Units: | 3 Credit Hours |
| Day/Time: | TTh 6:05–8:10 pm |
| Location: | PS 115 |
| Instructor's Name: | Brad Morin |
| Contact Information: | Office location and hours: PS200 Phone: _____ by appointment Email: brad-morin@redwoods.edu |
| Course Description: | |
| <p>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.</p> | |
| Student Learning Outcomes : | |
| <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.

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

PS115-- Tuesday & Thursday 6:05-8:10 pm

Spring 2013

Instructor: Brad Morin

Office Location: PS 200

Email: brad-morin@redwoods.edu

Office Hours: After class and by appointment

Cancelled Class Line: 476-4210 Option 5 OR I will email a notice (I've never cancelled a class.)

Textbook: Intermediate Algebra Textbook, by Mathematics Department of College of the Redwoods

Syllabus insert.doc

On CD, supplied by instructor first day of class

Also, available online at: <http://msenux.redwoods.edu/IntAlgText/>

A hard copy of the text is available for purchase in the college bookstore

Materials:

TI-83 or 84 Graphing Calculator- can be rented for \$20 from the Math Department

Composition Book - your own reference book to be used on some exams & quizzes

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.

Course Grading Scheme:

| | |
|--|-----|
| Daily Quizzes Based on Daily Assignments | 30% |
| Four in class Exams | 50% |
| Final Exam | 20% |

Letter Grades:

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

Homework and Quizzes: Homework will not be collected. A quiz will be given each class period, except on exam days and following exam days, with quiz question coming from the homework assigned the previous day.

Exams: Exams will be given in class. During exams, you will be allowed to use your Composition Book, where you can keep formulas, algorithms, examples, or anything you find useful. Typically, my exams are easily finished by all students who know the material. Upon turning in your exam, there will be plenty of time to look over the exam solutions key. You then have the option, for partial credit, to makeup any problems that you think you missed by taking home another copy of the exam and reworking those problems for submission the next time we meet.

Final Exam: The cumulative final is scheduled by the college for Tues May 7th 5:30pm-7:30pm. Do not plan on leaving town before your scheduled final.

Makeup & Extra Credit: Limited opportunities for makeup work and extra credit will be provided, mostly through online and class activities.

Class Participation: I feed on class participation. Everyone must give me at least one wrong answer - unintentionally - during the semester.

Office Hours: I hope to experiment with Skype for some office hours this semester. Many of you have daytime work schedules. We will discuss days and times in class.

My Teaching Philosophy & Goals:

- The purpose of mathematics - besides being cerebral art and a toy for the incurably curious mind - is to find really good shortcuts for life's practical chores, giving us more time to play
- Share the thrill - math can be fascinating (not always -- some of it can be tedious)
- Make the subject and class time enjoyable (not a promise, just a goal)
- Set a high standard for mastering math skills
- Be a resource all students are comfortable approaching
- Manage incentives - inspire/cajole/hoodwink students into eagerly expending time and energy learning Algebra
- Foster in students the confidence for future math classes and/or practical applications

Mathematics Department Policy Regarding "Faculty Withdrawal" of Students after Census Day:

A student who is absent from class for the amount of time equal to two weeks of classes, will be withdrawn from the course, unless there are extenuating circumstances that are communicated to the instructor in a timely manner. This "faculty withdrawal" can occur between Week 4 and Week 10 of the semester.

**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.

This syllabus is an attempt to help you make plans for the course. Minor modification in this syllabus may be necessary during the semester

Math 120

Homework & Exams **Fall Semester 2012**

Morin

The dates given below are the days the sections are covered in class. The suggested homework should then be done in preparation for the quiz the next day. The quiz is one point, all or nothing. Quizzes can be made up by completing assignments on optimath by getting at least 6 out of 7 problems right. You may make as many attempts as you wish. The results are automatically emailed to me.

Extra credit can be obtained after each exam (restoring a portion of the points missed on the exam) by doing 8 of the 10 problems correct on the corresponding option on optimath. Generally, three days will be given to complete that option. After three days, you must get 9 out of 10 to get the extra credit.

The single lowest exam score, including a missed exam, will be dropped if made-up on optimath with a score of ten out of ten.

Additional extra credit can be obtained by:

Having perfect quiz scores before each exam, makeups on optimath -- adding 2 points to the exam score.

Doing Alcumus on the Art of Problem Solving

1 exam points for every two levels completed in prealgebra.

1 exam point for every level completed in pre algebra

Links to optimath and Alcumus are found at the following sites:
<http://msenux.redwoods.edu/cgi-bin/online/s13/OTlogin.cgi?section=E2697>
<http://www.artofproblemsolving.com/>

| Date | Sec | Suggested Problems | Recommended Focus Problems |
|--------|-----|---------------------|--|
| Jan 15 | 1.1 | 1-41 odd | -- 5,13,24,35,39,41 -- Extra Credit *25 |
| | 1.2 | 1-49 odd | -- 13,23,33,39,45,47 |
| 17 | 1.3 | 9-55 odd | -- 11,17,19,21,25,27,29,35,43,53 |
| | 1.4 | 1-61 odd | -- 11,19,35,47,53,57 |
| 22 | 2.1 | 1-81 odd | -- 3,5,39,47,55,61,67,73,77 |
| | 2.2 | 1-21 odd | -- 5,9,13,15 |
| 24 | 2.3 | 1-29 odd | -- 5,9,13,15,23 |
| | 2.4 | 1-37 odd | -- 3,7,13,15,25,29 |
| 29 | 2.5 | 1-33 odd | -- 1,3,5,9,17,19,21,23,25,27 |
| | 2.6 | 1-27 odd | -- 5,13,17,19,21,23,25,27 |
| 31 | 3.1 | 1,3 | |
| | | Review | |
| Feb 5 | | Review | |
| | | Exam I | |
| | 3.2 | 3-23 odd | -- 5,7,17,21 |
| | 3.3 | 1-47 odd | -- 5,9,19,29,33,35 |
| 12 | 3.4 | 3-33 odd | -- 5,7,13,15,25,27 |
| | 3.5 | 1-9 odd | -- 7 |
| 14 | 5.1 | 1-55 odd | |
| | 5.2 | 1-77 odd | |
| 19 | 5.3 | 1-65 odd | |
| | 5.4 | 1-73 odd | |
| 21 | 5.5 | 1-43 odd | |
| | 5.6 | 1-37 odd, **39 | |
| 26 | 6.1 | 1-29 odd | 11,17,23,29 (to be done for May 5, not on Exam II) |
| | | Review | |
| 28 | | Review | |
| | | Exam II | |
| Mar 5 | 6.2 | 1-45 odd | -- 13, 25, 31, 41 |
| | 7.1 | 1-45 odd | -- 9, 19, 27, 37, 41 |
| 7 | 7.2 | 1-53 odd | -- 9, 15, 21, 33, 43, **51 |
| | 7.3 | 1-47 odd | -- 9, 19, 23, 33, 39, 45 |
| 12 | | Spring | |
| 14 | | Break | |
| 19 | 7.4 | 1-61 odd | -- 9, 13, 33, 35, 43 |
| | 7.5 | 1-37 odd | -- 19, 33 |
| 21 | 7.6 | 1-37 odd, 43-51 odd | -- 3, 11, 17, 37, 43, 47 |
| | 7.7 | 1-19 odd, 21-65 eeo | -- 5, 11, 19, 33, 37, 61 |
| 26 | 7.8 | 1-31 odd | -- 3, 13, 19, 27 |
| | | Review | |
| 28 | | Review | |
| | | Exam Iii | |

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|-------|----|-----|--|
| April | 2 | 8.1 | 1-11, 25-79 odd -- 7, 31, 39, 47, 63, 71, 77 |
| | | 8.2 | 1-25 odd -- 11, 37 |
| | 4 | 8.3 | 1-39 odd -- 5, 15, 21, 29, 37 |
| | | 8.4 | 1-67 odd -- 5, 21, 33, 41, 47, 53, 65 |
| | 9 | 8.5 | 1-41 odd -- 7, 11, 23, 29, 35 |
| | | 8.6 | 1-49 odd -- 9, 17, 23, 37 |
| | 11 | 8.7 | 1-39 odd -- 1, 11, 17, 19, 27, 37 |
| | | | Review |
| | 16 | | Review |
| | | | Exam IV |
| | 18 | 9.1 | 1-39 odd -- 13, 21, 25, 33 |
| | | 9.2 | 1-79 odd -- 7, 25, 31, 35, 59, 77 |
| | 23 | 9.3 | 5-55 odd |
| | | 9.4 | 1-75 odd |
| | 25 | 9.5 | 1-39 odd |
| | | | Review for Final |
| | 30 | 9.6 | 1-41 odd |
| May | | | Review for Final |
| | 2 | | Review for Final |
| | 7 | | Final Exam Tuesday 5:30 - 7:30 pm |