| MATH-120-K2954 Arithmetic, for the College Students | | | |
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| Arithmetic for the College Students | | | |
| Semester & Year: | Fall 2012 | | |
| Course ID and Section Number: | MATH – 120 – K2954 | | |
| Number of Credits/Units: | 4 units | | |
| Day/Time: | M W 9:30 – 11:35AM | | |
| Location: | Room 1 | | |
| Instructor's Name: | Mr. Jon Pace | | |
| Contact Information: | Office hours: Computer Lab, 2:00 – 3:30 M W | | |
| | Email: jonothan-pace@redwoods.edu | | |
| | or via MyCr | | |
| | | | |

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.

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

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: <u>http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final</u>%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.

* I reserve the right to change this syllabus at any time.

Course Prerequisites

A grade of "C" or better in Math 380 (Elementary Algebra) or equivalent or appropriate score on the math placement exam.

Representative skills without which the student would be highly unlikely to succeed: Ability to use the properties of real numbers to solve linear equations and inequalities, draw, read, and interpret graphs, and find the equations of lines. A complete proficiency in adding, subtracting, multiplying, and dividing fractions. Ability to correctly manipulate polynomial expressions, including factoring. Familiarity with graphing calculators helpful.

Text

Students will be given a free Intermediate Algebra textbook on the first day of classes in the form of a CD. The book is written by the mathematics department and will be given free of charge to all students in Math 120. When you load the CD into your computer, double-click **start.html** to view a table of contents.

The textbook files on the CD are in PDF format. You will need to download a free copy of the Acrobat Reader to read them. Go to <u>http://get.adobe.com/reader/</u> if you need to download Acrobat Reader. It is important that you have the most current version of the Acrobat Reader that your system will allow. The Adobe site will analyze your system, but you may be asked to choose the appropriate version of the reader for your system. If this happens, carefully select the appropriate version of the reader. The Intermediate Algebra textbook is also available online at: <u>http://msenux.redwoods.edu/mathdept/courses/math120.php</u>

The online files are identical to the files on the CD and include:

- 1. A file for each chapter, which includes exercises and short answers.
- 2. A single file that contains full solutions for each chapter.

Resources Required:

- 1. Pencils and erasers (pens may not be used in this class).
- 2. Ruler or straightedge.
- 3. Graphing calculator.
- 4. Graph Paper.

Recommended

- 1. Math Lab Hours TBD
- 2. I would recommend forming study groups. They are a great way to study for exams and do homework problems.
- 3. The Math 120 course page (for your interest) is located at <u>http://msenux.redwoods.edu/mathdept/courses/math120.php</u>

Classroom Environment

It is essential to our class that both students and teacher behave in a manner that will provide a comfortable learning atmosphere. Be respectful of one another. Any rude or derogatory comments will be dealt with quickly and severely. We are all adults and an open, comfortable environment is crucial for learning. Therefore, you should not hesitate to ask any questions or feel embarrassed to ask any question or seek for help. <u>Turn off cell phones before entering the classroom</u>.

<u>Exams</u>

There will be 4 in-class exams each worth 10% and a cumulative final exam worth 20% of your final grade respectively. I will notify you at least one week in advance as to the date of each exam. Before each exam, you will receive a study guide and practice exam/problems. All exams need to be taken in class on the day of the exam. There will be no make-ups on any exam. **The final exam must be taken on the scheduled day and time, no exceptions.**

Final Exam: Wednesday, May 8th, 10:45AM – 12:45PM

Homework

<u>Homework Turned-in:</u> Homework will be due at the beginning of each week for the sections covered the previous week (see your class schedule). **Homework for each section will be turned in separately.**

<u>OptiMath:</u> Beginning in chapter 2, daily assignments will be given in OptiMath. The assignment will open immediately after the class period it was covered in. The assignments will close the following Monday before class. You can attempt each assignment as many times as you wish.

Quizzes

A weekly quiz will be posted on OPTIMATH at the beginning of each week. You will have 1 week to complete the quiz. No extensions will be granted without a signed doctor's note.

Activities

2 graded group activities will be given throughout the semester. These are group activities and therefore must be done collectively by a group.

Calculator Use

A good graphing calculator is required for this course. The calculator must be able to plot graphs of functions and solve equations numerically. The TI-83 + or TI-84+ is an excellent, easy-to-use calculator which meets these requirements and are the standard calculators used in other math classes at College of the Redwoods. However, if you already have a good graphing calculator that meets the above requirements you may use that one. If you don't have a graphing calculator and don't wish to purchase one, you may rent one from the Math Department for \$25 a semester.

Grades

Your final grade will be determined as follows:

| OPTIMATH homework: | 10 % |
|-----------------------|------|
| Problems turned-in: | 10 % |
| Quizzes / Activities: | 20 % |
| Exams: | 40 % |
| Final Exam: | 20 % |

The grade breakdown is as follows:

| А | 93 - 100% | C+ | 77 - 79% |
|----|-----------|----|----------|
| A- | 90 - 92% | С | 70 - 76% |
| B+ | 87 - 89% | D | 60 - 69% |
| В | 83 - 86% | F | 0 - 59% |
| B- | 80 - 82% | | |

Attendance and Participation

It is expected that you come to class, be prepared, and arrive on time. I will take roll daily. You are responsible for any and all material covered in class which includes pop quizzes that may happen randomly.

Guidelines for Homework

Please adhere to the following guidelines before turning in your homework assignments:

- 1. Staple all homework in the upper left hand corner.
- 2. Label your homework with your name, the course name, assignment number, section number(s), and a list of problems assigned in the upper right hand corner.
- 3. Use only one side of the paper.
- 4. Box your answers to each exercise.
- 5. You must use pencil when writing your homework and your work must be written legibly and neatly.
- 6. Be sure to show your work when solving a problem. A problem with just the answer and no work shown will not receive any points.
- 7. When creating a graph, you must use graph paper and a ruler or straight edge. When graphing, make sure that you label your axes and scale or points will be taken off.
 - I reserve the right to change this syllabus at any time as I see fit.