MATH 112
Pre-Algebra
Winter 2014

Time: MTWThF 7:00pm to 9:05pm (section 4458)
Place: Room MSA 109
Instructor: Rex Perez
E-Mail: rexeperez@gmail.com

Required Text
Prealgebra 4th edition, Pearson, K. Elayn Martin-Gay

Prerequisite
The completion of Math 105 with a “C” or better. Or, equivalent preparation and a satisfactory score on the PreAlgebra placement test.

Course Description:
This course bridges the gap between arithmetic and algebra. It reviews arithmetic and introduces concepts of algebra, including signed numbers, variables, exponents, mathematical sentences and linear equations.

Course Layout & Grading

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Exams</td>
<td>45%</td>
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<tr>
<td>Department Final</td>
<td>35%</td>
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<tr>
<td></td>
<td>(1/10, 1/22, 2/4)</td>
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<td></td>
<td>(2/7) Comprehensive, 40 Multiple-Choice Questions</td>
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Grading:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90%-100%</td>
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<tr>
<td>B</td>
<td>80%-89.9%</td>
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<tr>
<td>C</td>
<td>70%-79.9%</td>
</tr>
<tr>
<td>D</td>
<td>60%-69.9%</td>
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<tr>
<td>F</td>
<td>less than 60%</td>
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Course Work

**Quizzes:** There will be quizzes given throughout the course. Some will be announced ahead of time; some will be pop-quizzes. There will be no make-up quizzes

**Homework:** It is very important to do your homework. This is a form of practice for your quizzes and exams. Also they are worth 10% of your grade. Written homework will all be due on test days.

**Exams:** There will be 3 exams accounting for 45% of your grade. There are no make-up exams.

**Final:** The final will be cumulative and will be worth 35% of your grade. You need to take the final in order to pass the class.

**Course Objectives**
1. Write and interpret fractions, and represent common fractions in multiple ways.
2. Add, subtract, multiply, and divide common fractions and mixed numbers.
3. Solve applications problems involving common fractions.
4. Read, write, round off, and compare decimal fractions.
5. Add, subtract, multiply, and divide decimals.
6. Convert among common fractions, decimals, and percents.
7. Write, interpret, simplify, and convert ratios and rates.
8. Solve problems involving proportions and percents.
9. Calculate powers and rational roots (where they exist) of rational numbers.
10. Read, construct, and interpret line graphs, bar graphs, and scatter plots.
11. Calculate and interpret the absolute value of a number.
12. Add, subtract, multiply, and divide integers.
13. Add, subtract, multiply, and divide non-integral rational numbers.
14. Identify and correctly use algebraic properties (commutative, associative, distributive; additive and multiplicative identities and inverses).
15. Use and manipulate variable representations in abstract and applied contexts.
16. Use basic properties of integer exponents to simplify expressions.
17. Add, subtract, multiply polynomials; divide a polynomial by a non-zero monomial.
18. Solve linear equations using the addition, subtraction, multiplication, and division.

**Math Program SLOs**
1. Apply quantitative thinking processes using basic mathematical operations (addition, subtraction, multiplication, division) to solve common academic, workplace, and family problems. (Theme: Quantitative thinking; mathematical operations)
2. Analyze and interpret spatial and graphic data (schedules, maps, tables, graphs, and geometric figures). (Theme: spatial and graphic data).
3. Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)
4. Apply advanced mathematical concepts and tools (algebra, calculus) essential in upper division academic work and/or workplace tasks. (Theme: advanced mathematical operations—algebra, calculus)
5. Select appropriate math strategies for solving and handling application problems involving (for example) finance, science, economics, and family issues. (Theme: mathematical problem-solving)
**Miscellaneous Information:**

**Calculator:** A calculator will not be allowed on tests so please refrain from using them when doing homework.

**Absences:** More than 3 absences may result in the student being dropped from the class. Each time you are late or leave early from class or lab will count as a ½ of an absence.

**Accommodations:** Academic accommodations are available for students with disabilities. Please identify yourself to your instructor and/or to Disabled Students Programs and Services staff so that the appropriate accommodations can be ensured. If you suspect that you have a learning disability, or require services for any other type of disability, see Disabled Students Programs and Services.

**Cell Phones:**
Cell phone use is strictly forbidden in the classroom. If you possess a cell phone, it must be set on silent vibrate mode. If you absolutely must take an emergency call, please exit the classroom quietly and do so outside.

**Success in Course**

It is important to do all your homework's, do all the assigned readings, come to class prepared and ready to learn and study for your quizzes and exams. I cannot stress enough the importance of staying on top of your work. Please make all the classes, ask questions and if you feel like you are still not getting the material, see me to get some extra help. By grasping the course material and practicing it during your homework's, it will make understanding and learning easier. Do not hesitate to ask questions and get extra help. I am here to help you do well.

**Course Conduct**

It is important to show up to class on time and prepared. You will be better prepared to understand the course material during lecture by doing the required reading before hand. I encourage you to study together and discuss trigonometry in a group but I expect everybody to hand in their own work and solutions. I do not tolerate cheating. This goes for quizzes, exams and homework.

**Withdrawal Deadlines**

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<thead>
<tr>
<th>LAST DAY TO</th>
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<tbody>
<tr>
<td>Drop a Class w/o a Fee</td>
<td>Jan 8</td>
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<td>Drop a Class w/o a W</td>
<td>Jan 8</td>
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<td>Drop w/ a W</td>
<td>Jan 31</td>
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<tr>
<td>File Pass / No Pass</td>
<td>Jan 8</td>
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<tr>
<td><strong>GRADUATION PETITION ACCEPTED</strong></td>
<td>Nov 18 - Apr 25</td>
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<tr>
<td><strong>CAMPUS CLOSED</strong></td>
<td>Winter Holiday Dec 24, 25, 30, 31, Jan 1 MLK Day Jan 20</td>
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http://www.wlac.edu/scheduleofclass/schedulecalendar.html