(Beginning) Algebra I
[Math 084]

[Outline of the Beginning Algebra I/Algebra I course]

Course Description
This course covers the general principles of beginning algebra and directly builds upon the materials learned in Pre-Algebra (Math 081). The course expands upon the student’s ability to work with expressions by introducing variables. The student will also be introduced to: exponents, polynomials, solving one and two variable linear equations, and straight line graphing. There is also a strong emphasis in solving problem with application in a real world scenario.

Course Mechanics:
- 3-5 hours of lecture a week (or 5 hours of online video)
- Weekly or every other week quizzes
- 1-3 midterms (online or in class)
- One final (almost always in class)

A typical student should expect to spend about 3-5 hours in class (or watching online videos) and an additional 10-15 doing homework and studying per week.

Topics Covered and Required Prereq skills

<table>
<thead>
<tr>
<th>Topic</th>
<th>Pre-req required</th>
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<tr>
<td>Use of variables in expressions involving adding, subtraction, multiplication and division.</td>
<td>Pre-Algebra, Order of Operations</td>
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<tr>
<td>Operations with integers and rationales.</td>
<td>Pre-Algebra, Order of Operations, Fractions</td>
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<tr>
<td>Graphing functions.</td>
<td>Pre-Algebra, Fractions</td>
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<tr>
<td>Solving linear equations in one/two variable(s).</td>
<td>Pre-Algebra, Order of Operations</td>
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[Preparing for the Course]

The following things can be done to help prepare for the course.

Prepare a notebook: Prepare a binder to keep all your returned math homework and quizzes in. The final is most likely comprehensive; having all your completed and graded work neatly grouped by topic will help a lot with studying for the final.

Purchase a scientific calculator: If you do not already own a scientific calculator, purchase one that allows you to see and edit your previous entry. Some calculators that can do this are: TI-30X IIS and the Ti-83 both from Texas instruments.

Brush up on Pre-algebra (Basic Math): If you have old math books revisit: Order of Operations, Negative Numbers, Fractions, and Factors and Multiples.

Additional Resources

Online Algebra I Materials:
HTTPS://WWW.KHANACADEMY.ORG/MATH/ALGEBRA

Online Pre-algebra Review:
HTTPS://WWW.KHANACADEMY.ORG/MATH/PRE-ALGEBRA
(RELEVANT TOPICS: ARITHMETIC PROPERTIES, FRACTIONS, FACTORS AND MULTIPLES, NEGATIVE NUMBERS)

Math 081 Pretest
http://www.seattlecentral.edu/learn/math/placement/AreYourReadyFor084.PDF
Online test that looks at how much material was retained from math 081.

Training Fund Tutoring:
Both online and in-person group tutoring is available by request check out:
http://healthcareerfund.org/tutoring/