[Outline of the Course]

Course Description
This course covers the general principles of intermediate algebra and directly builds upon the materials learned in Algebra I and II (Math 084 and 085). The course expands upon working with functions and rational expressions. The course introduces logarithmic functions, imaginary numbers and piecewise functions.

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 Prerequisite skills

<table>
<thead>
<tr>
<th>Topic</th>
<th>Prereq required</th>
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<tbody>
<tr>
<td>Solving Quadratic Equations</td>
<td>Algebra I and II Working with Polynomials (focus on trinomials)</td>
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<td>Complex Numbers</td>
<td>Algebra II Roots and Radicals</td>
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<tr>
<td>Working with Rational Expressions and Functions</td>
<td>Algebra II Intro to Functions</td>
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<tr>
<td>Functions and Transformations (focus on parabolas)</td>
<td>Algebra I Intro to Graphing</td>
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<td>Exponent and Logs</td>
<td>Algebra I Exponents</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. Note that the Training Fund usually does not reimburse calculator purchase.

Brush up on your Algebra I and II: If you have old algebra books revisit: factoring quadratics, the quadratic equation, working with roots and radicals, working with functions, graphing equations of the form y=mx+b, and exponents.

[Additional Resources]

ONLINE INTERMEDIATE ALGEBRA MATERIALS:
HTTPS://WWW.KHANACADEMY.ORG/MATH/ALGEBRA2
(NOTE: CONIC SECTIONS AND MATRIXES WILL MOST LIKELY NOT BE COVERED IN MATH 098)

ONLINE ALGEBRA I AND II REVIEW:
https://www.khanacademy.org/math/algebra/introduction-to-algebra
(Relevant topics: Multiplying and Factoring Expressions, Quadratic Equations, Functions,)

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