



## [Outline of Beginning Algebra II/Algebra II]

### Course Description

This course covers the general principles of beginning algebra and directly builds upon the materials learned in Algebra I (Math 084). The course expands upon working with functions, factoring polynomials and Graphing with a focus on quadratics. The course introduces the quadratic equation, rational expressions, and simplifying radical expressions. 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 Pre-req skills

Topic	Pre-req required
Exponents and Scientific Notation	Algebra I Exponents
Factoring Polynomials	Algebra I Polynomials
Working with Rational Expressions	Basic Math Fractions
Graphing and Solving Quadratics Equations	Algebra I Intro to Graphing
Radical Expressions	Basic math Use of the Square Root Operator

### [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 your Algebra I and Pre-algebra (Basic Math):** If you have old math books revisit: Negative Numbers, Factors, Exponents, Radicals, Graphing Functions, and Solving Linear Equations in One Variable.

### ADDITIONAL RESOURCES

#### ONLINE ALGEBRA II MATERIALS:

[HTTPS://WWW.KHANACADEMY.ORG/MATH/ALGEBRA](https://www.khanacademy.org/math/algebra)

#### ONLINE PRE-ALGEBRA REVIEW:

[HTTPS://WWW.KHANACADEMY.ORG/MATH/PRE-ALGEBRA](https://www.khanacademy.org/math/pre-algebra)

(Relevant topics: Negative Numbers, Factors, and Exponents)

#### Math 085 Pretest

<http://www.seattlecentral.edu/learn/math/placement/ruready4085/index.htm>

Online test that looks at how much material was retained from math 084.

#### Training Fund Tutoring:

Both online and in-person group tutoring is available by request check out:

<http://healthcareerfund.org/tutoring/>