



Outline of Beginning Algebra II

Course Description

This course covers the general principles of beginning algebra and directly builds upon the materials learned in Beginning Algebra I. 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 problems 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. Hybrid classes require more studying on your own.

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 for keeping all of your returned math homework and quizzes. The final is most likely comprehensive; having all of 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 Beginning 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 BEGINNING 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)

Beginning Algebra II (Math 085) Pretest

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

Online test that looks at how much material was retained from Beginning Algebra I.

Training Fund Tutoring:

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

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