

## Algebra II

### Syllabus

**Textbook:** Algebra: Beginning and Intermediate 6<sup>th</sup> Edition

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#### Course Description:

**Prerequisites:** Algebra I) This course extends the topics first seen in Algebra I and provides advanced skills in algebraic operations.

**Attendance login requirements:** Students must log into class at the scheduled class time and remain until class ends. Student must attend class 165 days per year.

**Homework:** Homework assignments will be given at the discretion of the instructor.

**Class Participation:** All class participation will be online. Instructor will give written feedback on progress and acceptable work directly to student online.

#### **Course Grade Policy:**

90-100 average = A

80-89 average = B

70-79 average = c

60-69 average =D

Below 60 = F

**Tests/Exams:** There will be a quiz after each unit of study. You will have two opportunities to pass the test with a grade of 60. Mid-Term and Final Exams will be counted twice in grade averaging.

#### **Chapter 7**

## **Rational Expressions**

[Unit 7-1 Introductions to Rational Functions](#)

[Unit 7-2 Operations on Rational Expressions](#)

[Unit 7-3 Complex Fractions](#)

[Unit 7-4 Rational Equations](#)

[Unit 7-5 Proportions and Variation](#)

[Unit 7-6 Literal Equations](#)

[\*\*Chapter 7 Quiz\*\*](#)

## **Chapter 8**

### **Rational Exponents**

[Unit 8-1 Rational Exponents and Radical Expressions](#)

[Unit 8-2 Operations and Radical Expressions](#)

[Unit 8-3 Radical Functions](#)

[Unit 8-4 Solving Equations Containing Radical Expressions](#)

[Unit 8-5 Complex Numbers](#)

[\*\*Chapter 8 Quiz\*\*](#)

## **Chapter 9**

### **Quadratic Equations**

[Unit 9-1 Solving Quadratic Equations by Factoring or Taking Square Root](#)

[Unit 9-2 Solving Quadratic Equations Completing the Square and by Using Quadratic Formula](#)

[Unit 9-3 Equations that are Reducible to Quadratic Equations](#)

[Unit 9-4 Applications of Quadratic Equations](#)

[Unit 9-5 Properties of Quadratic Functions](#)

[Unit 9-6 Applications of Quadratic Functions](#)

[Unit 9-7 Nonlinear Inequalities](#)

[\*\*Chapter 9 Quiz\*\*](#)

## **Chapter 10**

### **Functions and Relations**

[Unit 10-1 Translations of Graphs](#)

[Unit 10-2 Algebra of Functions](#)

[Unit 10-3 One-to-One and Inverse Functions](#)

[\*\*Chapter 10 Quiz\*\*](#)

## **Chapter 11**

### **Exponential Logarithmic**

[Unit 11-1 Exponential Functions](#)

[Unit 11-2 Introduction to Logarithms](#)

[Unit 11-3 Graphs of Logarithmic Functions](#)

[Unit 11-4 Exponential and Logarithmic Equations](#)

[Unit 11-5 Applications of Exponential and Logarithmic Functions](#)

[Chapter 11 Quiz](#)

## **Chapter 12**

### **Conic Sections**

[Unit 12-1 The Parabola](#)

[Unit 12-2 The Circle](#)

[Unit 12-3 The Ellipse and the Hyperbola](#)

[Unit 12-4 Solving Nonlinear Systems of Equations](#)

[Unit 12-5 Quadratic Inequalities and Systems of Inequalities](#)

[Chapter 12 Quiz](#)

[Final Exam](#)