

# High School Syllabus

**Department:** Mathematics

**Course #:** 40410B

**Course Title:** Practical Algebra 2

**DESCRIPTION OF COURSE:** This algebra course will emphasize a hands-on approach to concepts using models, activities, graphing calculators, and course-related software. Students will understand and demonstrate concepts of simplifying expressions with and without complex numbers and solving linear, quadratic, exponential, polynomial, rational, and radical equations. Achievement will be demonstrated through tests, quizzes, homework assignments, graphing calculator exercises and projects. Students will take the Practical Algebra 2 final exam at the end of the course.

REQUIRED TOPICS OF STUDY	SUGGESTED INSTRUCTIONAL TIME	STANDARDS/ ELIGIBLE CONTENT
Tools of Algebra	22 days	CC.2.1.HS.F.2,3,4,5 ; CC.2.2.HS.D.8,9 A1.1.1.1.1 A2.1.3.2.2
Functions, Equations, and Graphs	22 days	CC.2.2.HS.C.1,2,3,6 ; CC.2.2.HS.D.1,2 CC.2.2.HS.D.7
Probability and Statistics	13 days	CC.2.4.HS.B.1,6,7
Linear Systems	13 days	CC.2.2.HS.C.5; CC.2.2.HS.D.10 CC.2.4.HS.B.2,3; A1.1.2.2.2 A1.1.3.2.2
Quadratic Equations and Functions	23 days	CC.2.1.HS.F.5,6,7; CC.2.2.HS.C.6 A1.1.1.5.2; A1.1.1.1.2; A2.1.1.1.1,2 A2.1.1.1.2,2; A2.2.1.1.4
Polynomials and Polynomial Functions	17 days	CC.2.2.HS.D.1,2,3,5,6
Radical Functions	10 days	CC.2.2.HS.C.4; A2.1.2.1.1,2,3
Rational Exponents	10 days	CC.2.1.HS.F.1,4
Exponential and Logarithmic Functions; Rational Functions; Sequences	5 days	CC.2.2.HS.C.5; CC.2.2.HS.D.6 A2.1.1.2.1.1,2,3,4; A2.2.2.1.1,2,3,4 A2.2.1.1.1,2,3; A2.1.2.1.1,4

**RESOURCES:** Algebra 2” Prentice Hall, 2008 edition  
TI-83 Graphing Calculator is recommended

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Curr/Syllabus/Math/Practical Algebra 2/Gr 10, 11, 12  
BAC/Ct/e-mailed N Buckno/3/30/15