Intermediate Algebra: Rio Salado College

(For a list of materials used in the course, please see
http://www.theNCAT.org/R2R/AcadPrac/CM/Rio_IntAlg_Mat.pdf.)

Intermediate Algebra is a one-semester, three-credit course that covers the following topics:

Solving Linear Systems
    Solving Linear Systems
        Solution by Graphing
        Solution by Algebra
    Problem Solving
        Using Linear System

Essentials of Algebra
    Numbers and Exponents
        Real Numbers & Notation
        Integer Exponents
    Polynomials
        Polynomial Operations
        Factoring Polynomials
    Equations and Inequalities
        Linear
    Rational Expressions
        Rational Expressions
        Rational Equations
    Graphing Lines
        Graphing Lines
        Finding Equations
    Absolute Value
        Solving Equations
        Solving Inequalities

Rational Exponents and Radicals
    Roots and Radicals
        Square Roots and Cube Roots
        Radical Expressions

Quadratic Equations
    Quadratic Equations I
        Solving by Factoring
        Solving by Square Root
    Quadratic Equations II
        Completing the Square
        The Quadratic Formula
    Complex Numbers
        Complex Number System

Functions and Graphing
    Functions
        Functions and Graphs
        Linear Functions
        Quadratic Functions

The Exponential and Logarithmic Functions
    Exponential Functions
        The Exponential Function
    Logs and Their Properties
        The Logarithmic Function
        Logarithmic Properties
    Applications of Logs
        Natural and Common Logs
        Solving Equations

More Nonlinear Equations and Inequalities
    Nonlinear Equations
        Solving Equations
        Radical Equations
    Inequalities
        Quadratic Inequalities
        Rational Inequalities