

Algebra 2

Class Description:

Algebra II provides a curriculum that builds on the algebraic concepts covered in Algebra I. Through a "Discovery-Confirmation-Practice" based exploration of intermediate algebra concepts, students are challenged to work toward a mastery of computational skills, to deepen their conceptual understanding of key ideas and solution strategies, and to extend their knowledge in a variety of problem-solving applications. Course topics include conic sections; functions, relations, and their graphs; quadratic functions; inverse functions; and advanced polynomial functions. Students also cover topics relating to rational, radical, exponential, and logarithmic functions; sequences and series; and data analysis and probability.

Within each Algebra II lesson, students are supplied with a scaffolded note-taking guide, called a "Study Sheet," as well as a post-study "Checkup" activity, providing them the opportunity to hone their computational skills by working through a low-stakes, 10-question problem set before moving on to a formal assessment. Unit-level Algebra II assessments include a computer-scored test and a scaffolded, teacher-scored test.

The content is based on the National Council of Teachers of Mathematics (NCTM) standards and is aligned to state standards.

Learning Materials:

APEX is a complete curriculum, other than a computer a student does not need any additional materials.

Learning Goals:

The content is based on the National Council of Teachers of Mathematics (NCTM) standards and is aligned to state standards. This course meets a graduation requirements and meets at least one GLE and/or EALR.

Learning Activities:

Student will complete Study, Discussion, Activity and a Quiz for each section in a unit and then will complete a unit exam. Activities are based on a student earning a min. of 70% or better in each activity.

Evaluation:

On each month's progress reports, student will report completion and mastery of learning activities designed to reach specific goals within the course description.

In addition, students will keep portfolios of their written work, quizzes, and tests to show their consultants and/or HQ teachers.

Every month progress will be determined by the HQ teacher of this course based on the question: "Will the student master his performance objectives by the end of the course?" The HQ teacher will take into consideration ALL factors (including student life situation, effort, attitude, etc.) when making this professional judgment.

Each month, the student will be expected to master approximately 10% of the yearly goals for this class (or 20% of semester goals), with all of the goals being met by the end of the year (or semester.) The mastery of any one goal may be an on-going process and some goals may overlap or be difficult to measure. Evaluation of progress toward the mastery of the goals will be based on monthly completion (or progress toward completion) of the learning activities that are designed to provide the means to achieving the goals of the learning plan. With that said, monthly progress can still be marked satisfactory based on the professional judgment of the teacher that the student will complete the goals of the course.