

Course Title: ALGEBRA IB	Course Description
<p>Course No. 4202 Grade level: 8-12</p> <p>Text and Resources: A. <i>Algebra</i>, Part I; AGS Publishing B. <i>Pacemaker Algebra I</i>; Globe Fearon C. <i>Algebra I</i>; Prentice Hall</p>	<p>Course Value: *One Semester</p> <p>Credit Value: 1-5</p>
<p>Course Content: Key Content Standards and Course Objectives</p>	
<p>The following objectives are based on the Grades 8-12 Algebra I standards:</p> <ol style="list-style-type: none"> 1. Students solve a system of two linear equations in two variables algebraically and are able to interpret/sketch the answer graphically (9.0). 2. Students add, subtract, multiply and divide monomials and polynomials and solve problems using these techniques (10.0). 3. Students apply basic factoring techniques to second and simple third-degree polynomials (11.0). 4. Students solve quadratic equations (14.0). 5. Students apply algebraic techniques to solve problems (15.0). 6. Students determine the domain of independent variables and the range of dependent variables defined by a graph, a set of ordered pairs, or a symbolic expression (16.0) 7. Students graph quadratic functions (21.0). 8. Students use the quadratic formula or factoring techniques or both to determine whether the graph of a quadratic function will intersect the x-axis in 0, 1 or 2 points (22.0). 9. Students use properties of the number system to judge the validity of results, to justify each step of a procedure and to prove or disprove statements (25.0). 	<p>This course will serve as a continuum of the Grades 8-12 Algebra I standards. The focus will remain on symbolic reasoning, as calculations with symbols are central in algebra. Through the study of algebra, students will develop an understanding of the symbolic language of mathematics and the sciences. In addition, algebraic skills and concepts are developed and used in a wide variety of problem-solving situations.</p> <p>*Open entry/open exit</p>
<p>Methods of Study</p>	<p>Evaluation of Performance Standards</p>
<ol style="list-style-type: none"> 1. Students will complete all activities assigned. 2. Students will participate in discussion with other class members and/or teacher. 	<ol style="list-style-type: none"> 1. Students will complete all assignments with a minimum of 70% accuracy. 2. The supervising teacher will be satisfied with the quality of the student's work. 3. The student must receive a minimum score of 70% on a teacher assigned final evaluation. 4. Letter grade contracts are optional and require a higher level of performance

ALGEBRA IB
Course Outline: 4202

I. Textbook Assignment Options:

A. *Algebra*; AGS, Part II (**5.0 credits**)

- Complete: even-numbered problems in Chapter 7.
- Complete: Chapter 7 Review, even-numbered problems.
- Complete: even-numbered problems in Chapter 8.
- Complete: Chapter 8 Review, even-numbered problems.
- Complete: even-numbered problems in Chapter 9.
- Complete: Chapter 9 Review, even-numbered problems.
- Complete: One “Application” activity from Chapters 7-9.
- Complete: even-numbered problems in Chapter 10.
- Complete: Chapter 10 Review, even-numbered problems.
- Complete: even-numbered problems Chapter 11.
- Complete: Chapter 11 Review, even numbered problems.
- Complete: even-numbered problems in Chapter 12.
- Complete: Chapter 12 Review, even numbered problems.
- Complete: even-numbered problems in Chapter 13.
- Complete: Chapter 13 Review, even numbered problems.
- Complete: One “Application” activity from Chapters 10-13.

B. *Pacemaker Algebra I*, Part II (**5.0 credits**)

- Complete: Chapters 9-15 “Practice” exercises, even numbered problems.
- Complete: Chapters 9-15 “Additional Practice” exercises, even numbered problems (see: back of book)
- Complete: Chapter quizzes, even numbered problems.
- Complete: Unit 3, 4, 5 “Reviews” , even numbered problems.

C. *Algebra I* (Prentice Hall) (**1.0-5.0 credits**: direct instruction or course contract required)

II. Extension Activity

Infused into textbook assignment.

III. Evaluation

- Unit and/or final test.
- All textbook work must meet the 70% accuracy level for a “C” grade.