

<b>Course Title: ALGEBRA IA</b>	<b>Course Description</b>
<p><b>Course No.</b> 4201                      <b>Grade level:</b> 8-12</p> <p><b>Text and Resource Options:</b>  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><b>Course Value:</b> *One Semester</p> <p><b>Credit Value:</b> 1 - 5</p>
<p><b>Course Content: Key Content Standards and Course Objectives</b></p>	
<p>The following objectives are based on the Grades 8-12 Algebra I standards:</p> <ol style="list-style-type: none"> <li>1. Students identify and use the arithmetic properties of subsets of integers and rational, irrational, and real numbers, including closure properties for the four basic arithmetic operations (1.0).</li> <li>2. Students understand and use such operations as taking the opposite, finding the reciprocal, and taking a root. They understand and use the rules of exponents (2.0).</li> <li>3. Students solve equations and inequalities (3.0).</li> <li>4. Students solve multistep problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step (5.0).</li> <li>5. Students simplify expressions before solving linear equations and inequalities in one variable (4.0).</li> <li>6. Students graph a linear equation and compute the x- and y- intercepts (6.0).</li> <li>7. Students verify that a point lies on a line, given an equation of the line (7.0).</li> <li>8. Students understand the concepts of parallel lines and how their slopes are related (8.0).</li> </ol>	<p>This course will focus 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><b>Methods of Study</b></p>	<p><b>Evaluation of Performance Standards</b></p>
<ol style="list-style-type: none"> <li>1. Students will complete all activities assigned.</li> <li>2. Students will participate in discussion with other class members and/or teacher.</li> </ol>	<ol style="list-style-type: none"> <li>1. Students will complete all assignments with a minimum of 70% accuracy.</li> <li>2. The supervising teacher will be satisfied with the quality of the student's work.</li> <li>3. The student must receive a minimum score of 70% on a teacher assigned final evaluation.</li> <li>4. Letter grade contracts are optional and require a higher level of performance.</li> </ol>

ALGEBRA IA  
**Course Outline: 4201**

**I. Textbook Assignment Options:**

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

- Complete: even-numbered problems in Chapter 1.
- Complete: Chapter 1 Review, even-numbered problems.
- Complete: even-numbered problems in Chapter 2.
- Complete: Chapter 2 Review, even-numbered problems.
- Complete: even-numbered problems in Chapter 3.
- Complete: Chapter 3 Review, even-numbered problems.
- Complete: One “Application” activity from Chapters 1-3.
- Complete: even-numbered problems in Chapter 4.
- Complete: Chapter 4 Review, even-numbered problems.
- Complete: even-number problems Chapter 5.
- Complete: Chapter 5 Review, even numbered problems.
- Complete: even-numbered problems in Chapter 6.
- Complete: Chapter 6 Review, even numbered problems.
- Complete: One “Application” activity from Chapters 4-6.

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

- Complete: Chapters 1-8 “Practice” exercises, even numbered problems.
- Complete: Chapters 1-8 “Additional Practice” exercises, even numbered problems (see: back of book)
- Complete: Chapter quizzes.
- Complete: Unit 1 and Unit 2 “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.