

MATHEMATICS

MA06 **Math Lab** **EL**
1.0 Cr. **1 Year**
Math Lab is a support course designed to meet the needs of students whose mathematics achievement is below the proficient level. This course directly addresses students' needs through the use of small group instruction, computer aided instruction, review of basic arithmetic and pre-algebra concepts and procedures, supplemental activities that reinforce concepts and objectives presented in the core mathematics course, and by providing time to work on homework in a structured setting under the supervision of a math teacher. The course is designed to supplement Math Standards 1-2, Math Standards 3-4, Algebra 1-2 and Geometry. (May be repeated for credit.) (Course is available only at Title I schools.) [Board Adopted 2004]

Prerequisites: Placement test/Elective Credit only
Homework: Daily
Degree of Difficulty: Low/Average
Grade Levels: 9

MA32 **Math Standards 3-4** **MA**
1.0 Cr. **1 Year**
 This course, along with the first course in the sequence, Math Standards 1-2, is designed to help students with the standards that will be tested on Arizona's Instrument to Measure Standards (AIMS). This class will also cover various life applications of mathematics. Students will receive instruction on the topics of number sense, statistics, linear equations, basic geometry, logic and probability. Students who take this course will need to take Math Standards 1-2 prior to enrolling in this course. The sequence of courses Math Standards 1-2 and Math Standards 3-4 provides students an alternative to the sequence Algebra 1-2 and Geometry 1-2. In both sequences students will be exposed to the standards that the AIMS assesses. [Board Adopted 2001]

Prerequisites: Math Standards Lab
Homework: Daily
Degree of Difficulty: Low/Average
Grade Level: 10

MA07 **Algebra 1-2** **MA**
1.0 Cr. **1 Year**
 This course is designed for the student who can independently use and apply the basic skills of arithmetic. The course introduces the student to the basic structure of Algebra through the use and application of real numbers, inequalities, factoring, polynomials, linear and quadratic equations, and graphs. Appropriate technology will be used to enhance mathematical understanding and problem solving skills. Students who successfully complete this course with a grade of "C" or higher should be prepared to take Geometry 1-2. [Board Adopted 2000]

Prerequisites: Department recommendation
Homework: Daily
Degree of Difficulty: Average
Grade Levels: 9, 10

MA9 **Geometry 1-2** **MA**
1.0 Cr. **1 Year**
 This course introduces the student to the deductive method of proof with the use of points, lines, and planes. Solid geometry is integrated with plane geometry to lead the student to consideration of two- and three-dimensional figures and to develop the ability to visualize space relationships. Students who successfully complete this course with a grade of "C" or higher should be prepared for Algebra 3-4. [Board Adopted 2000]

Prerequisites: Algebra 1-2 with a grade of 'C' or better and/or Department recommendation
Homework: Daily
Degree of Difficulty: Average
Grade Levels: 9, 10

MA10 **Honors Geometry 1-2*** **MA**
1.0 Cr. **1 Year**
 This course introduces the student to the deductive method of proof with the use of points, lines, and planes. Solid geometry is integrated with plane geometry to lead the student to consideration of two- and three-dimensional figures and to develop the ability to visualize space relationships. Other geometries and methods of proof will also be explored. Opportunities for creative expression and enrichment will be provided. This course meets the state proficiency standards at the distinction level. [Board Adopted 2000]

Prerequisites: Algebra 1-2 with a grade of 'A' and/or Department recommendation
Homework: Daily
Degree of Difficulty: High
Grade Levels: 9, 10

MA11 **Algebra 3-4** **MA**
1.0 Cr. **1 Year**
 This course begins with a review of Algebra 1-2 topics and introduces the following new topics: matrices, complex numbers, exponential and logarithmic functions, conic sections, and trigonometry. This course or Honors Algebra 3-4 is recommended for all students who are planning to attend most post-secondary institutions. Students who successfully complete this course with a grade of "C" or higher should have met the prerequisites for Math Analysis 1-2. [Board Adopted 2000]

Prerequisites: Geometry 1-2 with a grade of 'C' or better and/or Department recommendation
Homework: Daily
Degree of Difficulty: Average/High
Grade Levels: 11, 12

MA12 **Honors Algebra 3-4*** **MA**
1.0 Cr. **1 Year**
 This course in second year Algebra and Trigonometry places consistent emphasis on the real and complex number systems, solution of equations and inequalities, trigonometry, logarithms, and the deductive method of proof. The concepts of sets, relations, and functions are explored thoroughly and used to unify the course material. Included in the content will be an extension of the topics covered in Algebra 1-2 and many of the following: progressions, binomial theorem, vectors, probability, etc. This course is highly recommended for the student who will pursue a career in mathematics, science, or engineering. Students successfully completing this course with a "C" or higher should be prepared to take Honors Pre Calculus. This course meets the state proficiency standards at the distinction level. [Board Adopted 2000]

Prerequisites: Honors geometry with a grade of 'C' or better and/or Department recommendation
Homework: Yes
Degree of Difficulty: High
Grade Levels: 10, 11

MA13 **Math Analysis 1-2** **MA**
1.0 Cr. **1 Year**
 This course introduces the student to higher mathematics through the study of fundamental concepts of equations, functions, and applications. Emphasis is placed upon understanding rather than just manipulation and computation. Appropriate technology will be used to enhance mathematical understanding and problem solving skills. Students successfully completing this course with a "C" or higher should be prepared to take Calculus 1-2 or Honors Pre Calculus. [Board Adopted 2000]

Prerequisites: Algebra 3-4 with a grade of 'C' or better and/or Department recommendation
Homework: Daily (Rio Credit available)
Degree of Difficulty: High
Grade Levels: 11, 12

