

MA733O/ Algebra 1-2 Syllabus

Course Title----- Algebra 1-2
Course Number----- MA733O
Grades:----- 09-12
High School Credit Value:----- 0.5

Prerequisites:----- Mastery of the concepts in first semester algebra.

Course Length:----- Regular courses: 17 weeks
CR: 9-17 weeks.

Course Time:----- Regular courses: 17 week schedule: 75 - 90 minutes per school day (6-7.5 hours per week)
Credit Retrieval: 75 - 90 minutes per school day (6-7.5 hours per week) until course completion.

{ Course Description }

This second semester of algebra 1 course covers: solving systems of equalities and inequalities, exponents and polynomials, factoring polynomials, quadratic equations and functions, exponential equations and functions, radical expressions and equations, as well as rational expressions and equations.

Because high school students have unique needs and experiences, CompassLearning ensures that students know where they are, while challenging them to grow. Odyssey High School Math focuses on foundational skills to support learners, emphasizes repetition and practice of key skills, reinforces study habits, including note-taking, to sharpen students' comprehension, and covers National Mathematics Advisory Panel's concepts for success in algebra.

Course Materials:

The student should plan on 60 to 90 minutes of working in this math class per week day.

This math class requires the use of a online text book Odyssey. The student will run a system checkup in order to be able to fully take advantage of the course. This course may be taken on the PC or Mac platform.

For the student to participate with the instructor online, it is strongly recommended that the student needs to have headphones with a microphone in order to meet with the teacher online.

State Alignments

Washington State Standards guided the design of the course. Learning expectations are found within the course itself.

CCSS	Description	Unit Number
A.SSE	Seeing Structure in Expressions	2, 3, 4, 7
A.APR	Arithmetic with Polynomials and Rational Expressions	2,
A.CED	Creating Equations	1, 4, 5, 6, 7
A.REI	Reasoning with Equations and inequalities	1, 3, 4, 7
F.IF	Interpreting Functions	2, 3, 4, 5, 6, 7
F.BF	Building Functions	2, 5, 7
F.LE	Linear and Exponential Models	4, 5,
N.Q	Quantities	1st Semester
S.ID	Interpreting Categorical and Quantitative Data	1st Semester

Course Outline

MTH732 - Algebra 1-2 - (Second semester of the first year of algebra.) - Some Units and lessons may overlap within weeks.

Unit	Lessons	17 Week Learning Plan Contract	12 Week Learning Plan Contract
Unit 1 - Solving Systems of Eq/Ineq	Solving Systems by Graphing, Solving Systems Using Substitution, Solving Systems Using Elimination, Linear Inequalities, Parent Functions	3 Weeks	2 Weeks
Unit 2 - Exponents and Polynomials	Exponents, Operations with Polynomials, Operations with Binomials	2 Weeks	1 Week
Unit 3 - Factoring Polynomials	Introduction to Factoring, Factoring, Factoring Special Products	2 Weeks	1 Week
Unit 4 - Quadratic Equations/Functions	Examining Graphs of Quadratic Functions, Solving Quadratic Equations by Graphing, Simplifying Radicals and Complex Numbers, Solving Quadratic Equations, Completing the Square, The Quadratic Formula and the Discriminant	3 Weeks	2 Weeks
Unit 5 - Exponential Equation/Function	Exponential Growth and Decay, Graphs of Exponential Functions, Geometric Sequences	2 Weeks	1 Week
Unit 6 - Radical Expressions/Equations	Solving Radical Equations, Graphing Square Root Functions, The Pythagorean Theorem and Trig. Ratios, The Midpoint and Distance	2 Weeks	2 Weeks

	Formula		
Unit 7 - Rational Expressions/Equations	Inverse Variation, Graphing Rational Functions, Simplifying Rational Expressions, Dividing Polynomials, Multiplying and Dividing Rational Expressions, Mixed Expressions and Complex Fractions, Solving Rational Equations	4 Weeks	4 Weeks

Course Flow

The student will begin working in the Odyssey textbook to receive instruction in the different skills. Then the student participates in quizzes where the student's goal is to achieve a 70% or better in score before moving forward in the textbook. The student will have three attempts to reach the 70% or better mark.

Upon completion of a unit of lessons the student will take a cumulative Chapter Test. This score is then given to the instructor within the iA math course unit folder as the reflection assignment.

Students are also required to complete weekly summative assessments entitled, checkpoints. These checkpoints require the student to demonstrate their complete understanding of the different skills presented to them each week. Correct answers are only worth 2 points of the 5 point total as the remaining 3 points are earned with their explanation that goes with their process of arriving at their response.

Course Work

The homework that is completed for this course is assigned on the student's Learning Plan Contract or pacing guide found in the students Unit page. The Learning Plan Contract of 17 or 12 weeks is based upon the student's contracted start and end date.

The student is required to complete the weekly checkpoint as assigned on the Learning Plan Contract as well as reflection assignments that will contain their percentage earned on the "Chapter Test" after their efforts in the different units.

Grading

Grades will be generated from the following:

Weekly Checkpoints - These checkpoint summative assessments have the student demonstrating to the instructor their complete understanding of taught skills.

Chapter Test Results - This Chapter Test score is a summative assessment based upon the students learning and practicing within the various lessons of the unit. This assignment includes having the student reflect upon their learnings for the unit and their Chapter Test percentage.

Revision Policy - While working within the Odyssey textbook, the student is able to attempt the quizzes up to three times to surpass the 70% mark until they are able to move ahead. The student is not able to "redo" or "revise" the Chapter Test activity. Currently, teachers are unable to "reset" this test. So, students want to make sure that they do their best on their first only attempt.

Checkpoints are able to be revised one more time based upon teacher feedback given the first attempt.

Grades - Grades are posted within the iA math course. Students can click on the Student Grades tab in their class to view their gradebook. Grades or scores in the Odyssey textbook are there for the student and parent to see their practice and progress in the different skills. Only the Chapter Test score will be placed within the iA math gradebook. As stated above, the gradebook will be consisted of checkpoint scores and chapter test scores.

Occupational Credit:

This course may qualify for *occupational credit. Please consult your school counselor for further clarification.

*Please note that FLA901 (Sign Language) does not qualify for occupational credit.

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