

MA733OR/ Algebra 1-2 CR Syllabus

Course Title-----	Algebra 1-2 CR
Course Number-----	MA733OR
Grades:-----	09-12
High School Credit Value:-----	0.5
Prerequisites:-----	A transcript or other documentation is required to show the student has previously taken the course and not earned credit.
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 credit retrieval course covers these Washington state standards: linear functions, equations, and inequalities, quadratic functions and equations, data and distributions.

Students begin with a diagnostic assessment on a Washington state standard within the Compass Learning program (CLO) and then based upon those results an individual learning plan is set up for the student. The student works the lessons needed and then demonstrates mastery of the skills in an assessment that must be passed before moving on to the next standard.

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:

This math class requires the use of the virtual curriculum called 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.

The student is encouraged to participate with the instructor online, thus the student may want to have

headphones with a microphone in order to meet weekly with the teacher virtually.

State Alignments

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

The student will have the opportunity to go through these standards within the two semesters of algebra.

Standard 1: Select and justify functions and equations to model and solve problems.

Standard 2: Solve problems that can be represented by linear functions, equations, and inequalities. Write and solve linear equations and inequalities in one variable.

Standard 3: Solve problems that can be represented by a system of two linear equations or inequalities. Write and solve systems of linear equations and inequalities in two variables.

Standard 4: Recognize the multiple uses of variables, determine all possible values of variables that satisfy prescribed conditions, and evaluate algebraic expressions that involve variables.

Standard 5: Interpret and use integer exponents and square and cube roots, and apply the laws and properties of exponents to simplify and evaluate exponential expressions.

Standard 6: Use algebraic properties to factor and combine like terms in polynomials.

Standard 7: Represent a function with a symbolic expression, as a graph, in a table, and using words, and make connections among these representations.

Standard 8: Evaluate $f(x)$ at a (i.e., $f(a)$) and solve for x in the equation $f(x)=b$.

Standard 9: Write and graph an equation for a line given the slope and the y-intercept, the slope and a point on the line, or two points on the line, and translate between forms of linear equations.

Standard 10: Identify and interpret the slope and intercepts of a linear function, including equations for parallel and perpendicular lines.

Standard 11: Describe how changes in the parameters of linear functions and functions containing an absolute value of a linear expression affect their graphs and the relationships they represent.

Standard 12: Represent a quadratic function with a symbolic expression, as a graph, in a table, and with a description, and make connections among the representations.

Standard 13: Find the equation of a linear function that best fits bivariate data that are linearly related, interpret the slope and y-intercept of the line, and use the equation to make predictions. Describe the correlation of data in scatterplots in terms of strong or weak and positive or negative.

Standard 14: Sketch the graph of a quadratic function, describe the effects that changes in the parameters have on the graph, and interpret the x-intercepts as solutions to a quadratic equation.

Sketch the graph for an exponential function of the form $y=ab^n$ where n is an integer, describe the effects that changes in the parameters a and b have on the graph, and answer questions that arise in situations modeled by exponential functions.

Standard 15: Develop fluency in operations with real numbers, vectors, matrices, using mental computation or paper-pencil calculations for simple cases and technology for more complicated cases.

Course Outline

MTH733T - Algebra 1-2 Credit Retrieval - (Second semester of the first year of algebra.) - Students demonstrate mastery in the following Common Core Algebra Standards. Students will take a diagnostic assessment for each standard and then an individual learning path will be given to the student based upon those results.

Common Core Standard 3 - Functions

Interpreting Functions

Building Functions

Linear and Exponential Models

Common Core Standard 4 - Statistics and Probability

Interpreting Categorical and Quantitative Data

Course Work

- You will begin by taking a Diagnostic Assessment on each common core standard to begin each section of your course. Each diagnostic assessment will evaluate the student on their knowledge and ability to demonstrate those standards.
- Upon completion of the diagnostic assessment, an individual learning path within the Odyssey text book will be set up for you based upon the results of your diagnostic assessment.
- When the student reaches a lesson quiz, the goal is to receive a 70% or better on that quiz. **If the student receives a 70% or better on the quiz** the student will see that they are given access to the next portion of the lesson or unit. Should one **not receive a 70% or better on a quiz** they will be redirected back to the lesson to study and go through to assist them in getting a score of a 70% or better the second time. After three attempts of more learning and still unable to reach a 70% or better they will be given access to move ahead, however the teacher will be in touch with them through email to discuss their results for the quiz.
- Upon completion of lessons in your Odyssey text book email the teacher that you are ready to take the Standard Summative Assessment.
- Upon teacher approval, you will be given access to the Standard Summative Assessment you have asked to complete.

- As instructed on your unit pages you will be coming back to your IA Campus math course and unit folder to complete a "Power Standard Summative Assessment" for those lessons. This summative assessment is your way of demonstrating what you have learned in those lessons. **If you pass the summative assessment** with a 70% or better demonstrating your mastery of the those standards, you will move on to the next power standard diagnostic assessment and go through these steps all over again.
- **If you do not pass the summative assessment** with a 70% or better, you will be asked to re-work the assessment until you have demonstrated to your teacher your understanding and mastery of the standards.

Grading

Quizzes Within Your CLO Textbook: When you take quizzes within your Odyssey textbook, you are studying and practicing using the skills that you were taught. These scores will NOT be part of your grade for the unit or found in your IA grade book. You will be able to take a quiz up to three times to reach a 70% or better.

Power Standard Summative Assessments: These assignments will be completed upon completion the diagnostic assessment and then the lessons that follow based upon your score. This assignment is used to demonstrate to your teacher that you have mastered the skills within this standard. You will only receive one of two scores on this assignment, Passing or Not Passing. You must receive a Passing grade in order to proceed in the class and thus passing the class.

Revision Policy: Your assignments within your math class, the Power Standard Summative Assessment, will be corrected by your teacher. Should you not demonstrate full understanding of the skills you will be asked to revise the assignment and resend it to your instructor. Your ability to revise a lesson quiz is already built into the Odyssey curriculum. You are able to retake a quiz up to three times.

The highest grade you can earn in this course is a C.

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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