

MA872OR/ Algebra 2-1 CR Syllabus

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| Course Title----- | Algebra 2-1 CR |
| Course Number----- | MA872OR |
| Grades:----- | 09-12 |
| High School Credit Value:----- | 0.5 |
| Prerequisites:----- | Successful completion of year one of Algebra, a previous attempt at Algebra 2-1 and verification by a transcript. |
| 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 is a credit retrieval course for students who have already taken Algebra 2-1 and not earned credit. Students enrolled in this course will use an online curriculum called Compass Learning Odyssey (Odyssey). Within Odyssey, students will take objective-based pre-assessments which indicate what standards have been met and what skills need to be practiced and demonstrated by the student. Based on the results of the the pre-assessments, an individual plan (called an Odyssey learning path) will be developed for the student. Successful completion of the Odyssey learning paths and the final summative assessment earns a passing grade (C) and .5 credit in Algebra 2-1.

This first semester of algebra 2 credit retrieval course covers the Algebra 2 Washington state standards: select and justify functions and equations to model situations, solve problems involving exponential and quadratic functions, explain how number systems are related, and simplify rational expressions.

This course helps meet the state minimum requirements of 2.0 Mathematics credits. Please check with your district for more specific requirements.

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 Compass Learning 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 required to participate with the instructor online, thus 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.

Course Outline

Algebra 2 Standard 1 - Solve problems that can be represented by systems of equations and inequalities including systems of equation in three variables.

Algebra 2 Standard 2 - Solve problems involving probability and solve problems involving combinations and permutations.

Algebra 2 Standard 3 - Use the laws of **exponents** to simplify and evaluate numeric and algebraic **expressions** that contain rational exponents.

Algebra 2 Standard 5 - Translate between the standard form of a quadratic function, the vertex form, and the factored form; graph and interpret the meaning of each form.

Algebra 2 Standard 6 - Solve quadratic equations and inequalities, including equations with complex roots and solve problems that can be represented by quadratic functions, equations, and inequalities.

Algebra 2 Standard 7 - Solve exponential and logarithmic equations.

Algebra 2 Standard 8 - Construct new functions using the transformations $f(x - h)$, $f(x) + k$, $cf(x)$, and by adding and subtracting functions, and describe the effect on the original graph(s).

Algebra 2 Standard 10 - Given a finite sample space consisting of equally likely outcomes and containing events A and B, determine whether A and B are independent or dependent, and find the conditional probability of A given B.

Algebra 2 Standard 11 - Calculate and interpret measures of variability and standard deviation and use these measures and the characteristics of the normal distribution to describe and compare data sets.

Algebra 2 Standard 12 - Find the terms and partial sums of arithmetic and geometric **series** and the infinite **sum** for geometric series.

Course Work

The coursework for each student varies, and depends on a student's pre-assessment. The student must complete their individualized Learning Path Assignment in Odyssey, and pass each assessment within the Learning Path with 70% or higher.

Once the Odyssey Learning Path is complete, students must pass a final assessment on their iA Campus math page found

under units. Once the final assessment is completed with a 70% or higher, the student is done with the course.

Grading

The student will earn a C at the completion of the course, when they have 1) Shown mastery of each topic on their Odyssey Learning Path with 70% or higher on each assessment, and 2) Completed the course Final Assessment on their iA Campus Math page with 70% or higher.

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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