

MA833OR/ Geometry 1-2 CR Syllabus

Course Title-----	Geometry 1-2 CR
Course Number-----	MA833OR
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 is a six-week credit retrieval course for students who have already taken this class and not earned credit. A diagnostic assessment, given at the beginning of the course, indicates what standards have been met, and what skills need to be practiced and demonstrated. Based on the results of the diagnostic assessment, an individual plan for completing the course is developed by the teacher and communicated to the student. Upon successful completion of the course, the student earns a passing grade (C) and .5 credit in Geometry 2.

Students will learn the concepts of quadrilaterals and other polygons, circles, coordinate geometry, three-dimensional solids and various topics in geometry.

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 necessary computer components as defined at the iA and Odyssey websites.
- Speakers to access the audio of the text.
- A printer for the worksheets.
- A notebook or binder to take and organize notes.
- A headset with microphone is recommended for communicating in the online office.

State Alignments

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

During the full year of Geometry students will:

1. Know, prove, and apply theorems about parallel and perpendicular lines and angles, including angles that arise from parallel lines intersected by a transversal.
2. Explain and perform basic compass and straightedge constructions related to parallel and perpendicular lines.
3. Determine and prove triangle congruence, triangle similarity, and other properties of triangles.
4. Solve problems involving the basic trigonometric ratios of sine, cosine, and tangent and know, prove, and apply the Pythagorean Theorem and its converse.
5. Know, prove, and apply basic theorems about parallelograms.
6. Know, prove, and apply theorems about properties of quadrilaterals and other polygons.
7. Know, prove, and apply basic theorems relating circles to tangents, chords, radii, secants, and inscribed angles.
8. Determine the equation of a line in the coordinate plane that is described geometrically, including a line through two given points, a line through a given point parallel to a given line, and a line through a given point perpendicular to a given line.
9. Verify and apply properties of triangles and quadrilaterals in the coordinate plane.
10. Determine the equation of a circle that is described geometrically in the coordinate plane and, given equations for a circle and a line, determine the coordinates of their intersection(s).
11. Determine and apply properties of transformations.
12. Apply formulas for surface area and volume of three-dimensional figures to solve problems and predict and verify the effect that changing one, two, or three linear dimensions has on perimeter, area, volume, or surface area of two- and three-dimensional figures.
13. Use inductive reasoning to make conjectures, and use deductive reasoning to prove or disprove conjectures.
14. Develop fluency in operations with real numbers, vectors, and matrices, using mental computation or paper-and-pencil calculations for simple cases and technology for more-complicated cases.

Course Outline

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Unit 1	Polygons
Unit 2	Area of Polygons and Circles
Unit 3	Circles
Unit 4	Transformations

Unit 5	Surface Area and Volume
Unit 6	Angles of Elevations and Depression and Vectors
Unit 7	Constructions, Non-Euclidean Geometry and Art
Unit 8	Semester Wrap-up and final

Course Work

Students begin by logging into their IA Campus Course pages (UNITS tab) and follow the Getting Started (GS) instructions and complete the GS assignment. This will introduce Odyssey, our interactive online curricula and perform a system check to be sure their computer has all the add-ons needed to run the lessons. It is the responsibility of user to install any add-ons suggested and/or to remove any program that will affect the use of the online curriculum.

After the GS is completed, students will:

- Log into Odyssey and take the Diagnostic for the first Standard. Odyssey will then create a Learning Plan to cover the topics and concepts not passed.
- Students then work on the assigned lessons. Scores of at least 70% must be earned to progress to the next assigned lesson. Three attempts are allowed on each quiz. Please contact the teacher for help before making the third attempt.
- Each unit concludes with a unit test which may only be taken once.
- Students then submit a unit summary in the iA Campus page.

The same procedure is followed for the remaining Standards.

The course concludes with a cumulative final.

Math is like sports or music, you can understand what to do, but if you don't practice, your skills will be weak. You may need to do all the practice problems available.

Grading

Geometry 2R is a pass (C)/ no credit class. Students must demonstrate mastery of each standard to earn a passing grade. Students will demonstrate mastery by;

- Chapter test scores from Odyssey.
- Checkpoints, Unit reflections, and other assignments posted by the teacher in the iA Campus.

Revision Policy

Students will be given three attempts to achieve mastery (70%) of each quiz. Students will be given the opportunity to revise work not done at a passing level by communicating with the teacher.

Chapter tests, and the final exam cannot be retaken.

Please be aware that the program can mark a quiz answer incorrect when it is correct. *When this occurs, it is the student's responsibility to communicate to the teacher. Be detailed when explaining the mathematical steps used to compute the answer.* The teacher will review the problem and the student's solution to determine if full or partial credit should be given.

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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