## Geometry: Part 1

Course number: MA043_20_1<br>Credits: . 5 credit<br>Prerequisites: None

## INSTRUCTIONAL TEAM

Our Academic Advisors are also available to help you when you need it. They are trained to provide answers to your questions about the course or program.
Phone: 1-800-224-7234
Hours: 8:30AM - 8:30PM (Eastern Standard Time), Monday-Friday

## MAIL

James Madison High School
5051 Peachtree Corners Circle, Suite 200
Norcross, GA 30092

## Course Materials

All of your course materials are included in this course experience. You'll find it easiest to study this course by following these steps:

- Look over the syllabus, paying close attention to the course and lesson objectives.
- Read each objective. Pay close attention to main concepts and definitions.
- Complete each assignment as you come to it.
- When you've completed each assignment, look over the lesson review.
- When you're confident you understand the material, complete the lesson exam.


## COURSE DESCRIPTION

The Geometry: Part 1 course focuses on the properties of lines and angles. You'll perform translations and apply theorems to shapes. In this course, you'll discover how relevant geometry is to everyday life by exploring practical applications. You'll forge connections between mathematical topics and gain many powerful tools to help you negotiate logic problems and proofs, all of which will improve problem-solving skills.

## LEARNING OBJECTIVES

After completing Geometry: Part 1, students will be able to:

- Recognize the basic principles of Geometry
- Use deductive and inductive reasoning through writing proofs
- Prove that lines are either parallel or perpendicular
- Perform translations, reflections, rotations, dilations, and compositions of transformations
- Apply theorems to prove congruent triangles
- Use properties of similarity to complete proofs

| LESSONS | TOPICS |
| :--- | :--- |
| Lesson 1: | Basics of Geometry |
| Lesson 2: | Reasoning and Proofs |
| Lesson 3: | Parallel and Perpendicular Lines |
| Lesson 4: | Transformations |
| Lesson 5: | Congruent Triangles |
| Lesson 6: | Similarity |
| Graded Exam: | Final Exam |

## GRADING

The following point totals correspond to the following grades:

## POINTS GRADE

100-90 A
89-80 B
79-70 C
65-69 D
Below 65 F
James Madison High School allows 2 attempts on exams. If a student is not satisfied with his/her score on the 1st attempt, an exam may be resubmitted. The 2 nd attempt is not required as long as the final course average is above $65 \%$. The higher of the $\mathbf{2}$ attempts will be the score that counts towards the final average.

Exams are timed and once you begin an exam, the timer runs continuously, even if you leave the course. Refer to the exam instructions for the time limit (in most cases 3 hours), but the time limit cannot be spread over multiple days.

## GRADE WEIGHT

| TOPIC | ACTIVITY | PERCENTAGE |
| :--- | :---: | :---: |
| Lesson 1: Basics of Geometry | Quiz | $13.3 \%$ |
| Lesson 2: Reasoning and Proofs | Quiz | $13.3 \%$ |
| Lesson 3: Parallel and Perpendicular Lines | Quiz | $13.3 \%$ |
| Lesson 4: Transformations | Quiz | $13.3 \%$ |
| Lesson 5: Congruent Triangles | Quiz | $13.4 \%$ |
| Lesson 6: Similarity | Quiz | $13.4 \%$ |
| Graded Exam: Final Exam | Assignment | $20 \%$ |

## ACADEMIC AND COURSE POLICIES

Please see the Academic Policies section in the James Madison High School Catalog for information on Course policies, including the Exam/Assignment Retake Policy, Grading Policy, Academic Honesty Policy, and Student Conduct Policy.

## Geometry: Part 2

Course number: MA044_20_1<br>Credits: . 5 credit<br>Prerequisites: None

## INSTRUCTIONAL TEAM

Our Academic Advisors are also available to help you when you need it. They are trained to provide answers to your questions about the course or program.
Phone: 1-800-224-7234
Hours: 8:30AM - 8:30PM (Eastern Standard Time), Monday-Friday

## MAIL

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James Madison High School
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5051 Peachtree Corners Circle, Suite 200
Norcross, GA 30092

## Course Materials

All of your course materials are included in this course experience. You'll find it easiest to study this course by following these steps:

- Look over the syllabus, paying close attention to the course and lesson objectives.
- Read each objective. Pay close attention to main concepts and definitions.
- Complete each assignment as you come to it.
- When you've completed each assignment, look over the lesson review.
- When you're confident you understand the material, complete the lesson exam.


## COURSE DESCRIPTION

The Geometry: Part 2 course focuses on the properties polygons, circles, and three-dimensional figures. You'll apply theorems and trigonometric ratios to shapes. In this course, you'll discover how relevant geometry is to everyday life by exploring practical applications.

## LEARNING OBJECTIVES

After completing Geometry: Part 2, students will be able to:

- Calculate lengths of triangle components
- Prove properties of quadrilaterals
- Apply the Pythagorean Theorem and other trigonometry functions
- Calculate measures of a circle
- Calculate circumference, area, and volume of circular shapes

| LESSONS | Relationships with Triangles |
| :--- | :--- |
| Lesson 7: | Quadrilaterals and Other Polygons |
| Lesson 8: | Right Triangles and Trigonometry |
| Lesson 9: | Circles |
| Lesson 10: | Area and Volume |
| Lesson 11: | Final Graded Exam |
| Graded Exam: |  |

## GRADING

The following point totals correspond to the following grades:

| POINTS | GRADE |
| :--- | :--- |
| $100-90$ | A |
| $89-80$ | B |
| $79-70$ | C |
| $65-69$ | D |
| Below 65 | F |

James Madison High School allows 2 attempts on exams. If a student is not satisfied with his/her score on the 1st attempt, an exam may be resubmitted. The 2 nd attempt is not required as long as the final course average is above $65 \%$. The higher of the $\mathbf{2}$ attempts will be the score that counts towards the final average.

Exams are timed and once you begin an exam, the timer runs continuously, even if you leave the course. Refer to the exam instructions for the time limit (in most cases 3 hours), but the time limit cannot be spread over multiple days.

## GRADE WEIGHT

| TOPIC | ACTIVITY | PERCENTAGE |
| :--- | :---: | :---: |
| Lesson 7: Relationships with Triangles | Quiz | $15 \%$ |
| Lesson 8: Quadrilaterals and Other <br> Polygons | Quiz | $15 \%$ |
| Lesson 9: Right Triangles and <br> Trigonometry | Quiz | $15 \%$ |
| Lesson 10: Circles | Quiz |  |
| Lesson 11: Area and Volume | Quiz | $15 \%$ |
| Graded Exam: Final Graded Exam | Assignment | $15 \%$ |

## ACADEMIC AND COURSE POLICIES

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