

Manhattan High School - P35M

Geometry Syllabus

Course Codes: MGS21QQM/2, MGS21QQM/5

Course Name: Geometry 1/2

Year and Term: 2022 Fall Session

Instructor: Mr. Payton

Room: 411

Email: APayton3@schools.nyc.gov

School Contact Number: (212)-247-4307

Manhattan High School Mission and Philosophy: The mission of Manhattan High School is to provide an appropriate education in the least restrictive environment based on a student's identified needs, strengths and interests. The school environment believes all students can learn regardless of his/her disability. Students are provided with all necessary resources to transition into less restrictive environments by improving their academic and social skills. All students will be provided with a rigorous education and supported by a caring community of educators and administrators. Our educators will prepare all students for post-secondary opportunities in college and/or in the workplace.

Course Description: This Geometry course is a comprehensive look at the study of geometric concepts including the basic elements of geometry, proofs, parallel and perpendicular lines, the coordinate plane, triangles, quadrilaterals, polygons, circles, trigonometry, congruence and similarity, surface area, volume and transformations

Course Objectives:

Students will be able to:

- Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
- Represent transformations in the plane
- Define rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
- Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.
- Prove theorems about lines and angles.
- Prove theorems about triangles.
- Prove theorems about parallelograms.
- Make formal geometric constructions with a variety of tools and methods (compass and straightedge).
- Define trigonometric ratios and solve problems involving right triangles.

Expectations and Guidelines:

- Homework is due at the beginning of the period.
- Successful students will attend class regularly and be on time.
- Successful students will demonstrate skills indicative of quality workers by bringing required materials, completing homework assignments, participating in class discussions, and respecting the opinions of others.
- Successful students will demonstrate accountability by listening closely in class.
- Students are not allowed to leave the classroom without a hall pass. Only one student at a time can use the restroom.
- A Zero Tolerance Policy is enforced concerning cruelty, harassment, excessive teasing, discrimination, bullying, violence, and intimidation. Foul language, derogatory remarks, and disrespect toward classmates, teachers and school staff will not be tolerated.
- A Zero Tolerance Policy is enforced concerning cheating on tests and quizzes and plagiarism.
- Students are expected to respect the property of others (including writing on or defacing desks).

Grading policy:

<i>Classwork/participation</i>	35%
<i>Assessments</i>	50%
<i>Projects</i>	5%
<i>Homework</i>	10%

Scope and Sequence:

September	<i>Unit 1: Reviewing Geometric Terms</i> <i>Unit 2: Transformations in the Plane</i>
October	<i>Unit 3: Congruence in terms of rigid motion</i>
November	<i>Unit 4: Proving Geometric Theorems</i>
December	<i>Unit 5: Proving triangle and parallelogram theorems</i>
January	<i>Unit 6: Geometric constructions</i>

February	<i>Unit 7: Similarity transformations</i>
March	<i>Unit 8: Prove theorems involving similarity</i>
April	<i>Unit 9: Trigonometric ratios</i>
May	<i>Unit 10: Apply trigonometry to general triangles</i>
June	<i>Unit 11: Understand and apply theorems about circles</i>

Attendance Policy: In case of absence, excused or otherwise, students are expected to complete any classwork or homework assignments they have missed in order to receive an academic grade without penalty. The assignments will all be available on Skedula/Pupil Path. The student will receive a grade of “0” for the classwork assignments on the missed day until the student hands in the missing work. All missing work will have a maximum amount of 5 days given to complete any missing assignments. It is the student’s responsibility to follow up with me to ensure he/she makes up any missing assignments.

Student Name: _____ Date: _____

Parent/Guardian Signature: _____ Date: _____