Manhattan High School - P35M Geometry Syllabus

Course Codes: MGS22QQM/2, MGS21QQM/5
Course Name: Geometry
Year and Term: 2023 Spring Session
Instructor: Mr. Dotter
Room: 315

Email: <u>WDotter2@schools.nyc.gov</u> 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 will 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 use cell phones while in class, unless otherwise stated. Therefore, if a student is seen using their cell phone for any reason other than classwork, it will negatively impact their grade.
- 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:

Classwork/participation	50%
Assessments	30%
Projects	15%
Homework	5%

Scope and Sequence:

September	Unit 1: Reviewing Geometric Terms Unit 2: Transformations in the Plane
October	Unit 3: Congruence in terms of rigid motion
November	Unit 4: Proving Geometric Theorems
December	Unit 5: Proving triangle and parallelogram theorems
January	Unit 6: Geometric constructions
February	Unit 7: Similarity transformations
March	Unit 8: Prove theorems involving similarity
April	Unit 9: Trigonometric ratios
May	Unit 10: Apply trigonometry to general triangles
June	Unit 11: Understand and apply theorems about circles

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: