



GEOMETRY
TIMES² STEM ACADEMY
INSTRUCTOR: Mrs. Childress
2017-2018

EMAIL:	nchildress@times2.org
ROOM:	202
OFFICE HOURS:	TBD

COURSE DESCRIPTION/OVERVIEW:

The purpose of this course is to formalize and build upon the students' prior experience with geometry and to prepare the students for the higher level thinking involved in future math and science courses. Topics include, but are not limited to, geometric concepts and notation – points, lines, planes, rays, and angles; transformations, congruence, similarity, properties of geometric figures (parallel lines, transversals, triangles, polygons, and circles.); conjectures, inductive and deductive reasoning, converses and writing proofs.

Upon successful completion of the course, students will be able to:

- Demonstrate an understanding of congruence in terms of rigid motion
- Demonstrate an understanding of similarity in terms of similarity transformations
- Prove geometric theorems using congruence and similarity
- Define trigonometric ratios and solve problems involving right triangles
- Demonstrate the understanding and application of theorems involving circles
- Use coordinates to prove simple geometric theorems algebraically
- Apply geometric concepts in modeling situations

TEXTBOOKS:

Geometry: Glencoe, McGraw-Hill, Common Core Edition 2014

Geometry: University of Chicago Mathematics Project, Scott Foresman-Addison-Wesley 1998

COMMON CORE STANDARDS OVERVIEW:

Congruence: G-CO #1-13

Similarity, Right Triangles, and Trigonometry: G-SRT #1 - 11

Circles: G-C #1 – 5

Expressing Geometric Properties with Equations: G-GPE #1 - 7

Geometric Measurement and Dimension: G-GMD #1 - 4

Modeling with Geometry: G-MG #1-3

Conditional Probability and the Rules of Probability: S-CP #1-9

Using Probability to Make Decisions: S-MMD #6,7



COURSE SYLLABUS

COURSE REQUIREMENTS:

Students are expected to strictly follow the guidelines in the student handbook.

Students are required to keep a notebook/binder that will be checked and graded regularly. This notebook/binder should include all class notes, examples, handouts, as well as all assignments. Students need a scientific calculator, a compass, and a protractor for the course.

Students are responsible for all assignments, tests, quizzes, group activities, projects and performance assessments. Make up procedures outlined below will be strictly enforced. Students in this class are strongly advised to be present for all classes.

HOMEWORK:

Homework is a very important component of this class. When doing homework, it is best to focus on the process of getting the answer more than just getting the answer. Please seek extra help as soon as it is needed. Forming study groups that meet regularly is encouraged.

Homework will not be collected unless stated beforehand. Therefore, it is imperative for students to check answers as will be discussed on the first day of class.

Make-Up Work – due to absences:

It is the student's responsibility to acquire and make up any missing work within three days of the absence. Tests and quizzes are to be made up the day of return to class with written excuse.

Late Work – due to no completion:

Late work due to no completion is accepted up to three days after due date and will receive half credit.

Homework will be graded as follows:

√+ = 110 Earned under certain circumstances

√ = 100 Assignment is complete and on time

√± = 75 A few problems are missing and on time

√- = 50 About half the assignment is complete and on time OR assignment is late

√_ = 25 A few problems are completed and on time

0 = 0 Assignment not done

GRADING POLICY:

- Homework 20%
- Quizzes 20%
- Tests 40%
- Participation 10% (Notes, Entrance & Exit Tickets, Preparedness)
- Projects 10%
- Exams 20% (grades listed above count as 80% of overall grade)

$$(Q1 = 20\%) + (Q2 = 20\%) + (Q3 = 20\%) + (Q4 = 20\%) + (\text{Mid-Term Exam} = 10\%) + (\text{Final Exam} = 10\%) = 100\%$$



COURSE SYLLABUS

TENTATIVE COURSE CALENDAR:

DATE	SECTION	TOPIC(S)
Q1 45 days	Unit 1	
9/5 1 day		Introduction/Collect Summer Math Packet/Pass out textbooks
9/6 – 9/26 13 days	Chapter 1	Tools of Geometry
9/27 – 10/19 16 days	Chapter 2	Reasoning and Proof
10/20 – 10/3 11 days	Chapter 3	Parallel and Perpendicular Lines
10/6 - 11/9 4 days	Review	Unit 1 Test
Q2 44 days	Unit 2	
11/13 – 12/4 14 days	Chapter 4	Congruent Triangles
12/5 – 12/21 13 days	Chapter 5	Relationships in Triangles
1/3 – 1/18 11 days	Chapter 6	Quadrilaterals
1/19 – 1/23 3 days	Review	Unit 2 Test
1/24 – 1/26 3 days	Review	Mid-Term Exam Units 1 and 2
Q3 47 days	Unit 3	
1/29 – 2/16 15 days	Chapter 7	Proportions and Similarity
2/21 – 3/13 15 days	Chapter 8	Right Triangles and Trigonometry
3/14 – 4/3 14 days	Chapter 9	Transformations and Symmetry
4/4 – 4/6 3 days	Review	Unit 3 Test
Q4 44 days	Unit 4	
4/9 – 5/2 13 days	Chapter 10	Proving Angle Relationships
5/3 – 5/22 14 days	Chapter 11	Chapter 2 Review
5/23 – 6/1 7 days	Chapter 12	Chapter 2 Test
6/4 – 6/6 3 days	Review	Unit 4 Test
6/7 – 6/11 (Tentative Dates) 3 days	Review	Final Exam Units 3 and 4
6/12 – 6/15 4 days	TBD	End of School Year