

**Center for Talent Development
Northwestern University
Course Syllabus
Gifted LearningLinks Program**

Course Title:

- a. *Geometry Honors*

Course Description:

- a. Geometry Honors includes, but is not limited to, the structure of plane and solid geometry, coordinate geometry, and calculations involving areas and volumes of geometric figures. Creative problem solving is emphasized throughout the course, and the notion of mathematical proof and deductive structure are introduced. With the understanding of the basic concepts of plane geometry (synthetic and coordinate geometry), students engage in higher order mathematical thought to solve problems and prove statements in plane and solid geometry.

Outcomes: Upon successful completion of this course, students will:

- a. Calculate measurements of plane and solid geometric figures.
- b. Construct logical arguments, based on axioms, definitions and theorems, to prove theorems and other results in geometry.
- c. Know and apply properties of geometric figures to solve real-world and mathematical problems and to logically justify results in geometry.
- d. Know and apply properties of geometric figures.

Resources and Materials:

- a. *Text: Geometry; Larson, McDougal Littell ISBN 0-618-25022-0*
- b. *Text Materials: www.classzone.com*
- c. *Materials supplied by student: homework notebook, compass, protractor, & calculator.*

Schedule:

SEMESTER ONE				
	Topic/Focus	Activities & Reading Assignments	What do I need to post to the Discussion Board?	What do I need to turn in?
Week 1	Orientation to Online Learning	Survey	Please use email to ask questions or set up a time to use the discussion board.	Survey
2 & 3	Basic Geometry	Read Chapter 1 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test

4 & 5	Reasoning & Proof	Read Chapter 2 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
6 & 7	Perpendicular & Parallel Lines	Read Chapter 3 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
8 & 9	Midterm Review & Cumulative Test			1-3 Test
10 & 11		Read Chapter 4 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
12 & 13		Read Chapter 5 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
14 & 15		Read Chapter 6 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
16 & 17	Review for 1 st Semester Final			
18	1 st Semester Final			1-6 Test

SEMESTER TWO

	Topic/Focus	Activities & Reading Assignments	What do I need to post to the Discussion Board?	What do I need to turn in?
19 & 20		Read Chapter 7 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
21 & 22		Read Chapter 8 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
23 & 24		Read Chapter 9 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
25 & 26	Midterm Review & Cumulative Test			1-9 Test
27 & 28		Read Chapter 10 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
29 & 30		Read Chapter 11 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test
31 & 32		Read Chapter 12 & complete section assignments and note taking guide.		Unit Check Point Problems, Homework Checks, & Test

