

Name of School:

Name of Course: **Geometry**

Instructor Information

Name:

E-mail address:

School phone number:

Web page address:

Best times to be reached:

Course Description

This is an integrated course in plane and solid geometry. This course is designed for the development of logical and deductive reasoning through the study and analysis of facts pertaining to various two and three dimensional figures.

District Standards and Power Benchmarks

Numbers and Operations Standard: Understands and applies concepts of numbers and operations

- 1: Understands numbers, ways of representing numbers, relationships among numbers, and number systems.

Algebra Standard: Understands and applies concepts of algebra and functions

- 2: Represents and analyzes mathematical situations and structures using algebraic symbols.

Geometry Standard: Understands and applies concepts of geometry

- 1: Analyzes characteristics and properties of 2- and 3- dimensional geometric shapes and develops mathematical arguments about geometric relationships.

- 2: Specifies locations and describes spatial relationships using coordinate geometry and other representational systems.

- 3: Applies transformations and uses symmetry to analyze mathematical situations.

- 4: Uses visualization, spatial reasoning, and geometric modeling to solve problems.

Course Information

Course length: Two terms.

Credits: .5 per term Geometry is an elective course which can be used to fulfill the graduation requirement of three credits in mathematics.

Prerequisites: Algebra 1 or Cognitive Tutor Algebra 1

Course Outline/Calendar

Term 1:	Term 2:
Unit 1: Tools of Geometry	Unit 6: Measuring in Space (6-7 and 6-8 optional)
Unit 2: Investigating Geometric Figures	Unit 7: Reasoning and Parallel Lines (7-3, 7-4, 7-5 optional)
Unit 3: Transformation: Shapes in Motion (3-4 and 3-6 optional)	Unit 8: Proving Triangles Congruent
Unit 4: Triangle Relationships	Unit 9: Quadrilaterals (9-1,2,3, & 4)
Unit 5: Measuring in the Plane	Unit 10: Similarity
	Unit 11: Right Triangle Trigonometry
	Unit 12: Chords, Secants, and Tangents (time permitting)

Text/Other Required Materials/Resources

Text: *Geometry: Tools for a Changing World*, Bass, Hall, Johnson, Wood; Prentice Hall; 1998. Required materials may include protractor, compass, 3-ring binder, notebooks, note cards, graph paper, colored pencils and/or pens. Graphing calculators are highly recommended.

Instructional Procedures & Support

Teaching Strategies: Methods of instruction include direct instruction, cooperative learning, individual practice, and hands-on calculator and/or computer activities, higher order thinking skills and may include the Socratic method and student note taking.

Academic expectations: Students are expected to ask questions during class about the material. Students are expected to seek teacher assistance when additional help is needed to understand the material.

Homework expectations: Students are expected to set aside at least 30 minutes of time daily for geometry material.

Make-up and enrichment opportunities: Meetings outside of class time need to be arranged by the student, especially to make-up quizzes or tests.

Deadlines for acceptance of student work due to absences as outlined in the student handbook.

Classroom Management Procedures

Behavior guidelines: Students are expected to be in class on-time daily with all required materials.

Attendance policy of the building will be followed.

Assessment Plan

Homework	20%
Tests/Quizzes/Projects	70%
End-of-Term Final Exam	10%

Grading System

Grades will be determined by the DCSD Grading Scale.

100-90	A
89-80	B
79-70	C
69-60	D
59-0	F