



Sarasota School of Arts and Sciences
High School Credit Geometry

2007-2008

Ms. Abby Coulter

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Course Description

Geometry I is designed for students to gain a thorough understanding of geometry concepts as they apply to the real world and our global society. We will explore geometry and transition from concrete to abstract understanding. We will take a very hands on approach using diagrams and discussion to discover new concepts.

Textbook and Materials

Discovering Geometry, Key Curriculum Press

Composition Book

Graphing Calculator

Protractor

Compass (good quality with ability to tighten)

Mechanical Pencils

Homework

*Students will be issued a textbook that they are expected to keep at home. Homework will be completed in a composition book. Unless otherwise stated, problems must be copied and all work shown. Homework will be given daily and checked at the beginning of class on the next school day. **Late homework receives no credit.** Homework missed due to absence can be picked up the following day in the bin next to the front door.*

Contacting the Teacher

You may contact me by email at AbbyCoulter@ssas.org Email communication eliminates playing phone tag, which happens so often with everyone's busy schedules. I will answer emails promptly, usually the same day. You may also contact me by phone. (941 330-1855 ex. 104) Please leave your name, your child's name, a phone number where you can be reached, and the issue that is to be addressed. It is also helpful to let me know a good time to return your call. I return phone calls either before or after the regular school day. Conferences will be scheduled during the year to meet in person and discuss your student's strengths and concerns.

GRADING – Grades are posted on www.edline.com weekly.

40%	Tests
25%	Quizzes
25%	Written Assignments (Classwork and Homework)
10%	Participation

COURSE CONTENT

First Quarter

Chapter 1 – Exploring Geometry

Basic terms, length and angle measurement, and motion

Chapter 2 – Reasoning in Geometry

Proof and logic, postulates, conjectures and theorems

Chapter 3 – Parallels and Polygons

Second Quarter

Chapter 4 – Triangle Congruence

Chapter 5 – Perimeter and Area

Pythagorean Theorem, Triangle Theorem

Chapter 6 – Shapes in Space

Three-dimensional figures, spatial relationships and perspective drawing

Third Quarter

Chapter 7 – Surface Area and Volume

Prisms, pyramids, cylinders, cones and spheres and three-dimensional symmetry

Chapter 8 – Similar Shapes

Dilations and scale factors, similar polygons, and indirect measurement

Chapter 9 – Circles

Chords, arcs, and tangents

Fourth Quarter

Chapter 10 – Trigonometry

Tangent, sine, and cosine; The Law of Sines and the Law of Cosines; vectors and rotations

Chapter 11 – Taxicabs, Fractals, and More

Golden ratio; taxicab geometry; and fractals

Chapter 12 – A Closer Look at Proof and Logic

If-then statements, indirect proof and computer logic

Classroom Rules

- *Respect everyone and everything*
- *Come to class on time prepared to learn*
- *Raise your hand to speak and wait to be called on*
- *Follow directions, participate and enjoy learning*
- *Leave gum, candy, tapping, humming and napping out of the classroom*

Consequences

- *“THE LOOK”*
- *Write rules and call parent*
- *Behavior Essay – Signed by a parent*
- *Detention*
- *Administrative Intervention*

Rewards

- *Praise*
- *Bonus Points*
- *Pride in your good grades*
- *Hugs, smiles and praise from proud parents*
- *“Joy of Learning”*