



Greer High School

COMMUNITY ♦ TRADITION ♦ DETERMINATION
3000 East Gap Creek Road, Greer, SC 29651



Mrs. Rebecca Pfister

Geometry with Statistics CP

Text: (864) 326-5039

rpfister@greenville.k12.sc.us

Course Description: Geometry CP

Geometry students study congruence and similarity through analyses of transformations and formal constructions. They also study the properties of triangles and quadrilaterals, the Pythagorean Theorem, special right triangles, and right-triangle trigonometry. Additional topics include circles, coordinate geometry, and area and volume of 2-and 3-dimensional shapes. Students develop formal proofs using a variety of formats. Students will also study basic probability and statistics applications. The Mathematical Practice Standards also apply throughout the course.

Prerequisite: 8th grade math

Objectives:

Unit 1: Foundations & Parallel/Perpendicular

This unit begins by focusing on the measurements and properties of line segments and angles. This unit also focuses on the properties of parallel lines and the angle relationships formed when parallel lines are cut by a transversal. The rest of the unit examines how these angle relationships can help prove whether or not lines are parallel, the relationships between parallel lines, and the relationships between the slopes of parallel and perpendicular lines.

Unit 2: Transformations

This unit begins by focusing on transformations, moving from the definition of rigid motion to the rigid transformations: reflections, translations, and rotations. The rest of the unit examines how transformations can be combined to create new images and complete proofs such as the proof for demonstrating that a composition of two or more rigid motions is also a rigid motion.

Unit 3: Triangles & Triangle Congruence

This unit focuses on congruence and transformations resulting in congruent figures. The lesson includes the definitions of congruence and congruence transformations. Students will then explore various triangles and define congruence theorems that prove triangles are congruent given congruent angles and sides of triangles.

Unit 4: Quadrilaterals

This unit focuses on quadrilaterals, examining properties and conditions of parallelograms and special parallelograms.

Unit 5: Similarity

This unit begins with an examination of dilations and similarity transformations. These concepts are then applied to triangles; students examine the criteria for proving two triangles similar. Students consider proportions in triangles.

Unit 6: Right Triangles and Trigonometry

The unit begins by applying properties of similar right triangles to understand the Pythagorean Theorem, relationships in special right triangles, and trigonometric ratios. Students then apply what they have learned to various contextual problems.

Unit 7: Circles

This unit begins with an examination of arc length, sector area, and segment area. Students then examine properties of tangents, chords, and inscribed angles. Finally, students learn about the properties of angles, arcs, and segment lengths that are formed when two lines intersect inside or outside a circle.

Unit 8: Two- and Three - Dimensional Models

This unit begins with students examining different three-dimensional figures and their two-dimensional cross sections. Students then discover and apply the volume and surface area formulas for prisms, cylinders, pyramids, cones, and spheres to solve problems.

Unit 9: Probability and Statistics

This unit begins with extending a student's previous knowledge of ratios and basic probability to the probability of multiple events. Students will then analyze the relationship between variables by observing any association, eventually asking and answering statistical questions.

Standards: [South Carolina College and Career Readiness Standards](#) (Geometry with Statistics Standards - beginning on pg. 107)

Grading:

HW/Classwork 10%

Quizzes 30%,

Tests/Projects 60%

- HW and CW will be graded on both effort and sometimes for accuracy.
- Quizzes and Tests will be graded on accuracy.
- Some quizzes will be announced while others will be pop quizzes.
- You may retake one test per nine weeks. This test will replace your original test grade, whether higher or lower. The “retest” will not be the same test as the original test but will cover the same material.
- Tests will be announced at least one week prior to test day as well as posted on the board.
- A final exam will be given at the end of the semester and will count as 10% of your overall grade... NO EOC.
- Projects will be graded on both attempt and accuracy. Rubrics for projects will be given when projects are assigned so the students know the expectations.

Google Classroom

Students are to check google classroom **especially in the case of an absence** to receive all work and assignments for the day. All videos, classwork, notes and assignments given or used in class will be posted there under the classwork tab.

Grading Scale:

A: 90-100 B: 80-89 C: 70-79 D: 60-69 F: 59 or below

Supplies: Students will need:

- **3-ring binder**
- **scientific calculator** - class sets of calculators are available for use in class
- pack of colored pencils, thin colored markers, or colored pens -this helps with color coding notes, etc.

Attendance Policy:

Absences in High School are accrued per course. Any absence in excess of 5 days may cause the student to lose credit for a 90-day semester course. Absences that are medical (doctor notes), bereavement, and/or Principal Approved are not included in the maximum absences. Students must be present a minimum of 45 minutes of the class to be counted as present. **This is a change from last year as you will only be allowed 5 unexcused absences and parent notes combined.**

Tardies: Students must be in the room when the bell rings. Consequences for tardies are as follows: 1st tardy – warning, 2nd tardy – warning, 3rd tardy – warning and phone call to parent, 4th tardy – referral. All tardies beyond the 4th tardy will result in a referral.

Communication: Student grades will be updated in PowerSchool at least once a week. Please check Backpack weekly for grades on assignments as well as an updated average. Parents and students can text me (864) 326-5039 or email me at rpfister@greenville.k12.sc.us with any questions or concerns.

Student Responsibilities:

1. Be on time - in the room when the bell rings
2. Be seated -Stay in your assigned seat unless the teacher gives you permission to be up
3. Be prepared
 - Bring your chromebook, notes and pencil to class daily
 - Make sure your chromebook is charged
 - Complete all assignments
4. Be respectful of the speaking voice during instruction time - Show respect for your teachers AND your classmates

Late Work Policy:

Each day you will be assigned homework. Make sure it is completed before the next class period. Late work policy is below:

- Students will receive a 100 on minor assignments turned in on time.
- Students will receive 75% on minor assignments turned in 1 day late.
- Students will receive 50% on minor assignments turned in 2 days late. This policy does not apply to students who are absent for instruction.
- Students absent for instruction have 5 school days to turn in make-up work for credit. After 5 days no credit will be given for make up work.

Tutoring:

If you need extra help, Brain Gym is offered every Tuesday and Thursday afternoon from 4 - 5 for free. I am also available before school starting at 8, and in the afternoon

by appointment. Please provide me with 24 hours notice if you need to stay before or after school with me.

Food/Drinks:

No eating in class. Water is allowed. Please make sure that your cup has a spill proof lid. Please help me keep my classroom looking clean.

Cell Phone Policy:

New cell phone policy from the state and adopted by our school district effective Jan 2025 is as follows:

All student cell phones and personal electronic devices must be stored in backpacks, lockers, or in a location directed by the school; this includes smartwatches, earbuds, and all other personal electronic devices and accessories.

High school students may not use electronic devices outside of the classroom unless that use is for instructional/school-related activities as approved by the school, such as checking grades, emailing teachers, referencing their schedule, using the phone to pay for lunch, etc.

Consequences-

1st infraction/referral: School level detention

2nd infraction/referral: ISS

3rd infraction/referral: OSS

Textbook

Hard Copy: SAVVAS enVision Geometry

Online Version: SAVVAS EasyBridge

You can access your textbook in your backpack under educational apps.