Mrs. Fisher's Geometry Class
lfisher@srvhs.org

COURSE DESCRIPTION

The objective of Geometry is to help the student understand plane and space relationships. All standards of the California framework for Geometry are covered. Topics include: basic spatial concepts, deductive proofs, parallelism, perpendicularity, congruence, quadrilaterals, ratio and proportion, similar polygons, the Pythagorean Theorem, right triangle trigonometry, circles, coordinate geometry, regular polygons, areas, volumes, compass and straight edge constructions and optional subjects as time allows.

CALIFORNIA STANDARDS COVERED IN THIS COURSE

Geometry follows the California Mathematics Content Standards for Geometry. Emphasis in this course is on the skills identified in the Course outline below. A full description of the Standards can be accessed at
http://www.cde.ca.gov/ta/tg/sr/documents/geometry1105.doc

COURSE OUTLINE

Points lines planes and angles
Basic figures
Definitions and postulates

Deductive reasoning
If-then statements
Proving theorems
Theorems involving angles and
perpendicular lines

Parallel lines and planes
Applying parallel lines to polygons
Inductive reasoning

Congruent triangles
Corresponding parts in congruence
Ways to prove triangles congruent
Using congruent triangles
Isosceles triangle theorems
Medians, altitudes, perpendicular
bisectors

Quadrilaterals
Properties of parallelograms
Proving parallelograms
Special parallelograms (rectangles,
squares, rhombi)

Trapezoids

Inequalities in geometries
Indirect proofs
Triangle inequality theorem

Similar polygons
Ratio, proportion, similarity
Similar triangles

Right triangles
Pythagorean Theorem
30-60-90 and 45-45-90 triangles
Trigonometric ratios

Circles
Tangents, arcs, chords
Angles and segments

Construction and loci
Basic constructions
Perpendicular and parallel lines

Area
Rectangles
Parallelograms
Triangles
Rhombus

Trapezoid
Regular polygons
Circles
Sectors
Ratio of area

Areas and volumes of solids
Prisms
Pyramids
Cylinders
Cones
Spheres
Surface area and lateral surface areas
Similar solids
Ratio of areas

Coordinate geometry
Distance formula
Slope of a line
Parallel and perpendicular lines
Midpoint formula
Coordinate geometry proofs

Transformations
Reflections
Rotations
Translations

SAN RAMON VALLEY HIGH SCHOOL EXPECTED SCHOOL WIDE LEARNING RESULTS

At San Ramon Valley High School, we believe students will:
- Be able to communicate effectively.
- Think critically and support ideas through problem solving.
- Stand for integrity, honesty, and ethical treatment of all people.
- Be partners in the learning process and take responsibility for themselves and their learning.

CLASSROOM RULES

- **DO NOT DISTURB YOUR CLASSMATES** - interruptions, eating, grooming, texting disturb the classroom setting.
- **BE POLITE and SHOW RESPECT** – bullying, put downs, sarcasm, or inappropriate language is not polite behavior and is not tolerated. District policy states that harassment in or out of the classroom is not to be tolerated. Harassment based on race, ethnicity, able-bodiedness, sexuality, perceived sexuality, gender, gender expression, monetary standing, religion or faith-base, or any other factor will be reported to the administration and dealt with accordingly. This includes slang such as 'that's so gay' or 'that's retarded.' Both are considered hate speech.
- **IT IS OK TO DRINK WATER IN CLASS** - No food or soda is allowed in class.
- **BE PREPARED TO LEARN -** BRING MATERIALS TO CLASS EACH DAY **--** textbook, paper, pencil, and binder. Once the bell rings you cannot go back to the locker to retrieve forgotten items.

CONSEQUENCES

Consequences will be dealt with in accordance with school policy as specified in the student guidebook.

STANDARD CLASS PROCEDURES

BEGINNING OF CLASS – Before the bell rings sharpen your pencil and sit down:
- Make sure your pencil is sharpened before the bell rings.
- You will have *five minutes* to solve the homework accuracy problem on the overhead, after *two minutes* the problem will be taken off the overhead.
- The homework accuracy problem will be graded after the 5 minutes is up. **Unexcused tardies will not be given additional time to complete homework accuracies (be on time and be ready to work).**

DAY to DAY IN CLASS WORK / NOTES:
- Taking notes and solving in-class problems is an important part of learning math. The notes outline is on school loop and should be printed at the beginning of each chapter. The lecture is designed around students having printed notes. Take neat notes and carefully put the notes in your math binder. On the day of a benchmark test I will collect your notes and grade them for completeness and neatness.

PHONES
- Appropriate use of phones to enhance the learning experience in class is encouraged. Recording HW, taking quizzes, photographing what's on the board, looking up materials are all examples of appropriate use. **TEXTING IN CLASS IS NEVER APPROPRIATE** and will be dealt with according to school policy.

RESTROOM USE:
- **Use the bathroom before you get to class.** Bathroom privileges are for emergencies only. Missing instruction because you are in the bathroom hurts your grade. Use the hall pass. You are responsible for making up what you miss during class.

END OF CLASS:
- Mrs. Fisher will give the cue when class is dismissed. Please remain at your desk until Mrs. Fisher gives the signal. Never ever gather by the door waiting for the bell to ring.

SCHOOL LOOP:
- School loop is used extensively as a way to **communicate with students and parents**. School loop contains:
  - ✓ Geometry resources
  - ✓ Class notes (student to print)
  - ✓ Homework assignments
  - ✓ Assessment schedules
  - ✓ Grades

RECOMMENDED MATERIALS:
- ✓ **Three ring binder** with **dividers** labeled: 1) Notes; 2) Homework; 3) Quizzes
- ✓ One **red pen**
- ✓ **Pencil, eraser** and binder **paper**
- ✓ **Compass & Straight Edge**
- ✓ **TEXTBOOK – bring to class daily**

TARDINESS and ABSENCE

- Tardiness is disruptive and interrupts the progress of other students. Tardiness will be dealt with in accordance with school policy as specified in the student guidebook.

- If an absence is legal, it is the **student's responsibility** to check for assignments, notes, class work, quizzes or tests missed. Make-up work is due in accordance with the SRVHS Student Guidebook. In the case of an extended absence, the student should arrange a reasonable due date with the teacher. In the case of an *unexcused* absence (cut, illegal, etc) any assignment/assessment given that day or due that day is unable to be made up for credit. It is essential you let me know if you will be absent on test day.

- **Cheating/plagiarism** will not be tolerated. All cell phones must be powered off before and after any assessment. Cheating/plagiarism will be dealt with according to the SRVHS Student Guidebook.

ASSESSMENT PROCEDURES

GRADE SCALE: *All tests, quizzes, and report card grades will be given according to this scale.*

100 – 93.5 = A	89.5 – 87.5 = B+	79.5 – 77.5 = C+	69.5 – 67.5 = D+	59.5 – 0 = F
93.5 – 89.5 = A-	87.5 – 83.5 = B	77.5 – 73.5 = C	67.5 – 63.5 = D	
	83.5 – 79.5 = B-	73.5 – 69.5 = C-	63.5 – 59.5 = D-	

Report Card Grades determined by:
- **Semester Grade**
  - ✓ 55% Tests
  - ✓ 10% Projects
  - ✓ 10% Homework Completion
  - ✓ 5% Homework Accuracy Assessments
  - ✓ 15% Final Exam
  - ✓ 5% Participation / in class notes
- **Quarter Grade:** Grade-to-date at end of the first and third grading period. Quarters are **not** averaged to obtain the semester grade.

TESTS
- You know if you learned if you can talk about something and can teach it to someone else confidently, fluently and accurately. Each chapter you will have frequent grading experiences to assess whether or not you have learned the material.

PROJECTS
- Projects help you develop your ability to present and communicate your ideas. They also help you develop your problem-solving and reasoning abilities as you make connections between what you know and what is new. Each semester you will have projects to help solidify your skills and understanding of the material.

HOMEWORK COMPLETION
- Math is not a spectator sport. Daily practice is essential to solidify understanding of the material taught in class. Homework assignments are a vital part of the learning process and as such are important. Homework = 5 points per assignment. No homework = 0 points. Late work is accepted for full credit; however, whether or not homework is completed students are still expected to complete the homework accuracy assessments.

HOMEWORK ACCURACY ASSESSMENTS
- Since homework is given a completion score regardless of accuracy, how do you know if you learned? Homework accuracy assessments are short assessments intended to measure your understanding of the assigned homework. Typically they are given 2 days after a lesson, after you have done the homework and have had the chance to ask questions.

FINAL EXAM
- This exam is a multiple choice test that covers all the standards covered during a semester. The second semester final does include questions from the first semester. You will be given a study guide.

PARTICIPATION
- You will earn your participation points by turning in your completed class notes at the end of the chapter. Completion of notes is a general indication of how well you pay attention and participate during class time.

NEED HELP:
- Feel free to arrange for extra help. I am available during brunch, lunch, or after school. Tuesdays at 2:15 are set aside as "office hours".

Student Signature: _____ Parent Signature: _____ Date: _____