Geometry Syllabus
Mr. Cox's E-mail: jcox@superiorusd.org
Contact Hours 7:30-3:30 Phone: 520-689-3119

Welcome to Geometry! Please read the following information carefully tonight with your parent or guardian and sign in the designated areas as an acknowledgement of our expectations and policies for class this semester. THE SIGNING AND RETURNING OF THIS DOCUMENT WILL BE CONDISERED A HOMEWORK GRADE.

EXPECTATIONS: Each Mathematics student will be held to HIGH expectations at all times. The following expectations serve as the foundation for effective learning and skill development in the classroom.
1. Respect yourself and one another at all times. (This includes any guest speakers)
2. Be prepared for class every day with all necessary materials and completed homework.
3. Class time is for class activities.
4. Academic Achievement is our top priority at all times.
5. Give Results, Not Excuses.

CONSEQUENCES: Students are subject to both positive and negative consequences in the classroom.
Positive Consequences may include, but are not limited to, receiving teacher acknowledgement and praise, gotcha cards, and classroom privileges.

Negative consequences will be administered consistently and fairly on a consequence ladder following the 3 step infractions:
1. Verbal Warning
2. Step 1-Written warning
3. Step 2-Phone call to Parent/Guardian
4. Step 3-Behavior referral

CLASSROOM/SCHOOL POLICIES:
1. No food or drink is allowed in the classroom.
2. Tardy policy-Students need to be in class before the bell finishes ringing.
3. Cell phones and all other electronic devices need to be turned off and put away during class except when teacher requests them to be out for educational purposes.
4. Cheating and plagiarism will not be tolerated. Active or passive participation in cheating or evidence of cheating will result in a zero grade and possible disciplinary action.

SUPPLIES: Each Mathematics student needs to bring the following materials to class every day:
1.   3-Ring Binder with dividers (for home work)
2.   2 Composition Notebooks (for notes)
2.   Two Sharpened Pencils with erasers
3.   Calculator (Ti 83 if higher preferred)

GRADING SYSTEM: The grading system that will be used in the Geometry class is fairly standard in the high school setting. The basic breakdown of the grading proportions used in Geometry is:

GRADE PERCENTAGES		OVERALL GRADES	
PRACTICE/ASSIGNMENTS	20%	90-100%	A
FORMATIVE ASSESSMENTS/QUIZZES	30%	80-89%	B
SUMMATIVE ASSESSMENTS	30%:	70-79%	C
PARTICIPATION	20%:	60-69%	D
Total	100%	BELOW 60%	F

TEST RETAKES: Students may re-take a test if they wish to improve their grade. In order to re-take a test, students must have completed all unit assignments and test correctives from the first test. It is the STUDENT'S responsibility to schedule a test re-take and it needs to be scheduled outside of regular class time.

PARTICIPATION: Active student participation is extremely important to achieve success in Geometry. All students will be expected to participate in class every day. Student participation is factored into student's overall grade.

What is a Class Participation Grade?

- Bringing required materials to class
- Frequency and quality of participating with frequency and quality

- Being prepared for classroom discussions due to having done his/her reading/studying
- Making relevant comments based on assigned material
- Improving group dynamic by student's presence
- Being engaged in classroom discussion and able to give cogent answers when called upon
- Not disrupting class and classroom discussion
- Taking complete and neat notes that are required
- Handling comments in class and possible disagreements with the teacher and other students with maturity and sensitivity
- Showing an interest in and respect for others' contributions

What Participation IS NOT

- Raising of the hand in an attempt answer every question whether or not you have anything of quality to offer
- Interjecting in class discussion purely to be "seen" or "counted"
- Talking incessantly, rambling or making tangential comments

What takes away from Class Participation?

- Coming to class ill prepared
- Being disrespectful to students or staff
- Disrupting the learning environment by actions or talking out of turn
- Belittling the opinions of others
- Not following the conversation and thus is not prepared to answer questions when called upon or is off topic
- Discouraging and disrupting others that are attempting to participate
- Not taking notes
- Not having homework complete and thus not able to contribute to class discussion of said homework

TUTORING: Tutoring offered before school beginning at 7:15 or after school. Limited tutoring can be given during 0-hour with prior notice. Students must arrange transportation either to or from school.

ABSENCES: If a student is absent, the guidelines in the student handbook will be followed. The student is responsible for making up any missed assignments and class work due to absence. Furthermore, it is the student's responsibility to seek out missed assignments from the calendar/absence folder located in the classroom. Those students involved in school related activities must make arrangements for all missed work prior to leaving for the scheduled event. Failure to make these arrangements could result in a zero grade for missed work.

Calculators: Calculators will be provided at the beginning of the day. Students are responsible for the calculator and it must be returned in the condition received. If it is broken, lost or stolen, student/parent is responsible for its replacement. A fee of $110 will be charged for the replacement.

Concepts Covered in this Course

Unit 1: Tools in Geometry
1-1 Patterns
1-2 Points, Lines, Planes
1-3 Segments, Rays, Parallel Lines
1-4 Segments or Angles
1-5 Basic Constructions
1-6 Coordinate Plane
1-7 Perimeter, Circumference, and Area

Unit 2: Reasoning and Proof
2.1 Conditional Statements
2.2 Deductive Reasoning
2.3 Biconditional and definitions
2.4 Reasoning in Algebra
2.5 Proving Angles Congruent

Unit 3: Parallel and Perpendicular Lines
3.1 Parallel Lines
3.2 Proving Lines Parallel
3.3 Triangle Sum Theorem
3.4 Angle Sum Theorem
3.5 Coordinate Planes
3.6 Parallel and Perpendicular Line
3.7 Constructing Lines

Unit 4: Congruent Triangles
4.1 Congruent Figures
4.2 SSS and SAS
4.3 ASA and ASA
4.4 CPCTC
4.5 Isosceles and Equilateral Triangles
4.6 Right Triangle Congruence
4.7 Writing Flow Proofs

Unit 5: Relationships with Triangles
5.1 Midsegments
5.2 Bisectors in Triangles
5.3 Concurrent Lines, Medians, and Altitudes
5.4 Inverses, Contrapositives, and Indirect Reasoning
5.5 Inequalities in Triangles
5.6 Parallel and Perpendicular Line
5.7 Constructing Lines

Unit 7: Area
7.1 Parallelograms and Triangles
7.2 Pythagorean Theorem
7.3 Special Right Triangles
7.4 Area Trapezoids, Rhombuses, and Kites
7.5 Area Regular Polygons
7.6 Circles and Arcs
7.7 Circles and Sectors
7.8 Geometric Probability

Unit 9: Right Triangle Trigonometry
9.1 Tangent Ratio
9.2 Sine and Cosine
9.3 Elevation of Depression
9.4 Vectors
9.5 Trig and Area

Unit 11: Circles
11.1 Tangent Lines
11.2 Chords and Arcs
11.3 Inscribed Angles
11.4 Segment Length
11.5 Coordinate Plane
11.6 Locus

Unit 6: Quadrilaterals
6.1 Quadrilaterals
6.2 Parallelograms
6.3 Proving Quad is a Parallelogram
6.4 Special Parallelograms
6.5 Trapezoids and Kites
6.6 Coordinate plane
6.7 Coordinate Geometry

Unit 8: Similarity
8.1 Ratios and Proportions
8.2 Similar Polygons
8.3 Triangle Similarity
8.4 Proportions in Triangles
8.5 Similarity in Right Triangles
8.6 Perimeter and Area

Unit 10: Similarity
10.1 Space Figures
10.2 Space Figures and Drawing
10.3 Prisms and Cylinders
10.4 Surface Area of Pyramids and Cones
10.5 Volume of Prisms and Cylinders
10.6 Volume of Pyramids and Cones
10.7 Surface Area and Volume of Spheres
10.8 Area and Volume of Similar Solids

Unit 12: Transformations
12.1 Reflections
12.2 Translations
12.3 Rotations
12.4 Compositions
12.5 Symmetry
12.6 Tessellations
12.7 Dilations

To the parent/guardian:

I am truly interested in enlisting you as an educational resource for your child. Please familiarize yourself with the rules, procedures, and expectations that I have included, and encourage your student to understand their importance in creating an appropriate, healthy learning atmosphere both at home and at school.

I am committed to providing my students quality mathematics instruction and also expect that they are committed to making the most of their educational opportunities at Superior High School. Being a high school student is a full-time job which has very demanding requirements. With this in mind I offer the following:

Suggestions: How you can help in your child's education

1. Attend class regularly: Please try to avoid planning family trips and non-emergency appointments which conflict with school attendance.
2. Be at school on time: Your child should eat breakfast and start the day with a positive attitude.
3. Complete daily assignments on time: A classroom lesson is most effective when students work on homework problems as soon after the class as possible. Coming to class without completing the assignment will handicap your child. Lack of skill development and insufficient practice make new lessons and assignments more difficult.
4. Use free time wisely: A student who has free time should put it to good advantage by reviewing schoolwork.
5. Keep an organized notebook for each class: Organized notes lead to organized minds. Notes should include a list of the major daily objectives, definitions, main ideas and formulas presented in class.
6. Practice good study habits at home: Possibilities include:
   o establish a set time to study each night
   o spend time reviewing previous work before beginning a new assignment
   o spend time reviewing and reflecting when working on longer assignments
   o collect study materials in one place
   o keep up with daily assignments
   o Work in an environment free from distractions (TV, siblings, etc.)
7. Prepare systematically for tests: Keeping a list of the important objectives in an organized notebook is an excellent first step (see #5). Begin a review of the objectives and previous assignments a few days before the test. Focus on the objectives which seemed to cause the most difficulty.
8. Be psychologically ready for tests: One of the best ways to become emotionally prepared to take a test is to be academically prepared. The majority of test anxiety is caused by inadequate study preparation.
9. Take advantage of special opportunities at school: Your child should make use of the school library resources and the individual help offered by staff members.

PROJECTS: There will be projects in the class. Each student is expected to complete all projects thoroughly and on time.

HOMEWORK: Students will be expected to complete homework assignment nightly. Each student will be expected to have assignments completed before class begins with all work show for credit. If students do not have homework completed by the due date, they have the opportunity to earn reduced credit for work turned in the next school day.

I have read Mr. Cox's Geometry syllabus and I understand & agree to be held to, the contents of the document.

_____   _____
Student Name (printed)   Student Signature

_____   _____
Parent/Guardian Name (printed)   Parent/Guardian Signature

_____   _____
Phone Number   Parent/Guardian Email address

RETURN THIS DOCUMENT, SIGNED FOR FULL CREDIT