

Geometry

Ms. Emily Campbell

Contact Information: If at any time you have a question regarding your student's progress or the course in general, feel free to contact me during my planning period (approximately 10 a.m. and 11 a.m.) at (606) 287-7155 or by email at emily.campbell@jackson.kyschools.us.

Prerequisite: The student must have successfully completed Algebra I.

Course Description: Fundamental skills of mathematics will be applied to the following topics: points, lines, and angles; logic and geometric proofs; geometric constructions; coordinate geometry; polygons; similarity; transformations; triangles; triangle trigonometry; circles; and solid geometry. Technology will be used to introduce and expand upon the areas of study listed above.

Units of Study: Each of the above mentioned mathematical topics will be transformed into a unit of study, which will be taught during this school year.

Course Objective:

Students will be able to:

Define points, lines, segments, rays; identify types of angles; and identify and apply properties of various types of angles.

Apply geometric logic, definitions, properties, postulates, and theorems; and construct two-column proofs and flowcharts.

Copy line segments and angles; construct bisectors, lines, and polygons; determine points on a bisector.

Determine distance between points; plot points; find the midpoint of a line; graph linear equations; understand slope; determine equations of parallel and perpendicular lines; and graph parabolas.

Identify polygons, determine lengths and areas; prove congruency; apply theorems; and prove theorems about parallelograms.

I can identify figures; solve proportions; determine similar figures; apply geometric relationships and properties of plane figures.

Identify, draw, and compare transformations; identify and produce algebraic transformations; prove congruency; define dilation and use to prove similarity.

Identify triangles; apply theorems and postulates; and prove triangle theorems.

Apply the Pythagorean Theorem, find missing leg of a right triangle; identify and label special right triangles; and apply trigonometric ratios and law of Sines and Cosines.

Identify parts, calculate the circumference, and calculate the area of circles; prove similarities; construct tangent lines; construct inscribed and circumscribed circles of triangles; determine arc measures; apply properties; and determine equations of a circle.

Identify types and cross sections of 3-D figures; create formations of and calculate the volume of various 3-D figures; identify solids; and apply theorems and properties of solids to solve real-life problems.

Grading Policy:

92-100 A

81-91 B

70-80 C

60-69 D

0-59 F

Each nine-week grade will be calculated in the following way:

60% Summative Assessments (Exams)

40% Formative Assessments (Homework, Quizzes, Daily Work, etc..)

The final grade will be calculated in the following way:

20% First nine weeks

20% Second nine weeks

20% Third nine weeks

20% Fourth nine weeks

20% Final Exam

Attendance Policy: As written in the Student Handbook

Classroom Tardy: The student will be counted tardy if they are not in the classroom and ready to work by the time the bell rings. After five (5) tardies, the student will be referred to the office. For each tardy, the student will lose 20% of their weekly participation grade.

Leaving the Classroom: Each student will be issued one coupon per nine-week grading period. This coupon can be turned in and used as a hall pass or turned in at the end of the grading period. If the coupon is turned in at the end of the grading period, the teacher will drop up to fifty (50) points worth of the student's lowest homework/daily/quiz grades. In accordance to school policy, no student will be permitted to leave the classroom in the first or last ten (10) minutes of the class period.

Materials Needed: Students will need the following materials (other materials may be needed during the year and you will be notified).

- Pencils Only (Work done in anything else will not be accepted.)
- Erasers
- 3-Ring Binder
- Loose-Leaf Graph Paper
- Page Dividers/Folders

Other Guidelines and Expectations:

- Students are to be respectful of each other, the teacher, and anyone else in the classroom at ALL times. Inappropriate behavior will not be tolerated.
- Students will be expected to keep a 3-ring binder containing all notes, homework, quizzes, exams, activities, and open responses. Each item in this binder must be hole-punched, dated, and kept in chronological order. Random binder quizzes can be expected. This binder is only to be used for this class.
- Students are encouraged to ask questions and participate fully. No on-task question will be ignored.
- The student is responsible for completing any missed work. Each day's assignment will be written on a calendar displayed in the classroom. It is the student's responsibility to look in the "Make-Up Work" binder and get the corresponding handouts/assignments for each day missed. The student will be responsible for getting the notes he/she missed from the teacher or fellow classmate. If I collected work while the student is absent, he/she will need to place it in the "Make-Up Assignment" folder. The assignment will only be accepted for full credit if the absence is excused. Other late work will have 10% of the possible points deducted per day late.

- Class is over when the teacher dismisses class. No one is to gather their materials, close their books, or put away pencils until the teacher dismisses class.
- Ms. Campbell may add or revise classroom policies and procedures when necessary.

*Parents/Guardians,

I'm very excited to have your child in class this year! I'm looking forward to working with you and your child to make this a successful and enjoyable year! Let me know if you have any questions or concerns! Thank you!

-Miss Campbell

This syllabus must be kept in the front of your classroom binder. Please read and discuss this syllabus with your parents/guardians. Then detach the bottom half of this page. It must be signed and returned to Ms. Campbell on, or before, Monday August 12th for an exam grade.

We have read and discussed the above policies and procedures and understand the importance of following them at all times.

Parent or Guardian Signature _____ **Date** _____

Student Signature _____ **Date** _____

Parents or Guardians, please include your email address for more efficient communication:
