PreAP Geometry with Data Analysis

Teacher Name: Ms. Emily Albert   Teacher E-mail: esalbert@madisoncity.k12.al.us

Course Description:

Geometry provides students with knowledge about shapes and properties and assists with the development of spatial sense, critical for further study in mathematics and for everyday life. Because of its importance in the development of mathematical empowerment, this course is required for all students. This course includes consistent use of algebra to reinforce the skills and concepts developed in the Algebra I course. Course work provides an excellent context for developing students' abilities to reason and write proofs. Problem solving skills in the development of geometric concepts are integrated throughout the course. Trigonometry is included to prepare students for development of circular function trigonometry in later courses.

Course Objectives:

2020 Alabama Course of Study: Mathematics pages 117-126
https://www.alabamaachieves.org/wp-content/uploads/2021/03/2019-Alabama-Mathematics-COS-Rev.-6-2021.pdf

Classroom Expectations:

You are expected to conduct yourself in a respectful and productive manner. In addition to all the rules and expectations listed in the student handbook, I expect you to have a positive attitude, treat others with respect, practice self-discipline, and demonstrate responsibility. If these conditions are not met, you can expect one-on-one meetings with me, parent/instructor conferencing, and administrative action, if necessary.

<u>Concerning the use of cell phones and other electronic devices:</u>
Devices should be on silent and kept in your purse, backpack, or pocket during class unless otherwise instructed. You may not place it on your desk. Parents, guardians, and other family members should call the front office in case of emergency.
If you violate this rule, you can expect the following consequences:
- *First offense* – The phone or device will be placed in a phone chart at the back of the room. You may pick it up at the end of class.
- *Second offense* – The phone or device will again be placed in a phone chart at the back of the room until the end of class and a parent/guardian will be notified.
- *Third offense* – This is defiance and I will notify an administrator.

Grading Policy:

Major assessments will count 70 percent of your grade. Homework and classwork will account for 30 percent of your grade. Grades will be updated weekly in PowerSchools. Each grading period will consist of nine weeks.

Make-up Work Policy:

Make-up tests will **only** be given to a student who has an **excused absence**. **The student must make arrangements with the teacher to take a make-up test. Tests may be taken during Patriot Path with prior arrangement from each teacher.** A student only has two chances (the next two Patriot Paths after the absence) to make up a test. All make-up tests will be administered in the designated classroom on the Patriot Path session roster.

Homework/Classwork: Students who are absent for **excused reasons** will be permitted to make up missed work. **It is the student's responsibility to get their work assignments the day upon return to school and complete the assignments according to a time frame determined by the teacher within two weeks of the date of the last absence**. Grades of zero will be assigned for assignments missed because of unexcused absences.

Text and Other Required Reading:

Larson, R., & Boswell, L. (2020). *Geometry with Data Analysis*. Big Ideas Learning. Access through Clever App

PreAP Geometry with Data Analysis

Teacher Name: Ms. Emily Albert   Teacher E-mail: esalbert@madisoncity.k12.al.us

|	
Materials and Supplies Needed:	3-Ring Binder (1"-1.5") with Dividers (12), Notebook paper, Pencils & Erasers, Colored pencils, Calculator (scientific recommended)
Laptops:	Concerning laptop utilization: 1. Student laptops should not be hard-wired to the network or have print capabilities. 2. Use of discs, flash drives, jump drives, or other USB devices will not be allowed on Madison City computers. 3. Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops. 4. Laptops and other electronic devices will be used at the individual discretion of the teacher.
Accommodations	Requests for accommodations for this course or any school event are welcomed from students and parents.

18 – WEEK PLAN*	
Weeks 1-2	**Unit 1** Geometry Basics (Textbook Chapter 1) Essential Question: How can you use the tools of geometry to illustrate and solve real-world problems?
Week 3	**Unit 2** Logic & Proof (Textbook Chapter 2) Essential Question: When would it be appropriate to use a proof, informal and formal, in a real-world setting?
Weeks 3-5	**Unit 3** Parallel & Perpendicular Lines (Textbook Chapter 3) Essential Question: When might parallel or perpendicular lines as well as the special angle pairs they create be applied in a real-world setting?
Week 5	**Unit 9** Transformations (Textbook Chapter 4) Essential Question: Where can transformations be seen in your daily lives?
Weeks 6-7	**Unit 4** Congruent Triangles (Textbook Chapter 5) Essential Question: Which approach is likely to be the most efficient when determining which congruent triangle theorem may apply for a given diagram?
Week 8	**Unit 5** Relationships in Triangles (Textbook Chapter 6) Essential Question: When solving algebraic problems with angles and sides of a triangle, what characteristics of a triangle might be helpful?
Weeks 8-9	**Unit 6** Similar Triangles (Textbook Chapter 8) Essential Question: How do we use similarity to make sense of real-world problems?
Weeks 10-11	**Unit 8** Right Triangles & Trigonometry (Textbook Chapter 9) Essential Question: Is there a method (Pythagorean Theorem, special right triangles, similar triangles, or trigonometry) that is the most efficient way to solve a right triangle?
Weeks 11-13	**Unit 7** Quadrilaterals and Other Polygons (Textbook Chapter 7) Essential Question: How do the different types of polygons compare with each other when identifying the properties of their sides and angles?
Weeks 13-15	**Unit 10** Circles (Textbook Chapter 10) Essential Question: What relationship between tangents, central angles, inscribed angles, chords, secants, radii, and diameters of a circle exist?
Weeks 16-17	**Unit 11** Volume & Surface Area (Textbook Chapter 11) Essential Question: How can area and volume be used to find answers to real-world applications?
Week 18	**Unit 12** Data Analysis (Textbook Chapter 12) Essential Question: How can we collect, organize, and analyze data, using technology when appropriate, to make informed decisions?

*This is a tentative plan and may change at the discretion of the teacher.
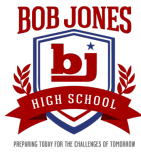
PreAP Geometry with Data Analysis

Teacher Name: Ms. Emily Albert   Teacher E-mail: esalbert@madisoncity.k12.al.us

Please sign below to acknowledge that you have received, read, and understood the syllabus.

Student name: _____

Student signature: _____

Parent/guardian name: _____

Parent/guardian signature: _____

Parent/guardian, please provide two ways for me to contact you (email address, phone numbers):

Parent/guardian Email:

_____

Parent/Guardian Phone number:

_____