Muscatine School District

Pre-AP Geometry	
Teacher Name	Gabriel McDonald
Course Name	Pre-AP Geometry
Email	gabe.mcdonald@mcsdonline.org
Phone Number	563.263.6141
Office Hours	7:45 am - 3:45pm M-F or By appointment
Course Description	Students learn basic geometry skills. Topics include points, lines, angles, right triangles, proofs and trigonometry. **Counts as a Mathematics credit** **Prerequisite: Algebra I**
Objectives	OVERVIEW: ● Read, Analyze, and solve right triangle and trigonometric functions within contextual situations. ● Develop area formulas necessary for determining volumes of rotational solids, solids, with known cross sections, and area beneath a curve. ● Explain work clearly so that the reasoning process can be followed throughout the solution. Unit 1 introduces students to the fundamentals of mathematical proofs by: ● Formalizing definitions of basic figures. ● Justifying statements about basic figures. ● Constructing proofs about segment and angle measurement and parallel and perpendicular lines. ● Writing equations of parallel and perpendicular lines. Unit 2 continues to prepare students for Advanced Placement courses by: ● Modeling real-world situations using reflections, rotations, and translations ● Increasing student ability to write proofs

	Unit 3 continues to develop students' understanding of the characteristics of plane figures by:
	
	● Allowing students to communicate mathematics and explain solutions verbally and in written form.
	● Using technology to help solve problems and support conclusions.
	● Encouraging students to determine the reasonableness of solutions including size and relative accuracy.
	● Providing contextual situations where special right triangles and trigonometric functions can be applied.
	
	Unit 4 continues to develop students' skill in constructing proofs and in their use of basic tools of geometry by:
	
	● Investigating relationships among angle and arc measures in circles as well as lengths of chords and tangents.
	
	● Developing coordinate proofs.
	
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	● Using a compass and straightedge for basic constructions which are applied both in contextual and noncontextual problems.
	
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	● Writing equations of circles and parabolas that meet given criteria.
	
	Unit 5 extends students' understanding of the properties of plane figures and solids by:
	
	● Applying area and volume formulas in contextual situations.
	● Developing the area formula for a circle as necessary for determining volumes of rotational solids required in AP Calculus.
	● Developing area formulas necessary for approximating the area beneath a curve and determining volumes of solids with known cross sections.
	● Providing contextual situations where calculating the area or volume of a composite shape is a necessary step to determining a solution.

Instructional Materials	SpringBoard Geometry Textbook.
Communication Protocols	You may contact me through email or phone message.

Grading Information	The overall grading scale will be as follows: 100% - 90% = A 89% - 80% = B 79% - 70% = C 69% - 60% = D 59% and below = F Grades will be broken down as follows: Assessments: 60% Learning Activities: 20% Semester Final: 20%	
Assignment List		
Academic Policies and Procedures	- Tests will have retake options. Retakes must be prearranged and taken within two weeks of the original assessment. - See student handbook for plagiarism and other information - document. (MHS Grading Policy)	
Course Calendar	Semester 1 Activities 1 - 5: 14 Days Activities 7 - 8: 12 Days Activities 9 - 11: 14 Days Activities 13 - 15.1: 15 Days Activity 15: 12 Days Activities 17 - 18: 14 Days Semester 2 Activities 19 - 21: 15 Days Activities 22 - 23: 16 Days Activities 24, 25, 27: 17 Days Activities 30 - 32: 14 Days Activities 33 - 36: 14 Days Activities 38 - 42: 10 Days	