

Cherokee High School

Course Syllabus

Teacher Information: Mrs. Mary Ellen Horner

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Course Title: Geometry

Course Description/Goals: The student will demonstrate the ability to solve mathematical and real-world problems using measurement and geometric models, and will justify solutions and explain processes used.

Course Materials:

Class set of Houghton Mifflin Harcourt *Geometry*, 2015 edition.

Subjects/ Course Work:

Tennessee State Standards link:

http://tn.gov/assets/entities/education/attachments/std_math_geometry.pdf

Unit 1: Transformations and Congruence		
Module 1: Tools of Geometry	G-CO.1	G-CO.2
	G-CO.9	
Module 2: Transformation and Symmetry	G-CO.3	G-CO.4
Module 3: Congruent Figures	G-CO.5	G-CO.6
	G-CO.7	
3 weeks		
Unit 2: Lines, Angle, and Triangles		
Module 4: Lines and Angles	G-CO.9	G-GPE.5
Module 5: Triangles Congruence Criteria	G-CO.7	G-GPE.8
Module 6: Applications of Triangle Congruence	G-CO.12	G-SRT.5
Module 7: Properties of Triangles	G-CO.10	G-GMD.6
Module 8: Special Segments in Triangles	G-C.3	G-CO.10
3 weeks		
Unit 3: Quadrilaterals and Coordinate Proof		
Module 9: Properties of Quadrilaterals	G-CO.11	G-SRT.5
Module 10: Coordinate Proof Using Slope and Distance	G-GPE.5	G-GPE.4
	G-CO.11	G-GPE.7
2 weeks		

Unit 4: Similarity			
Module 11: Similarity and Transformations	G-SRT.1a	G-SRT.2	2 weeks
	G-SRT.3		
Module 12: Using Similar Triangles	G-SRT.4	G-GPE.6	
	G-SRT.5		

Unit 5: Trigonometry			
Module 13: Trigonometry with Right Triangle	G-SRT.6	G-SRT.8	2 weeks
Module 14: Trigonometry with All Triangle	G-SRT.10		

Unit 6: Properties of a Circle			
Module 15: Angles and Segments in Circles	G-C.2	G-C.3	2 weeks
Module 16: Arc Length and Sector Area	G-GMD.1	G-C.1	
	G-C.5		
Module 17: Equations of Circles and Parabolas	G-GPE.1		

Unit 7: Measurement and modeling in Two and Three Dimensions			
Module 18: Volume Formulas	G-GMD.1	G-GMD.2	2 weeks
Module 19: Visualizing Solids	G-GMD.4	G-MG.1	
	G-GMD.3	G-MG.1	
Module 20: Modeling and Problem Solving	G-MG.2	G-MG.3	

Unit 8: Probability			
Module 21: Introduction to Probability	S-CP.1	S-CP.9	2 weeks
	S-CP.4		
Module 22: Conditional Probability and Independence of Events	S-CP.2	S-CP.4	
	S-CP.8		
Module 23: Probability and Decision Making	S-CP.4		

Major Standard
Supporting Standard

Assessment Types:

*noted within course outline

Major Assignments Required: *noted within course outline

Field Trips Planned: *No Field Trips Planned

Online Resources:

Hawkins County Board of Education Policy 4.400 – Instructional Materials.

<http://images.pcmac.org/Uploads/TennesseeSBA/TennesseeSBA/Departments/DocumentsCategories/Documents/4400-H.pdf>