Name	School	Grade	Course/Subject	Number of Students	Interval of Instruction
		10-12	Geometry		Sept. 2015 – Mar. 2016

Standards, Rationale, and Assessment Method

Major Work

Rationale: The following Common Core State Standards have been selected as Major Work because they are identified as major focus standards for the Geometry course. These standards are also those not heavily rooted in reasoning or proof, yet remain critical concepts and skills that students need to learn.

Standards:

- G.CO.6: Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.
- G.CO.7: Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.
- G.CO.8: Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.
- G.SRT.1: Verify experimentally the properties of dilations given by a center and a scale factor.
    a) A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.
    b) The dilation of a line segment is longer or shorter in the ratio given by the scale factor.
- G.SRT.2: Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.
- G.SRT.5: Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
- G.SRT.6: Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
- G.SRT.7: Explain and use the relationship between the sine and cosine of complementary angles.
- G.SRT.8: Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems
- G.MG.1: Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).*
- G.MG.2: Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).*
- G.MG.3: Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).

Assessment Method: Authentic Assessments (Assessment Portfolio) will be used as a tool to measure students' growth. The assessment portfolio incorporates carefully selected practice-forward tasks that reflect higher levels of cognitive complexity. All tasks included in the portfolio will be "practice forward" and rubric-scored.

Starting Points and Preparedness Groupings

Student tiers will be determined using a multiple data point system to develop a baseline index. Each tier will be assigned a target command level.

Data Measures used to Establish Baselines

- 2014-15 Average of unit assessments (40%)
- 2014-15 Average of SGO performance assessment (10%)
- 2014-15 Final Grade (10%)
- 2014-15 current year diagnostic assessment (40%)
- 2015-16 (September 8 – October 10) class attendance (see Rubric)

Preparedness Group	Baseline Score
Tier 1	< 0.35
Tier 2	0.35 – 0.55
Tier 3	0.55 – 0.75
Tier 4	> 0.75

Student Growth Objective

By March 2016, 70% of students in each preparedness group will meet their assigned target command level for full attainment of the objective as shown in the scoring plan.

Preparedness Group (e.g. 1,2,3)	Number of Students in Each Group	Target Command Level on SGO Assessment Portfolio
Tier 1		2
Tier 2		3
Tier 3		4
Tier 4		4 or 5[1]

[1] It is expected that students in Tier 4 maintain a level of strong command or grow to distinguished command.

Scoring Plan
State the projected scores for each group and what percentage/number of students will meet this target at each attainment level. Modify the table as needed.

Preparedness Group	Student Target Command Level	Teacher SGO Score Based on Percent of Students Achieving Target Score			
		Exceptional (4) **>80%**	Full (3) **70-80%**	Partial (2) **50-69%**	Insufficient (1) **<50%**
Tier 1	2				
Tier 2	3				
Tier 3	4				
Tier 4	4 or 5				

Approval of Student Growth Objective
Administrator approves scoring plan and assessment used to measure student learning.

Teacher _____ Signature_____ Date Submitted_____

Evaluator _____ Signature _____ Date Approved _____

Results of Student Growth Objective
Summarize results using weighted average as appropriate. Delete and add columns and rows as needed.

Preparedness Group	Students at Target Score	Teacher SGO Score	Weight (based on students per group)	Weighted Score	**Total Teacher SGO Score**
Tier 1					
Tier 2					
Tier 3					
Tier 4					

Notes
Describe any changes made to SGO after initial approval, e.g. because of changes in student population, other unforeseen circumstances, etc.

Review SGO at Annual Conference
Describe successes and challenges, lessons learned from SGO about teaching and student learning, and steps to improve SGOs for next year.

Teacher _____ Signature _____ Date _____

Evaluator _____ Signature _____ Date _____

Class Attendance Baseline Rubric

Attendance Rate (September 8 - October 10)	Scores
≥ 94%	No points deducted from the student's original baseline score
< 94%	6% of baseline score will be deducted from the student's original baseline score

Note:
The attendance percentage of 94% was used as good average attendance for public schools, while 93-85 percent was used as needing improvement and 84 percent or below was used as poor attendance as defined by the No Child Left Behind Act (NCLB) 2001.

Reference:

1. Jones, J., (2006, April 7). The impact of student attendance, socio-economic status and mobility on student achievement of third grade students in Title I schools. Retrieved from: http://scholar.lib.vt.edu/theses/available/etd04202006154606/unrestricted/jonesapproveddissertationsapr7.pdf

2. Applegate, K. (2003). The relationship of attendance, socio-economic status, and mobility and the achievement of seventh graders (Unpublished doctoral dissertation), Saint Louie University, St. Louis, MO.

3. Ziegler, C. W. (1972). School attendance as a factor in school progress (Rev. ed.). New York, NY: AMS Press, Inc.