## New York State Student Learning Objective: Geometry $10^{\text {th }}$ Grade

| All SLOs MUST include the following basic components: |  |
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| Population | These are the students assigned to the course section(s) in this SLO - all students who are assigned to the course section(s) must be included in the SLO. (Full class rosters of all students must be provided for all included course sections.) <br> Three sections of Geometry, heterogeneously grouped, 56 students. |
| Learning Content | What is being taught over the instructional period covered? Common Core/National/State standards? Will this goal apply to all standards applicable to a course or just to specific priority standards? <br> NY State Common Core Learning Standards for Mathematics in Geometry |
| Interval of Instructional Time | What is the instructional period covered (if not a year, rationale for semester/quarter/etc)? <br> 2012-2013 school year |
| Evidence | What specific assessment(s) will be used to measure this goal? The assessment must align to the learning content of the course. <br> Baseline <br> 1. Algebra R results from students in 2011-2012; overall averages and Regents results. <br> 2. District- wide pre-assessment administered at the beginning of the school year. <br> Summative <br> 1. Geometry Regents administered in June. |
| Baseline | What is the starting level of students' knowledge of the learning content at the beginning of the instructional period? <br> 1. All students passed the Algebra Regents in June of the previous year (16 91-100; 20 81-90; 15 71-80; 5 65-70) and all students passed the Algebra R course with a 65\% or higher cumulative average (26 91-100; 15 81-90; 20 71-80; 5 65-70). <br> 2. District-wide pre-assessment where $45 \%$ of the students achieved mastery, $30 \%$ received a score between 65 and $84 \%$, and $25 \%$ scored below 65\%. |


| Target(s) | What is the expected outcome (target) of students' level of knowledge of the learning content at the end of the instructional period? <br> $1.50 \%$ of the students will achieve mastery (level $4-85 \%$ or higher) on the Geometry Regents. <br> 2. $50 \%$ of the students will receive a $3(65 \%-84 \%)$ on the Geometry Regents. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| HEDI Scoring | How will evaluators determine what range of student performance "meets" the goal (effective) versus "well-below" (ineffective), "below" (developing), and "well-above" (highly effective)? <br> This HEDI scoring will be based on the goal of $50 \%$ of the students achieving mastery level on the Geometry Regents. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | HIGHLY EFFECTIVE |  |  |  | EFFECTIVE |  |  |  |  |  |  |  |  | DEVELOPING |  |  |  |  |  | INEFFECTIVE |  |  |
|  | 20 |  | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|  | $96-$ 100 $\%$ |  | $\begin{gathered} 90- \\ 95 \% \end{gathered}$ | $\begin{aligned} & 83- \\ & 89 \% \end{aligned}$ | $\begin{aligned} & 76- \\ & 82 \% \end{aligned}$ | $\begin{aligned} & 69- \\ & 75 \% \end{aligned}$ | $\begin{aligned} & 62- \\ & 68 \% \end{aligned}$ | $\begin{aligned} & 55- \\ & 61 \% \end{aligned}$ | $\begin{aligned} & 49- \\ & 54 \% \end{aligned}$ | $\begin{aligned} & 44- \\ & 48 \% \end{aligned}$ | $\begin{aligned} & 39- \\ & 43 \% \end{aligned}$ | $\begin{aligned} & 34- \\ & 38 \% \end{aligned}$ | $\begin{aligned} & 29- \\ & 33 \% \end{aligned}$ | $\begin{aligned} & 24- \\ & 28 \% \end{aligned}$ | $\begin{aligned} & 19- \\ & 23 \% \end{aligned}$ | $\begin{aligned} & 14- \\ & 18 \% \end{aligned}$ | $\begin{aligned} & 11- \\ & 130 \end{aligned}$ | $\begin{aligned} & 8- \\ & 10 \% \end{aligned}$ | $\begin{aligned} & 6- \\ & 7 \% \end{aligned}$ | $\begin{aligned} & 4- \\ & 5 \% \end{aligned}$ | $\begin{aligned} & 2- \\ & 3 \% \end{aligned}$ | $0-$ $1 \%$ |
| Rationale | Describe the reasoning behind the choices regarding learning content, evidence, and target and how they will be used together to prepare students for future growth and development in subsequent grades/courses, as well as college and career readiness. <br> The students' work in Algebra $R$ is a precursor to the skills necessary for success in Geometry. The diagnostic assessment used will focus on the algebra skills required for success in Geometry. The Geometry curriculum will build on the algebraic skills and the application of those skills with a higher level of critical thinking. The students will be required to transfer and apply the algebraic skills to new situations using the geometry content. Mastery of the algebraic skills and their application to the geometry content will assure student success on the Geometry Regents. The derivation and subsequent use of definitions, postulates, and theorems will support student success at this level and the next. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Appendix A: District Pre-Assessment will include the following topics:

- Solving Multiple Step Equations
- Solving for a missing variable in proportions
- Solving linear systems of equations; algebraically and graphically
- Solving quadratic / linear systems of equations; algebraically and graphically
- Sum of the interior and exterior angles in polygons
- Angles associated with parallel lines cut by a transversal
- Points, lines, slopes and the equations associated with them
- Surface area and volume
- Simplifying radicals
- Pythagorean Theorem

