

Three Rivers School District

PLANNED COURSE STATEMENT

Course Title: Algebra I	Grade Level(s): 9-12
Length of Course: 2 Semesters	Credit Area: Math
Prerequisite: 8th grade math	Amount of Credit: 1 (0.5/Semester)
Adopted/Supplemental Materials: Big Ideas Math, Larson & Boswell, Algebra I, 2015	
Dual Credit Articulation:	

COURSE DESCRIPTION:

Students will broaden their understanding of linear algebra including solving equations, inequalities, and systems of equations. Students will also learn several Geometry topics including lines and planes, triangles, geometric reasoning, transformations, and volume of 3D objects.

COURSE GOALS:

Students will:

- 1. Interpret the structure of expressions and develop mathematical vocabulary.
- 2. Understand solving equations as a process of reasoning and explain the reasoning.
- 3. Solve single and multi-step equations and inequalities using one or two variables.
- 4. Graph linear equations and inequalities.
- 5. Convert between equations, graphs, and tables of linear functions.
- 6. Graph, investigate, and describe patterns of scatter plots and draw lines of best fit.
- 7. Write systems of linear equations and choose the best method for solving a system.
- 8. Solve and apply the Pythagorean theorem and distance formula.
- 9. Identify and determine missing angles of parallel lines cut by a transversal.
- 10. Find missing angles in a triangle and determine whether two triangles are similar.
- 11. Recognize and describe transformations, including translations, rotations, and reflections.
- 12. Know and use formulas for finding the volume of 3D objects.

ASSESSMENT STRATEGIES:

Daily work, starter and exit activities, participation, written exams, performance tasks, oral and written student presentations on specific concepts and processes, and a notebook including daily notes.

ACCOMMODATIONS AND MODIFICATIONS:

Any student who feels the course is moving too slowly and demonstrates mastery of the subject matter by consistently exceeding expectations for regular assignments is encouraged to meet with the teacher for more rigorous assignments and projects. More rigorous work will include alternate assignments and projects, not additional assignments. Work will be graded using the same standards for work completed by other students in the class. Conversely, a student with an IEP who needs more time to complete the work may have assignments modified to meet his/her needs.

CAREER RELATED LEARNING STANDARDS:

Students will demonstrate appropriate workplace behaviors (e.g. maintain regular attendance and be on time), apply decision-making and problem-solving techniques, demonstrate effective teamwork, apply the principles of effective communication to give and receive information, acquire, use, and transfer information, assess the relationship of educational achievement to career goals, research and analyze career options, assess characteristics related to personal, educational, and career goals, and demonstrate academic knowledge and technical skills required for successful employment.