



Three Rivers School District

PLANNED COURSE STATEMENT

Course Title: Math Foundations	Grade Level(s): 9-12
Length of Course: 2 semesters	Credit Area: Elective
Prerequisite: 8th grade math	Amount of Credit: 1.0 (.5/semester)
Adopted/Supplemental Materials:	
Dual Credit Articulation:	

COURSE DESCRIPTION:

Students will deepen their understanding of the number system, equations and expressions, functions, geometry, statistics and probability, through the mathematical practices. Instructional time will focus on:

- Formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations;
- Grasping the concept of a function and using functions to describe quantitative relationships;
- Analyzing two- and three-dimensional space and figures using distance, angle, similarity, congruence, and understanding and applying the Pythagorean Theorem.

COURSE GOALS:

Students will:

1. Know that there are numbers that are not rational, and approximate them by rational numbers.
2. Work with radicals and integer exponents.
3. Understand the connections between proportional relationships, lines, and linear equations.
4. Analyze and solve linear equations and pairs of simultaneous linear equations.
5. Define, evaluate, and compare functions.
6. Use functions to model relationships between quantities.
7. Understand congruence and similarity using physical models, transparencies, or geometry software.
8. Understand and apply the Pythagorean Theorem.
9. Solve real-world problems including volume and cylinders, cones, and spheres.
10. Investigate patterns of association in bivariate data.

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.