JOHN F. KENNEDY HIGH SCHOOL
COURSE SYLLABUS
DEPARTMENT OF MATHEMATICS

1.	COURSE NUMBER, TITLE, UNITS AND PRINCIPAL/DEPARTMENT APPROVED DESCRIPTION
	Math 1 (Two semesters; 5 units each semester; 10 units total)
2.	**GENERAL INFORMATION**
	Term and year:	2018-2019
	Instructor:	Samantha Walker
	Class Room:	C310
	Phone number:	(916) 395-5090
	E-mail address:	Samantha-walker@scusd.edu
3.	**TEXTBOOKS AND/OR RECOMMENDED OR REQUIRED READINGS**
	Integrated Math I, Walch Education, Portland, ME; 2014) Student Resource Book (Textbook) and 6 Work Books **Resource Book** should be used by students to further study lessons taught in class, and for information lost due to absences. **Workbooks** are used for homework and in-class note taking.
4.	**GENERAL OVERVIEW**

The fundamental purpose of Mathematics I is to formalize and extend students' understanding of linear functions and their applications. The critical topics of study deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. Mathematics I uses properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge from prior grades. The courses in the Integrated Pathway follow the structure began in the K-8 standards of presenting mathematics as a coherent subject, mixing standards from various conceptual categories. The standards in the integrated Mathematics I course come from the following conceptual categories: Modeling, Functions, Number and Quantity, Algebra, Geometry, and Statistics and Probability.

This particular course uses a common core approach to learning. Students will be introduced to standards for mathematical practice. The following year, students will continue on to Math 2, which will contain more advanced topics in Algebra, Geometry and Statistics. Math 1 and Math 2 will complete a minimum high school graduation requirement in the study of mathematics. However, most students aim to continue on

with Math 3 and further math courses in preparation for college.

Students are expected to know basic solving of equations, calculations in fractions and other rational numbers, and proportional understanding. Brief reviews will be given before a unit is learned, however, it is expected that students take responsibility for attending support classes after school to get more proficient at any of the math skills in which they are not as fluent.

For the Algebra portion of this course, topics include simplifying expressions, evaluating and solving equations and inequalities, and graphing linear and exponential functions and relations. Real world applications are presented within the course content and a function's approach is emphasized. For the Geometry portion, topics include transformational geometry, congruence and constructions and connecting Algebra and Geometry through Cartesian analysis of lines and shapes.

5.	**COURSE OBJECTIVES**

The following sequence by textbook chapter identifies the major units making up the Algebra II curriculum.

Unit 1   Relationships Between Quantities
Unit 2   Linear and Exponential Relationships
Unit 3   Reasoning With Equations
Unit 4   Descriptive Statistics
Unit 5   Congruence, Proof and Constructions
Unit 6   Connecting Algebra and Geometry Through Coordinates

Students will acquire and demonstrate knowledge of the concepts, definitions and properties required to meet the Math 1 Common Core Mathematics Standards. Students will develop critical thinking and decision-making skills by connecting concepts to practical applications needed to be productive members of society. All students are expected to demonstrate the following objectives:

- Students should be able to work with functions represented in a variety of ways: graphical, numerical, analytical, or verbal. Students should understand the connections among these representations.

- Students should be able to communicate mathematics both orally and in well-written sentences and should be able to explain solutions to problems.

- Students should be able to model a written description of a real-world situation with a function.

- Students should be able to use technology (calculators, applets, Excel) to help solve problems, experiment, interpret results, and verify conclusions.

- Students should be able to determine the validity of solutions, including sign, size, relative accuracy, and units of measurement.

6.	**COURSE REQUIREMENTS, ATTENDANCE AND SPECIFIC GRADING POLICY**
	Grades are based on demonstrated mastery of concepts and development of skills, not effort or potential. *A major component of your grade is determined by your results on assessments.* Progress reports are available on the District Web site in Infinite Campus. Assignments are a guide as to what is most important and what will be tested. Assignments are given daily. *Students not actively engaged in assignments and study will most likely fail the class.* Planning your study should include a minimum hour of quality time daily. The math dept. complies with district protocol that can be viewed at www.scusd.edu.
7.	**DESCRIPTION OF MAJOR ACTIVITIES/EXERCISES/PROJECTS**
	Instructional Strategies and Activities Include: · Lecture on concepts and techniques · Presentation/modeling of examples and strategies · Large and small group discussions and explorations · Reading and writing assignments · Practice and learning through classwork and daily assignments · Applications to demonstrate relevance and extend learning · Active student engagement in group work and discussions · Quizzes, and tests to encourage and monitor learning
8.	**GENERAL STATEMENTS**
	CLASSROOM BEHAVIOR EXPECTATIONS: The following summarize important expectations for classroom behavior. • Students are expected to attend class every day. • Students are expected to complete all assignments on time. • Students are expected to be seated and prepared for learning when the bell rings. • Students are expected to treat their classmates with respect; no put downs of any kind. • Students are expected to actively and positively participate in class. • Students are expected to demonstrate personal responsibility, honesty, and integrity in all of their actions. **CLASSROOM RULES:** The following few rules guide classroom behavior and activity. • Follow teacher directions and requests immediately. • Keep your hands, feet, and other objects to yourself. • Remain seated unless you have permission to move about the classroom. Eating (food, candy, etc.) and gum chewing are not permitted in the classroom.

ELECTRONIC DEVICES: Electronics (music devices, cell phones, etc.) are to be turned completely off and away.

HOMEWORK AND STUDY: Homework and student study is an essential part of your education. Any student expecting to do well in this course should carefully read the text and do all the assigned work.

CHARACTERISTICS OF QUALITY WORK: Using the following guidelines will help you master the Math 1 objectives. Quality work has the following characteristics.
- Is complete with full solution. That is, all problems are completed or at least attempted.
- The supporting work for each problem is shown completely using proper algebraic conventions and notations.
- The work is done neatly.
- The work is done accurately.

CHARACTERISTICS OF A SUCCESSFUL STUDENT: Students that are successful in school generally exhibit the following traits:

- Is consistently present for class.
- Desires to learn the material presented.
- Uses time wisely.
- Does practice work, study, and test preparation.
- Asks thoughtful questions during class.
- Actively participates in class and gets extra help when needed.

CALCULATOR USE AND EXPECTATION: A scientific calulator is necessary for this course.

9.	**COURSE REQUIREMENTS, ATTENDANCE AND GRADING POLICY**

Grading Scale:
90% - 100%   A
80% - 89.9%   B
70% - 79.9%   C
60% - 69.9%   D
0 % - 59.9%   F

30%	Assignments
70%	Assessments
Up to 2%	Extra Credit added in Assignments category

Late work resulting from student absences will only be accepted if absence is excused through the attendance office. It is the student's responsibility to make arrangements with the teacher the day before or after the absence for make-up work.

Late work due to extra-curricular activities will not be accepted. If you find yourself falling behind due to these activities, make adjustments to your outside commitments that reflect a high priority to academics.

Zeros will be issued on ANY daily assignment or assessment to cheating students and the enabler.

The teacher has the right to adjust assessments, daily assignments and due dates as necessary.