DOBBS FERRY MIDDLE SCHOOL

Dobbs Ferry, New York 10522

COURSE OUTLINE

SUBJECT: Mathematics

<u>GRADE</u>: 8

Offered: Full Year Type of Course: Required unless student is taking Algebra I

COURSE DESCRIPTION:

The eighth grade mathematics course focuses on the concepts outlined in the New York State Common Core standards and builds upon the seventh grade concepts previously mastered. The course is broken into the following units: number system; expressions and equations; functions; geometry; probability and statistics. At the end of the course students will have mastered all the concepts necessary to continue into the ninth grade Algebra I course.

ANTICIPATED OUTCOMES:

By June of this year, students in this class will be able to:

- Perform and Understand Laws of Exponents
- Compute Scientific Notation
- Solve a variety of algebraic equations
- Translate expressions and equations
- Graphing Linear Equations and Inequalities
- Systems of Linear Equations
- Construct Functions
- Use the Pythagorean Theorem
- Angle relationships
- Transformations
- Volume and Surface Area of shapes
- Represent data in a variety of statistical plots

Materials Needed

- Agenda Pad
- Chromebook
- Scientific Calculator (TI-30X IIS)
- One Large 3-Ring Binder
- Pencil Case with 3 Holes (to be inserted in binder)
- Binder Dividers
- Loose Leaf Paper

- Graph Paper
- One Folder
- One Ruler
- Highlighters
- Pens (blue or black only)
- Pencils

Criteria for Assessment

Grades will be based on the following:

- Class Participation
- Homework/Projects
- Tests/Quizzes

STUDENT/PARENT RESOURCES:

- <u>www.math.com</u>
- www.mathisfun.com
- www.regentsprep.org
- -www.connected.mcgraw-hill.com

Outline developed by: <u>Mathematics Department</u>

Date: Fall 2015