

DOBBS FERRY MIDDLE SCHOOL
Dobbs Ferry, New York 10522

COURSE OUTLINE

SUBJECT: STEM 7

GRADE: 7

COURSE DESCRIPTION:

The STEM 7 curriculum is an introductory creative computing experience using the Scratch programming language. These activities are designed to support familiarity and increasing fluency with computational creativity and computational thinking.

Anticipated student outcomes:

Grade 7 – STEM 7 (*meets every other day for a semester*)

By the end of the two quarters, students will have been offered opportunities to engage in:

- Designing and making, not just listening, observing, and using.
- Activities that are personally meaningful and relevant.
- Interactions with others as audience, coaches, and co-creators.
- Review their creative practices.

Key Concepts Taught by this Course –

Computational Thinking Concepts

- Sequence
- Loops
- Parallelism
- Events
- Conditionals
- Operators
- Data

Computational Thinking Practices

- Experimenting and iterating
- Testing and debugging
- Reusing and remixing
- Events

Materials required or used:

7th Grade STEM

- Chromebook
- Small graph paper spiral notebook
- Pencils and a manual sharpener
- Calculator
- Colored Pencils

Criteria for grading:

Grades will be based on the following:

- Activities and Projects
- Class Participation
- Assessments
- Homework
- Online Performance