

**DOBBS FERRY MIDDLE SCHOOL**  
Dobbs Ferry, New York 10522

**COURSE OUTLINE**

**SUBJECT: SCIENCE**

**GRADE: 6**

Curriculum reflects NYS Intermediate Science Standards

**Anticipated student outcomes:**

*By June of this year, students in this class should be able to...*

- Make qualitative and quantitative observations. Make inferences based on those observations.
- Learn about the three states of matter.
- Understand phase changes along with reading a phase change diagram
- Describe physical versus chemical changes.
- Integrate the steps of the scientific method in various classroom investigations.
- Measure the length, mass and volume of regular and irregular shaped objects using the appropriate lab instruments and convert within the metric system.
- Investigate the structure of an atom, calculate atomic mass and atomic number.
- Draw an atom using the Bohr model.
- Recognize and access information from the Periodic Table of Elements.
- Understand the difference between an element, compound and mixture.
- Recognize and read chemical formulas for atomic and molecular make up.
- Understand Newton's Laws.
- Observe, describe, and compare effects of forces on the motion of objects.
- Determine the speed and acceleration of a moving object.
- Identify the six types of simple machines and calculate work and power.
- Know the different forms of energy and identify energy conversions.
- Explain the differences between Renewable and Non Renewable resources.

**Materials required or used:**

To Be Determined

**Criteria for grading:**

Students will be graded the averaging system. Students' grade will reflect their class participation, quizzes, homework, labs, projects and tests.

**Opportunities for Enrichment:** Approved sites for Article Reviews

[www.timeforkids.com](http://www.timeforkids.com)

[www.sciencenewsforkids.org](http://www.sciencenewsforkids.org)

[www.nytimes.com](http://www.nytimes.com)

*Outline developed by:* The Science Department

*Date:* Spring 2016