

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

**COURSE OUTLINE**

**SUBJECT: MYP Year 2 Living Science**

**GRADE: 7**

Offered: Full Year

Type of Course: Required

Teachers: Dr. Jin Park and Mrs. Leslie Marx

Life Science is the focus of the seventh grade curriculum. Throughout the year, students will learn four main topics through the lens of MYP: Diversity of Life, Genetics, the Human Body and Ecology. In addition, students will continue to work on skills such as utilizing the Scientific Method, graphing, interpreting graphs/diagrams, and working on persuasive essays. After this year of study, students will enroll in either General Eighth Grade Science or Regents Earth Science.

**Anticipated student outcomes:** *By June of this year, students in this class should be able to understand and have knowledge of:*

**Diversity of Life:** *Cellular Biology*

Know the parts of the microscope

Slide preparations and measurement of magnified objects (mm)

Microscopic organisms

Cell parts and functions

Plant vs. Animal cells

Classification of living things overview; protists, bacteria, fungi, plants and animals

**Human Body Systems:** *Anatomy and Physiology*

Overall organization of the human body, cells, organs and systems

Skeletal System

Muscular System

Cardiovascular System

Respiratory System

Nervous Systems

### **Genetics and Heredity**

Genes and Chromosomes  
Cell division; mitosis and meiosis  
History of genetics  
Mendelian genetics  
Current topics in genetics  
Punnett Square  
Sexual vs Asexual reproduction

### **Environmental Studies: Ecology**

Biological cycles  
Ecosystems  
Food Webs and Food Chains  
Ecological Interactions  
Different Biomes  
Environmental threats  
Concept of recycling

### **Materials required:**

1. Composition notebook
2. Agenda book
3. Pen and pencil
4. Chromebook

### **Criteria for grading:**

*Summative assessment: Approximate weight*

1. 40% Tests and Quizzes
2. 15% Homework
3. 35% MYP Labs and Projects
4. 10% Class Participation

*Outline developed by: Science Department*

*Date: Winter 2024*