P.S. 035 Manhattan High School Course Syllabus

Teacher- Ms. George Course Name- Living Environment SLS42QQX Year and Term- 2017-2018, Term 2

Grading Policy:

Participation/Behavior		40%
Classwork		30%
Assessments	(Tests, quizzes. Projects)	20%
Homework		10%

Course Description:

The Living Environment Core Curriculum is based on Standard 4 of the Commencement level New York State Learning Standards for Mathematics, Science, and Technology(Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science); building on the concepts covered in the elementary and intermediate levels. It incorporates scientific inquiry from Standard 1 (Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.) Living Environment 3 & 4 builds on the concepts learned in 1 & 2 and culminates in a NYS Regents exam. The key concepts covered in this course are Scientific Method, Skills, and Tools, Genetics and Heredity, Evolution, Ecology, Humans' effect on the Environment, and Regents Review.

Learning Objectives:

Unit 1 Scientific Method, Skills, and Tools

• design and carry out a controlled, scientific experiment. State an appropriate hypothesis. Differentiate between independent and dependent variables. Identify the control group and controlled variables. Collect, organize and analyze data. Organize data through

the use of data tables and graphs. Formulate an appropriate conclusion and generalizations from the results of an experiment. Recognize assumptions and limitations of the experiment.

Unit 2 Genetics and Heredity

- Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring.
- explain how the structure and replication of genetic material result in offspring that resemble their parents.
- explain how the technology of genetic engineering allows humans to alter genetic makeup of what makes you who you are and can you be changed?

Unit 3 Evolution

- know that individual organisms and species change over time.
- explain the mechanism and patterns of evolution.

Unit 4 Ecology

- know that Plants and animals depend on each other and their physical
- explain factors that limit growth of individuals and populations.
- explain the importance of preserving diversity of species and habitat.
- Explain how the living and nonliving environments change over time and respond to disturbances.

Unit 5 Humans' Effect on the Environment

- know that human decisions and activities have had a profound impact on the physical and living environment.
- describe the range of interrelationships of humans with the living and nonliving environment.
 - Explain the impact of technological development and growth in the human population on the living and nonliving environment.
- Explain how individual choices and societal actions can contribute to improving the environment.
- organize data through the use of data tables and graphs

Unit 6 Regents Review

• understand the course objectives for the topics in Living Environment 1 and 2. Key topics include Microbiology, Cellular form and function, Reproduction, and Homeostasis & Immunity.

Classroom Expectations and Requirements- In this class you will work towards accomplishing 3 very important goals-Developing a love for science and learning, passing this class, and preparing you for your future careers and/or college. We have very high expectations for you and know that with hard work, you can succeed in this class. You are required to come to class on time, do all classwork and homework assignments, and participate in a positive manner

Positive Phone Calls- We will select one student a week (from the 5 classes). This person will have followed class rules and completed assignments. These students will receive a positive phone call home and be invited to a pizza party at the end of the month. We will work very hard with you and except each of you to work just as hard. We look forward to a successful year.

Attendance policy-students should come to class on a regular basis, however they will be allowed to make up work they have missed within a reasonable period of time. Weekly attendance is calculated into the participation portion of the grading policy.