# P.S. 035 Manhattan High School

Course Code: SLS43

**Syllabus for:** Living Environment 3

Teacher Name: Ms. Luna Rojas

Year and Term: 2017-2018

**Learning Standards:** S2- Life Science Concepts

S4- Scientific Connections and Understanding

S5- Scientific Thinking

S6- Scientific Tools and Technologies

S7- Scientific Communication S8- Scientific Investigation

**Course Description:** Living Environment is a Regents course that connects the topic of cells, body systems and genetics.

# **Calendar or Unit Map:**

#### Scientific Method-1

- Variables
- Control group
- Create a hypothesis
- > Create an experiment
- > Data collection
- Data analysis

# The 5 Sciences

- Chemistry
- Physics
- Earth Science
- Math
- Biology

#### Biology-6

- 9 processes
- ➤ ATP
- > DNA
- ➤ Biotic Abiotic
- Homeostasis

#### Biology- cell-7

- Organelles
- Cell theory
- Mitosis
- Prokaryote, Eukaryote
- Cell theory

### Enzymes & pH -2.3

- Substrates/Product
- Inhibitors/Activators
- Anabolic/Catabolic
- ▶ nF
- > Enzymes effects on the body
- > pH effects on the body and on enzymes

#### Nutrition -16

- Type of foods
- > Food pyramid
- > Food plate
- ➤ ATP
- Foods effect on the body

#### **Biology- Systems-8**

- All the systems of the human body
- Relationships of the systems
- Connection to the 9 processes

#### Immune - 9

- WBC /Antibodies
- Vaccinations
- How does our body protect us?

# Reproduction-10

- System
- ➤ STDs
- Meiosis
- Embryology
- ➤ How to protect themselves from STDs
- ➤ Why reproduction is different in different organisms

# **Biology- Genetics-11**

- DNA
- ► RNA
- Mutations
- Meiosis
- Punnett Square
- Pedigree chart
- Karyotyping
- ➢ Gel electrophoresis
- Properties Gene

Course Materials: Notebook, 200 index cards, USB flash drive, home computer

# **Grading Policy:**

- 1-30%- Labs
- 2-10%- Exams
- 3-10%- Voc. Exams
- 4-15%- Wit packets
- 5-10%- Voc. Cards
- 6-10%- Movies
- 7-10%- Projects
- 8-05%- H.W.
- OR
- 1-30%- Labs
- 2-60%- Exams
- 3-10%- Voc. Exams
- OR for Beacon Student
- 1-30%- Labs
- 2-30%- Exams
- 3-10%- Voc. Exams
- 4-30%- Projects