# P.S. 035 Manhattan High School

Course Code: SLS43

**Syllabus for:** Living Environment 3

Teacher Name: Ms. Rojas

Year and Term: 2021/1

**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
- ≽ pF
- > 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

2-30%- Exams

3-40%- Classwork/Homework