GIFTY ASAMANI
SCHOOL FOR EXCELLENCE

LIVING ENVIRONMENT/BIOLOGY COURSE OUTLINE (SYLLABUS)

Welcome to science class! I excited to be your teacher this year as we explore the world around us through scientific research. This course designed for the Sophomore year of High School goes about three steps deeper in knowledge acquisition and details than the General Science course in the Freshman year. At the end of this course, all students are expected to sit for and pass the New York State Living Environment Regents. We will be studying all the required subject matters outlined in the Living Environment Regents Core Curriculum such as:

I. **Organization of Life**
II. **Heredity and Genetics**
III. **Evolution: Change Over Time**
IV. **Reproduction and Development**
V. **Homeostasis**
VI. **Ecology**
VII. **Human Impact on the Environment**
VIII. **Laboratory Skills: Scientific Inquiry and Techniques**

The laboratory component of this course includes laboratory activities required by the New York State Board of Regents and hands on activities that are necessary to enhance student understanding (of the lectures) and gain basic scientific laboratory skills by utilizing equipment and The Scientific Method.

Usage of technology such as the internet for research and information gathering for experimentation is highly encouraged.

Assessment is based on: Attendance, writing assignments, Quizzes, class participation, examinations, individual and group

projects, mock regents, midterms and final exams Portfolios and the Living Environment Regents Examination.

MAKE UP EXAMS MUST BE MADE WITHIN A WEEK. HOMEWORK ASSIGNMENTS ARE DUE ON THE DUE DATE; NO EXCEPTIONS. LATE PROJECTS WILL LOSE POINTS – 10 POINTS ON THE FIRST LATE DAY AND 5 POINTS ON EACH SUBSEQUENT DAY. NO PROJECT WILL BE ACCEPTED A WEEK AFTER THE DUE DATE.

NATIONAL SCIENCE STANDARDS

NS.9-12.1 SCIENCE AS INQUIRY

As a result of activities in grades 9-12, all students should develop

- Abilities necessary to do scientific inquiry
- Understandings about scientific inquiry

NS.9-12.2 PHYSICAL SCIENCE

As a result of their activities in grades 9-12, all students should develop an understanding of

- Structure of atoms
- Structure and properties of matter
- Chemical reactions
- Motions and forces
- Conservation of energy and increase in disorder
- Interactions of energy and matter

NS.9-12.3 LIFE SCIENCE

As a result of their activities in grades 9-12, all students should develop understanding of

- The cell
- Molecular basis of heredity
- Biological evolution
- Interdependence of organisms
- Matter, energy, and organization in living systems
- Behavior of organisms

NS.9-12.4 EARTH AND SPACE SCIENCE

As a result of their activities in grades 9-12, all students should develop an understanding of

- Energy in the earth system
- Geochemical cycles
- Origin and evolution of the earth system
- Origin and evolution of the universe

NS.9-12.5 SCIENCE AND TECHNOLOGY

As a result of activities in grades 9-12, all students should develop

- Abilities of technological design
- Understandings about science and technology

NS.9-12.6 PERSONAL AND SOCIAL PERSPECTIVES

As a result of activities in grades 9-12, all students should develop understanding of

- Personal and community health
- Population growth
- Natural resources
- Environmental quality
- Natural and human-induced hazards
- Science and technology in local, national, and global challenges

NS.9-12.7 HISTORY AND NATURE OF SCIENCE

As a result of activities in grades 9-12, all students should develop understanding of

- Science as a human endeavor
- Nature of scientific knowledge
- Historical perspectives

SFE ASSESSMENTS

40% CLASSWORK AND CLASS PARTICIPATION
40% EXAMS AND PROJECTS
5% HOMMEWORK
5% MOCK REGENTS
10% ORGANIZATIONAL SKILLS (Instruments of work; Time Management; College Readiness Expectations)

Attached please find a copy of a more detailed outline (Scope and Sequence)

DISCLAIMER: Teacher reserves the right to make changes to the detailed outline on a month-to-month basis. Teacher reserves the right to make changes to SFE Assessments to include Attendance and Lab credit.

_____
Student Print Name

_____
Student Signature

_____
Parent/Guardian Signature

Date_____

Ms. Gifty Asamani
Living Environment/Biology
Department Chair