

Southern Regional High School
Manahawkin, New Jersey
Course Syllabus

Department: Science

Course: BIOLOGY

Marking Period 1

Topics/Units to be covered:

- Classroom Expectations/Grading/Laboratory Safety
- Characteristics of Life
- Ecosystem Structure & Interactions
- Population Ecology
- Aquatic Ecology
- Human Impact on Ecosystems
- Cellular Parts, Processes & Function
- Quarterly

Marking Period 2

Topics/Units to be covered:

- Chemical Reactions/Chemical Bonds
- pH Scale/Acids/Bases
- Organic Compounds of Life: lipids, carbohydrates, proteins, nucleic acids
- Osmosis/Diffusion/Active Transport
- Cell Respiration
- Photosynthesis
- Cell Growth & Division (Mitosis)
- Meiosis
- Quarterly

Marking Period 3

Topics/Units to be covered:

- DNA Structure/Function/Replication
- RNA Structure/Protein Synthesis
- Mutations
- Mendel's Experiments
- Non-mendelian inheritance Patterns (Polygenic Traits, Multiple Alleles, Codominance & Incomplete dominance)
- Quarterly

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Marking Period 4

Topics/Units to be covered:

- Human Genetics
- Biotechnology (Gene Therapy, Human Genome Project, DNA Fingerprinting)
- Natural Selection
- Diversity of Life on Earth
- Evolution of Species
- Classification of Life
- Final Exam