COURSE TITLE: Biology I COURSE TYPE: required COURSE LENGTH: 1 year GRADE LEVEL: 11 COURSE CREDIT: 1 credit PREREQUISITE: n/a

## **COURSE GOALS:**

- 1. Students will define biology as a science.
- 2. Students will identify the themes of biology and the characteristics of life.
- 3. Students will gather information about carbohydrates, lipids, proteins, and nucleic acids.
- 4. Students will explain the structures and function of cells.
- 5. Students will research the structure and function of DNA and RNA.
- 6. Students will describe Mendelian genetics and basic heredity.
- 7. Students will describe the taxonomy and characteristics of the structures and functions of arthropods and mammals.
- 8. Students will describe the taxonomy and characteristics of the structures and functions of various plant species.

## **COURSE CONTENT:**

- 1. Biology as a science
- 2. Molecules required by living organisms
- 3. Structure and function of cells
- 4. DNA and RNA function and basic heredity
- 5. Animal taxonomy and characteristics
- 6. Plant taxonomy and characteristics