SUBJECT OUTLINE:

Biology is the study of living things. It includes their structure, how they function and how organisms interact with their environment. The study of Biology provides students with opportunities to:

- Gain insight into the scientific manner of investigating problems pertaining to the living world
- Experience the processes of science which lead to the discovery of new knowledge
- Develop a deeper understanding and an enhanced aesthetic appreciation of the living world.

The Biology Course is divided into units that are based on broad contexts in which biological concepts are studied, or on an inquiry approach to learning.

The course includes two student-determined research projects.

The main units to be studied include:

- The development and diversity of living things.
- Interaction and interdependence of organisms in the environment (including extensive and detailed field studies).
- Homeostasis and how body systems cope with extreme conditions.
- Genetics and biotechnology issues.

CONtributes TO OP: Yes

ASSESSMENT OUTLINE:

Assessment in Biology is entirely criteria-based. Assessment tasks will belong to one of three categories.

- **Extended Response** – this type of task will usually require substantial research and the report may take one of many forms including: a written report, a response to stimulus material, an oral or multimedia presentation.

- **Written Task** – this type of task is to be completed under supervised conditions. It may take the form of a test, analysis of data in table, diagram or graph form, an article for a science magazine or other formats.

- **Extended Experimental Investigation** – students will select or devise an open-ended practical research question. They will then conduct experiments and report on the data collected.

CAREER PATHWAYS:

Medical sciences, zoologist, botanist, environmental scientist, animal husbandry

STUDENT REQUIREMENTS/PREREQUISITES:

Students who succeed in this subject have usually achieved at least satisfactory results in Junior Science. Biology requires a great deal of reading and comprehension and students should have achieved at least a satisfactory level of achievement at Junior English.

The inquiry-learning and context-based units mean that students will need to develop independent learning skills and be self-motivated. Students must be prepared to ask questions, participate in discussions and be active learners. Experimental and non-experimental research skills will be developed, which will help students in future educational pursuits.