Name of Subject: Scientific Studies

Stage: 1

General information: Through Scientific Studies students develop knowledge of scientific principles and concepts through their own investigations. They develop the skills and abilities to explain scientific phenomena, and to draw evidence-based conclusions from investigations of science-related issues. Two different 10 unit courses will be offered subject to interest, the first in semester one and the second in semester 2. This subject is ideal for students who have an interest in science and science related issues who are not considering Biology, Chemistry or Physics.

Content: The content covered in this course is flexible and can be designed to suit the range of interests and abilities of the students enrolled. Each semester a different unifying theme will be selected for the course and students will undertake study of two or three topics related to this theme. An example of a theme and potential topics is shown below:

Example Theme: The implications of human intervention through science
Potential Topics: Recycling
Genetic modification of plants
Genetic modification of animals
Nuclear power
The Human Genome Project
Alternative energy

Assessments:
Assessment at Stage 1 is school based. In each semester long course students will undertake four or five assessments, at least one of which involves collaborative work. Tasks will be of one of the following assessment types: Investigations Folio and Skills and Applications Tasks. Each assessment type will have a weighting of at least 20%.

Investigations folio
For a 10-credit subject, students undertake at least one practical investigation and at least one issues investigation to include in the folio.

The practical investigation involves, students formulating hypotheses, designing and conducting an investigation, identifying variables, collecting, analysing, and interpreting data, evaluating results and drawing conclusions. Practical investigations may be conducted individually or collaboratively, but each student presents an individual report on the investigation.

During the issues investigation, students design and conduct an investigation based on a scientific issue, access information from different sources, analyse their findings and develop and explain their conclusions from the investigation. Students will present their findings using a maximum of 750 words if written or a maximum of 5 minutes for an oral presentation, or the equivalent in multimedia form.

Skills and Applications Tasks
Each semester students will undertake at least one skills and applications task (there may be more). At least one task will be held under supervision of the teacher.

Skills and applications tasks may include:
• an oral presentation
• participation in a debate
• an extended response
• a video or audio recording
• a written assignment

• multiple-choice questions
• an excursion report
• short-answer questions
• a response to text(s).

**Special Information:** In this course no final exam is set.

**Prerequisites:** Nil

**Preferred prerequisites:**
- an interest in science and contemporary scientific issues
- Students need to be prepared to write reports up to 750 words several times in the year