HEAD OF DEPARTMENT: Allison Sneddon

SUBJECT OUTLINE:

Science21 uses an inquiry-based approach to learning. The interdisciplinary nature of Science21 enables students to become knowledgeable and active participants in a scientifically rich society. A course of study in Science21 is academically rigorous and complements student learning in the established science disciplines of Physics, Chemistry, Biology and Earth Science. Inquiry-based learning involves a range of strategies including investigations, individual and cooperative learning, and direct instruction. In this inquiry-based framework, students play a major role in answering questions asked by themselves or their teacher. Inquiry-based learning is a process, a way of thinking and problem solving. It is an effective strategy for:

- the development of higher-order thinking skills
- increasing student involvement and ownership of their learning
- recognising and catering for individual difference.

Science21 is an interdisciplinary science course that aims to develop in students a broad understanding of the relevant science in today’s scientific and technological age. It deals with themes in real-world contexts that are of intrinsic interest and importance to students. A course in Science21 is built on the “scientific priorities” of Technology, Health and Wellbeing, Catalysts for Discovery and Environment.

CONtributes TO OP: Yes

ASSESSMENT OUTLINE:

A wide variety of assessment categories gives everyone scope to succeed in Science21. These may include:

- supervised written assessments, including short and extended response questions, and responses to stimulus
- extended experimental investigations, involving gathering and analysis of data obtained through controlled experiments or field observations
- extended response tasks, involving gathering and analysis of secondary research data
- collections of work, involving a collection of short, related research activities.

CAREER PATHWAYS:

Sciences – Physical, Biological, Environmental, Health

STUDENT REQUIREMENTS/PREREQUISITES:

Students who succeed in this subject have usually achieved at least satisfactory results in Junior Science. 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. Parents and guardians can assist their children as they study Science21 by providing a supportive environment. They can:

- encourage their children to read relevant articles about science related topics in newspapers, magazines and other media
- discuss science related issues
- share with them their views about the role of science in a technological society.