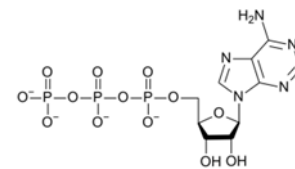




Senior Science 21



Overview

Science21 deals with themes in real-world contexts that are of intrinsic interest and importance to students — the way the human body works, the ways we communicate, our place in the universe, our environment, our enjoyment of both synthesised and natural things.

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. The interdisciplinary nature of the subject enables students to become knowledgeable and active participants in a scientifically rich society. This course is academically rigorous and complements student learning in the established science disciplines of Physics, Chemistry, Biology and Earth Science.

Understanding of science knowledge, concepts and skills is relevant to a range of careers, including those in food and marine sciences, agriculture, biotechnology, environmental science, biosecurity, quarantine, conservation and eco-tourism. This subject will also provide a foundation for students to critically consider contemporary biological issues and to make informed decisions about these issues in their everyday lives.



The approach to learning in Science21 is consistent with and builds upon the teaching and learning that underpins the Years 7-10 Science courses. Students choosing the course should have performed well in junior science and have good communication skills.

Topics studied

Forensic Science	Topics covered include ballistics, forensic pathology, blood typing, DNA analysis, fingerprinting
How is our Myall?	Environmental impact studies of the Myall creek and the Condamine River. Water quality and supply will also be studied.
How's your diet?	A study of obesity and diet and how it influences human metabolism.
Apple Cider	An investigation of the chemistry of making apple cider.
Wild Weather	The water cycle and how the weather develops from it. The science of weather forecasting and effects of El Nino & El Nina.
Sudden Impact	How natural and man-made disasters originate and their impact on the environment, both locally & globally. In particular volcanic, seismic and 'wild' weather hazards.
Superheroes	The study of genetics, bionics, transgenics and if it is possible for someone to have 'super' powers?
Sustainable Living & Alternate Energy	Investigation into the various problems associated sustainable living, in particular the Ethanol plant in town; Future options, production of energy and how it can be utilized including solar energy, wind power, nuclear power and eco-friendly structures.
Are we alone?	The parameters life needs and the possibility of life being found on other planets. Does "ET" exist? SETI and other programs including Planetary & Star formation.
Every K Over	Investigations into the factors that may impact a driver including: speed, effects of alcohol and other drugs on reaction times and perceptions.

Study Pathways

