

Earth and Environmental Science

2 units for each of Preliminary and HSC

Board Developed Course

Exclusions: Nil

Course Description:

The Earth and Environmental Science Stage 6 Syllabus explores the Earth's renewable and non-renewable resources and environmental issues. An understanding of the Earth's resources and the ability to live sustainably on the planet is a central purpose of the study of Earth and Environmental Science.

The course uses the Working Scientifically skills to develop knowledge through the application of those skills. Students engage with inquiry questions to explore knowledge of the Earth. They also undertake practical and secondary-sourced investigations to acquire a deeper understanding of the Earth's features and naturally occurring phenomena and cycles. Fieldwork is an integral part of these investigation processes.

Earth and Environmental Science involves the analysis, processing and evaluation of qualitative and quantitative data to formulate explanations and solve problems. In conjunction with knowledge and understanding, communication skills are essential in forming evidence-based conclusions or arguments.

The Earth and Environmental Science course builds on the knowledge and skills of Earth and Space gained in the Science Stage 5 course. The course maintains a practical emphasis in the delivery of the course content and engages with technologies that assist in developing earth and environmental science applications.

The course provides the foundation knowledge and skills required to study Earth and Environmental Science after completing school and supports participation in careers in a range of related industries. The application of Earth and Environmental Science is essential in addressing current and future environmental issues and challenges. It is also necessary for the use and management of geological resources that are important to Australia's sustainable future.

Main Topics Covered:

Preliminary Course

- Working Scientifically Skills
- Earth's Resources
- Plate Tectonics
- Energy Transformations
- Human Impacts

HSC Course

- Working Scientifically Skills
- Earth's Processes
- Hazards
- Climate Science
- Resource Management

Particular Course Requirements:

- Students are provided with 15 hours of course time for Depth Studies in both Year 11 and Year 12. During this time students may undertake an investigation/activity that allows for the further development of one or more scientific concepts. A Depth Study may be one investigation/activity or a series of investigations/activities. Depth Studies may be included in one module or across several modules.
- Practical investigations are an essential part of the Year 11 and Year 12 courses and must occupy a minimum of 35 hours of course time each year.
- Fieldwork is mandated in both Year 11 and Year 12 and is an integral part of the learning process.