## AT Environmental Science & Field Research

## **Overview**

This program offers an intensive inquiry into the integration of nature, society, economy, and wellness. Grounded in science, students in the class will explore a wide range of environmental issues both natural and man-made. It is designed for students who already have a solid grasp of biological and chemical sciences and can demonstrate a passion for examining solutions and alternatives for resolving, decreasing, and preventing environmental problems. While working with a mentor, they will supplement their knowledge of the inter-relationship between the environment and society, recognising that humans are an integral part of the global environment. Students will develop insights into global cultures in less and more economically developed societies and build empathy for myriad worldviews through role-playing and panel debates on hot-topic issues. Short fieldwork investigations will take students out of the classroom to conduct research culminating in a writing a research paper. Through this program, students will develop an informed personal response to a range of current and future environmental issues.

## **Objectives**

- Understand and analyse energy conversions that are present in every ecological process
- Understand the inter-relationships between the environment and society
- Recognise how environmental problems have a social and cultural context
- Foster international perspective and awareness of local and global environmental concerns

## **Structure**

- Reflect on current knowledge of the range of topics that AT Environmental Science covers and identify strengths and weaknesses
  - Develop a personalised curriculum
- Practice planning collection of primary data
- Conduct short research projects to answer a question
- Investigate environmental issues in the world today
  - o Critically analysing them to form an informed personal response
  - Real-world examples
- Practice reporting primary and secondary data in the form of a report
  - Rigorous research skills
  - Data analysis
  - Scientific writing style
- Write arguments focused on discipline-specific content



