IGCSE Science - Combined

Overview

It's perfectly acceptable that students do not know what career they wish to pursue at this point in their lives. This program provides an opportunity for them to maintain and develop their scientific skills in the three major sciences – Biology, Chemistry and Physics – while studying a range of other subjects as IGCSEs as well. In Combined Science, students will work with a mentor to identify their strengths and weaknesses before setting up a timeline for them to achieve their personal goals. Through investigating and studying various real-world situations, students will be able to develop their data analysis and evaluation skills, helping to enhance their report writing technique. As students participate in this program, they will learn about the scientific method and the ethical concerns and limitations that are apparent in conducting research in the field of science. Ultimately, this program will assist students in developing the required knowledge and understanding to participate in society as informed, confident, and technologically-able citizens.

Objectives

- Develop a more comprehensive knowledge of the scientific method
- Improve problem-solving, analytical, and evaluative skills
- Enhance overall knowledge of the three main sciences at all levels
- Acquire sufficient knowledge to become confident citizens in a technological world

Structure

- Reflect on current knowledge of the range of topics that Combined Science covers and identify strengths and weaknesses
 - Develop a personalised curriculum
- Investigate scientific studies and theories in the world today
 - Real-world examples
 - Ethical concerns
 - Limitations of scientific endeavours
 - Effects that scientific results have on individuals, communities, and the environment
- Examine the usefulness and limitations of the scientific method
- Collaboratively develop relevant attitudes towards science
 - Data analysis skills
 - Critical thinking and evaluation skills
 - Systematic problem-solving mindset
- Practice reporting primary and secondary data in the form of a report
 - Scientific writing style
- Exam practice
 - Past papers
 - Planning and structuring responses
 - Analysing and evaluating sources



Hour 0-1

Introduction & Reflection

Hour 1-3

Data Analysis Skills Hour 3-10

Discover & Discuss Scientific Theories Hour 10-12

Report Writing

Hour 12-16

Hone & Master

