AP Biology

Overview

This program is designed for students who are interested in higher studies in biological sciences, engineering, medicine, or related disciplines. Students will examine the four big biological ideas of Evolution, Energy, Information, and Interaction by investigating topics such as molecular and cellular biology, physiology of plants and animals, heredity, ecology, and evolution. 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 work collaboratively with a mentor in this program, they will learn about the scientific method and the ethical concerns and limitations that are apparent in conducting research in the biological field of science.

Objectives

- Develop a deeper understand of the process of evolution
- Analyse various biological systems
- Understand how living systems store, retrieve, transmit and respond to information essential to life process
- Understand the complex properties of interactions between biological systems

Structure

- Reflect on current knowledge of the range of topics that Biology covers and identify strengths and weaknesses
 - Develop a personalised curriculum
- Investigating biology studies and theories in the world today
 - Real-world examples
 - Ethical concerns
 - Limitations of scientific endeavours
- Develop and improve note-taking techniques to understand key concepts
- Collaboratively develop data analysis skills
- Practice reporting primary and secondary data in the form of a report
 - Scientific writing style
- Exam practice
 - Past papers
 - Planning and structuring responses
 - Time management
 - Analysing and evaluating sources



