

##### B E R M U D A C O L L E G E

###### Division of Liberal Arts

**ASSOCIATE IN SCIENCE**

CONCENTRATIONS - BIOLOGY, CHEMISTRY, PHYSICS, EARTH OR ENVIRONMENTAL SCIENCE

**GOALS**

The purpose of the programme is to expand student knowledge of the natural sciences in the following ways:

* ensure that students who choose Natural Science as their programme will become critically thinking individuals who are able to problem solve on both a local and global level with respect to issues requiring scientific information
* expose students to a variety of science disciplines so that they are well-rounded, science literate individuals that are capable of moving on to a tertiary level for further education in science
* give students the opportunity to concentrate in their area of interest of natural science focusing on subjects including biology, chemistry, physics or environmental science and provide them with the foundation for careers including medicine, nursing, veterinary medicine, lab technology, environmental health, environmental management, conservation, education and nutrition
* enable students to use a scientific approach to address issues and problems in an unbiased manner using an open and creative mind

**LEARNING OUTCOMES**

1. **Scientific Inquiry and Critical Thinking**
2. Design a scientific methodology
3. Determine a hypothesis
4. Conduct an experiment
5. Collect data
6. Analyze the data
7. Interpret the results
8. Write a lab report
9. **Scientific Literacy**
10. Utilize basic scientific language and processes
11. Distinguish between scientific, pseudo-scientific and non-scientific explanations
12. **Problem Solving**
13. Identify scientific principles, repeatable patterns in nature, and the intrinsic value of natural diversity
14. Apply scientific principles to problems locally and globally
15. **Scientific** **Discovery**
16. Analyze the impact of scientific discovery, both present and past, on human thought and behaviour
17. Discuss the impact of these discoveries on society
18. **Ethical Concerns**
19. Identify the ethical concerns surrounding many scientific discoveries
20. Describe the impact of scientific discoveries on our planet and society
21. **Human Impact**
22. Understand the impact humans have on their surroundings and encourage environmental stewardship.
23. Technological proficiency
24. Demonstrate basic computer skills to be able to retrieve and analyze data in a digital environment (e.g. Pasco, Excel, GIS, Word, Powerpoint etc..)