

GROUP 4: SCIENCES

PHYSICS, CHEMISTRY & BIOLOGY

AIMS

The aims of the teaching and study of sciences are to encourage and enable students to:

- develop inquiring minds and curiosity about science and the natural world
- acquire knowledge, conceptual understanding and skills to solve problems and make informed decisions in scientific and other contexts
- develop skills of scientific inquiry to design and carry out scientific investigations and evaluate scientific evidence to draw conclusions
- communicate scientific ideas, arguments and practical experiences accurately in a variety of ways
- think analytically, critically and creatively to solve problems, judge arguments and make decisions in scientific and other contexts
- appreciate the benefits and limitations of science and its application in technological developments
- understand the international nature of science and the interdependence of science, technology and society, including the benefits, limitations and implications imposed by social, economic, political, environmental, cultural and ethical factors
- demonstrate attitudes and develop values of honesty and respect for themselves, others, and their shared environment.

OBJECTIVES

- understand the interdependence of science and society
- to develop communication skills in science and to understand scientific information, such as data, ideas, arguments and investigations
- to communicate scientific information using appropriate scientific language in a variety of communication modes and formats.
- to understand the main ideas and concepts of science and to apply them to solve problems in familiar and unfamiliar situations.
- to develop scientific inquiry skills to design and carry out scientific investigations.
- to record, organize and process data.
- to develop attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society

ASSESSMENT FORMS

- Essays
- Case Studies And Research Projects
- Debates And Oral Presentations
- Scientific Investigation Reports
- Research Essays
- Knowledge tests
- Interdisciplinary Projects