



CENTENNIAL REGIONAL HIGH SCHOOL

COURSE OUTLINE 2020-2021

Subject: Science and Technology

Level: Secondary 2 TAG - Secondary 3

Course Description and Objectives:

The Science and Technology program creates a single discipline by integrating five scientific fields (chemistry, physics, biology, astronomy, geology) and various technological fields.

The Science and Technology program is aimed at helping students develop basic scientific and technological literacy that should be within everyone's reach. Students will be encouraged to gradually build on this basic knowledge, to make them aware of how it can improve their ability to make informed decisions and to have them discover the enjoyment that can be derived from the study of science and technology.

Course Content:

1. Introduction to the Material World – characteristic properties, physical and chemical changes and separation of mixtures with respect to nutrition and excretion
2. Introduction to the Living World – organization of systems in the human body, inputs and outputs, homeostasis, biotechnology
3. Introduction to Earth and Space – conditions conducive to life, diversity, extinctions, and sensory perception
4. Introduction to Technology – mechanical links of bones, muscles, and the heart and the design of a machine that mimics a human organ

Evaluation:

The program focuses on the development of two interrelated competencies associated with various complementary aspects of science and technology.

The two competencies to be further developed in secondary cycle two, year one are as follows:

- Seeks answers or solutions to scientific or technological problems
- Makes the most of his/her knowledge of science and technology

Safety glasses or goggles are required for laboratory work. (School will provide 1 set per laboratory)