

SCIENCE COURSES



(For more information on Science Courses offered at South Surrey/White Rock Learning Centre, please contact Jamie Huisman at huisman_j@surreyschools.ca)

COURSE OUTLINES

SCIENCE 10

Science 10 is a continuation of the junior Science program. Student will continue to focus on further development of skills in the curricular competencies.



The big ideas to be developed in this course include:

- Genes are the foundation for the diversity of living things
- Chemical processes require energy change as atoms are rearranged
- Energy is conserved and its transformation can affect living things and the environment.
- The formation of the universe can be explained by the big bang theory.



SCIENCE FOR CITIZENS 11

This course is intended primarily for students who do not intend to continue their studies in Science past grade 11. Completion of Science for Citizens 11 allows students to complete their graduation plan, but cannot be used for university entrance.

The Big Ideas for this course are:

- Science informs our decisions and impacts our daily lives
- Science has everyday uses and safety implications in the workplace
- Science helps explain how natural changes and human choices affect global systems

EARTH SCIENCE 11

Earth Science 11 is a course designed to introduce students to the many aspects that shape and change our planet. The course explores Earth from every angle: in (rocks, minerals, earth resources), on (earthquakes, volcanoes, and oceans), under (plate tectonics), and above (atmosphere and astronomy). Students will gain a better understanding of their environment, both locally, and globally.

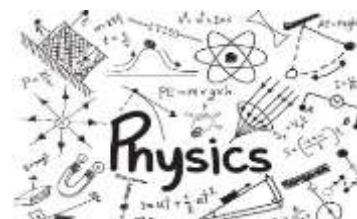


The Big Ideas for this course are:

- Earth Materials
- Plate Tectonic Theory
- Atmospheric Science and Climate
- Oceanography and the Hydrosphere
- Earth within the Solar System

PHYSICS 11

A strong foundation in Science and Math (Pre-Calculus 10) is recommended. This academic course is best suited to problem solvers with strong mathematic skills, especially word problems.



The Big Ideas include:

- 1D Kinematics
- 1D Dynamics
- 1D Momentum
- Energy
- Electric Circuits
- Waves and Optics
- Quantum
- Special relativity
- Nuclear physics



ANATOMY AND PHYSIOLOGY 12

This course concentrates on the physiology of human beings. Anatomy and Physiology 12 is a course intended for those students who are interested in preparing themselves for post-secondary studies in the biological sciences and or nursing. This course concentrates on the physiology of living things. A thorough study of cells leads to the study of tissues, organs and organ systems with particular concentration on humans.

The Big Ideas for this course are:

- Homeostasis: The body strives to maintain homeostasis.
- DNA and Cells: All living things are made of cells, which contain DNA and cell structures that allow cells to survive and reproduce.
- Organization: Organ systems have complex interrelationships to maintain homeostasis.

