SIR WILFIRD LAURIER SECONDAREY SCHOOL
Grade 10 Science (SNC2DF) Course Outline

OTTAWA-CARLETON
DISTRICT SCHOOL BOARD

COURSE DESCRITPION:
This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid–base reactions; forces that affect climate and climate change; and the interaction of light and matter.

Prerequisite: Science, Grade 9, Academic or Applied

COURSE MATERIALS:
- Textbook: SCIENCES PERSPECTIVES 10 (Duval)
- Worksheets

COURSE CONTENT: *STRANDS AND SUBGROUPS:*

Scientific Investigation Skills and Career Exploration
Throughout this course, students will:
A1. demonstrate scientific investigation skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analysing and interpreting, and communicating);
A2. identify and describe a variety of careers related to the fields of science under study, and identify scientists, including Canadians, who have made contributions to those fields

Biology: Tissues, Organs, and Systems of Living Things
By the end of this course, students will:
B1. Evaluate the importance of medical and other technological developments related to systems biology, and analyse their societal and ethical implications;
B2. Investigate cell division, cell specialization, organs, and systems in animals and plants, using research and inquiry skills
B3. Demonstrate an understanding of the hierarchical organization of cells, from tissues, to organs, to systems in animals and plants.

Chemistry: Chemical Reactions
By the end of this course, students will:
C1. Analyse a variety of safety and environmental issues associated with chemical reactions
C2. Investigate, through inquiry, the characteristics of chemical reactions;
C3. Demonstrate an understanding of the general principles of chemical reactions, and various ways to represent them.

Physics: Light and Geometric Optics
By the end of this course, students will:

E1. Evaluate the effectiveness of technological devices and procedures designed to make use of light, and assess their social benefits;
E2. Investigate, through inquiry, the properties of light, and predict its behaviour, particularly with respect to reflection in plane and curved mirrors and refraction in converging lenses;
E3. Demonstrate an understanding of various characteristics and properties of light, particularly with respect to reflection in mirrors and reflection and refraction in lenses.

Earth and Space Science: Climate Change
By the end of this course, students will:

D1. Analyse some of the effects of climate change around the world, and assess the effectiveness of initiatives that attempt to address the issue of climate change;
D2. Investigate various natural and human factors that influence Earth's climate and climate change;
D3. Demonstrate an understanding of natural and human factors, including the greenhouse effect, that influence Earth's climate and contribute to climate change.

ATTENDANCE & MISSED EVALUATIONS

Regular attendance is an integral part of learning. Students are responsible for completing all work missed due to absence. Any missed term evaluations (e.g. test) students must complete upon return to school or on Friday morning.

End-of course evaluations, i.e. the summative activity and final examination are term sensitive. Attendance is ***mandatory*** for these evaluations.

If a student participates in ***academic fraud*** (e.g. cheating on tests, plagiarism in assignments), he/she is deemed not to have met the expectations associated with that particular evaluations.

GENERAL COURSE INFORAMTION:

Students ***must bring*** *the* following materials to each class: Separate binder with dividers and lined paper, Pencil case (two different coloured pens, pencils, erasers and white out), scientific calculator, protractor

FEE:

The student will have access to a textbook that they can sign out. Students will be responsible for the cost of replacement, or repair if the texts are lost or damaged. Text Book value $120.00

EVALUATION

The final report card mark will be determined as follows:

Term work – 70%	**Percent Weight**
Quizzes, tests, assignments, lab reports	70 %
Summative – 30%	**Percent Weight**
Exam and/or Project	30%