



FOREST HILL CI

SNC1D GRADE 9 ACADEMIC SCIENCE COURSE OUTLINE

Welcome to Grade 9 Science Semester 2! This course will help you to gain a deeper understanding of chemistry, ecology, electricity, space and astronomy as well as an understanding of the interrelationships between science, technology and the environment. You will also be given opportunities to increase your skills in scientific inquiry, including designing and performing experiments. Please read the following document paying close attention to your responsibilities and how you will be evaluated. Good luck!

Resources

Textbook: The grade 9 science textbook is 'ON Science 9' by McGraw Hill/Nelson. The replacement cost of the textbook is \$95.

Tools for Success/Learning Skills

Responsibility	<ul style="list-style-type: none"> Understand and follow this course outline and the school policies outlined for students of FHCI. Arrive on time Come prepared to work with all necessary tools If absent, find out what you have missed and take action to complete and understand the material
Organization	<ul style="list-style-type: none"> Keep an organized notebook Keep an organized calendar of important dates Plan to complete practice and assignments so they are completed for due dates
Independent Work	<ul style="list-style-type: none"> Stay on task Avoid disrupting the learning of others. Do homework regularly and complete all assigned work Review/study the work often
Collaboration	<ul style="list-style-type: none"> Share questions, answers and ideas during class time Be a responsible group member. Help your peers succeed by sharing ideas, tutoring and studying together Prepare for labs as a team with a focus on each other's safety and planning each step
Initiative	<ul style="list-style-type: none"> Be active participants in the classroom Ask questions when unsure of the material & seek extra help when needed. Ensure that you get any missed handouts and catch up on missed work
Self-Regulation	<ul style="list-style-type: none"> Set goals and make good choices regarding academic success. Respect yourself, classmates and teachers.

Teacher Contact

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Assessment and Evaluation

The primary purpose of assessment and evaluation is to improve student learning. Assessment can take on one of three forms (described below). In accordance with *Growing Success*, a student's most recent and consistent work will be taken into account.

Diagnostic	Assessment FOR learning determines how learning should proceed at the beginning of a unit.
Formative	Assessment AS learning provides feedback for a student to determine where improvement is needed. An example of this is homework.
Summative	Assessment OF learning evaluates what a student has learned at the conclusion of a unit/course. Examples include tests, quizzes, assignments and labs.

Evaluation of student achievement will be defined by four broad **Achievement Categories** (described below). The category weighting for semester work is shown.

Semester Work		90%
Knowledge & Understanding	Specific content acquired in the course and the comprehension of its meaning and significance.	25%
Thinking & Investigation	The use of critical and creative thinking skills and inquiry, research, and problem-solving skills.	25%
Communication	The conveying of meaning through various forms.	25%
Application	The use of knowledge and skills to make connections within and between various contexts.	25%

Culminating Activities (i.e. lab exam) (**Subject to change based on TDSB directives)	**10%
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On-line Learning Expectations: Students are expected to access our on-line learning management system (BRIGHTSPACE) as needed. This tool will be used to supplement our in-class instruction where you will be able to access some classroom notes, assignment instructions, etc.

Academic Honesty: Cheating and Plagiarism

Students are expected to submit only their own original work on evaluations and assignments done in class or out of class. Plagiarism is the passing off the ideas or writings of another as one's own. This includes submitting the same lab report answers. Cases of academic dishonesty (cheating and/or plagiarism) will be dealt with on a case-by-case basis, but each case will involve investigation, communication with the student and his/her parent/guardian, and a mark of zero for plagiarized work. Whether the student has an opportunity to demonstrate his/her learning in another assignment will be at the discretion of the teacher and/or Principal.

***Should brick and mortar schools be shut down due to the COVID-19 pandemic, all course materials will be posted on the on-line learning platform daily. Students must also check their TDSB email multiple times daily for important course, school, and board updates as the pandemic progresses.*

Academic Integrity: Missed Classes, Evaluations and Assignments

It is the **responsibility of the student** to notify **all** appropriate parties (teachers, office, etc) **in advance** where appropriate and in compliance with school policies and procedures if the student will be absent. This allows for both the student and teacher to make alternative arrangements. **In the event that advance notice is not possible**, students/parents should **email the school** and **email their teacher** to ensure that student and teacher have an opportunity to connect about alternative arrangements.

Overall Course Expectations

*(**All Ministry Expectations can be found at the Ministry of Education Website)*

A. SCIENTIFIC INVESTIGATION SKILLS AND CAREER EXPLORATION

Throughout this course, students will:

- demonstrate scientific investigation skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analyzing and interpreting, and communicating);
- 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.

B. BIOLOGY: SUSTAINABLE ECOSYSTEMS

By the end of this course, students will:

- assess the impact of human activities on the sustainability of terrestrial and/or aquatic ecosystems, and evaluate the effectiveness of courses of action intended to remedy or mitigate negative impacts;
- investigate factors related to human activity that affect terrestrial and aquatic ecosystems, and explain how they affect the sustainability of these ecosystems;
- demonstrate an understanding of the dynamic nature of ecosystems, particularly in terms of ecological balance and the impact of human activity on the sustainability of terrestrial and aquatic ecosystems.



C. CHEMISTRY: CHEMICAL REACTIONS

By the end of this course, students will:

- assess social, environmental, and economic impacts of the use of common elements and compounds, with reference to their physical and chemical properties;
- investigate, through inquiry, the physical and chemical properties of common elements and compounds;

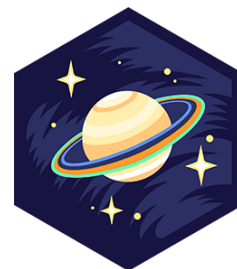


- demonstrate an understanding of the properties of common elements and compounds, and of the organization of elements in the periodic table.

D. EARTH AND SPACE SCIENCE: THE STUDY OF THE UNIVERSE

By the end of this course, students will:

- assess some of the costs, hazards, and benefits of space exploration and the contributions of Canadians to space research and technology;
- investigate the characteristics and properties of a variety of celestial objects visible from Earth in the night sky;
- demonstrate an understanding of the major scientific theories about the structure, formation, and evolution of the universe and its components and of the evidence that supports these theories.



E. PHYSICS: THE CHARACTERISTICS OF ELECTRICITY

By the end of this course, students will:

- assess some of the costs and benefits associated with the production of electrical energy from renewable and non-renewable sources, and analyze how electrical efficiencies and savings can be achieved, through both the design of technological devices and practices at home;
- investigate, through inquiry, various aspects of electricity, including the properties of static and current electricity, and the quantitative relationships between potential difference, current, and resistance in electrical circuits;
- demonstrate an understanding of the principles of static and current electricity.

