

NEWTONBROOK SECONDARY SCHOOL COURSE OUTLINE

COURSE NAME	Grade Nine Science ESL Academic	GRADE	9
COURSE CODE	SNC1D8	CREDIT VALUE	1
TEACHER	Ms. Labi-Han	DEPARTMENT	Science
PREREQUISITE	none	CLASSROOM CODE	uf11rjd

Course Description:	This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to apply their knowledge of science to everyday situations. They are also given opportunities to develop practical skills related to scientific investigation. Students will plan and conduct investigations into practical problems and issues related to the impact of human activity on ecosystems; the structure and properties of elements and compounds; space exploration and the components of the universe; and static and current electricity
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Overall Expectations:	<p>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);</p> <p>A2. identify and describe a variety of careers related to the fields of science and identify scientists, including Canadians, who have made contributions to those fields.</p> <p><u>Biology:</u></p> <p>B1. 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;</p> <p>B2. investigate factors related to human activity that affect terrestrial and aquatic ecosystems, and explain how they affect the sustainability of these ecosystems;</p> <p>B3. 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.</p> <p><u>Chemistry :</u></p> <p>C1. assess social, environmental, and economic impacts of the use of common elements and compounds, with reference to their physical and chemical properties; C2. investigate, through inquiry, the physical and chemical properties of common elements and compounds;</p> <p>C3. demonstrate an understanding of the properties of common elements and compounds, and of the organization of elements in the periodic table.</p> <p><u>Earth and Space Science:</u></p> <p>D1. assess some of the costs, hazards, and benefits of space exploration and the contributions of Canadians to space research and technology;</p> <p>D2. investigate the characteristics and properties of a variety of celestial objects visible from Earth in the night sky;</p> <p>D3. 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.</p> <p><u>Electricity:</u></p> <p>E1. 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 in the home;</p> <p>E2. 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;</p> <p>E3. demonstrate an understanding of the principles of static and current electricity.</p>
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Textbook(s)	Replacement Cost
Science Links 9, McGraw-Hill Ryerson	\$86.00

COMMUNICATION

Please direct all questions or concerns regarding student progress or program of study to the classroom teacher. The science department's phone number is 416-395-3280 ext. 20095, room 202. The teacher's email address is simone.labi-han@tdsb.on.ca

Marks will be posted on TeachAssist which parents can have access to.

EVALUATION OF STUDENT ACHIEVEMENT 70% of the term work is based on the following categories:

Category	Weighting	Category	Weighting
Knowledge/Understanding	19%	Communications	14%
Thinking/Inquiry	19%	Application	18%

UNITS OF STUDY & EVALUATION TASKS

70% of the final grade based on evaluations conducted throughout the course: Teachers will use their professional judgement to determine which specific expectations should be used to evaluate the achievement of the overall expectations in the four categories

Description (Approximate)	Evaluation Tasks	Achievement Categories
Unit 1 - Earth & Space Science: Space Exploration 10 hours	In-class assignments/quizzes	K, C
	Space Unit Test	K, A, C
	Space Project	I, C
Unit 2 – Chemistry: Exploring Matter 25 hours	In-class assignments/quizzes	K, C
	Chemistry Unit Test	K, A, C
	Chemistry Project	A, C
	Physical and Chemical Properties Lab	I, C
	Metal and Non-Metal Lab	I, C
Unit 3 – Physics: Electrical Applications 25 hours	In-class assignments/quizzes	K, C
	Electricity Unit Test	K, A, C
	Electricity Project	A, C
	Static Electricity Lab	I, C
	Current Electricity Lab	I, C
Unit 4 - Biology: Sustainable Ecosystems and Human Activity 25 hours	In-class assignments/quizzes	K, C
	Ecology Unit Test	K, A, C
	Environmental Project	A, C
	Ecology Experiment	I, C

20% Grade based on a final exam written during the exam period at the end of the semester

10% Grade based on culminating activity based on review for the exam.

*Any changes to the evaluation plan will be discussed in class and will reflect the collective agreement of the course teachers.