

Subject Name & Course Code:
Grade 9 Academic Science SNC1W

Teacher Name: A Fong
Teacher Website: Fongphysics.com



The Woodlands School

Course Outline

Course Description:

In this course students will develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of static and current electricity.

Course Units & Learning Goals

Unit	Learning Goals / Big Ideas	Summative Evaluations
Investigating Skills & Career Exploration	Initiating and planning, performing and recording, analyzing and interpreting, & communicating lab results; researching and identifying various scientific career opportunities	Tests, Quizzes, Assignments, Research projects, labs, presentations written reports, essays, notebooks, graphing, case studies, making models, observations, discussions, reflections, blogs, computer simulations, debates
Atoms and Elements	Atomic models; properties; chemical reactions; periodic table; bond formation and types	
The Characteristics of Electricity	Static and current electricity; circuits; quantitative relationships for I, V, and R; technologies	
The Study of the Universe	Celestial objects and their movement; space science tools and techniques; space exploration; technology and careers relating to space.	
Sustainability and Ecosystems	Components of ecosystems; energy flow; characteristics of sustainable ecosystems; human factors in Canadian and global contexts	

Final Evaluation(s)

20% Exam

10% Lab summative task

Assessment & Evaluation

Assessments and evaluations are based on the provincial expectations and levels of achievement outlined in the provincial curriculum document for each subject in secondary school. A wide range of assessment and evaluation opportunities allows students to demonstrate their learning in a variety of ways. The final grade will be determined as follows:

- **Seventy percent** of the grade will be based on evaluation conducted throughout the course;
- **Thirty percent** of the grade will be based on final evaluations administered at or towards the end of the course.

Evidence of Learning

Products, Conversations and Observations inform Final Grade

Knowledge & Understanding 15%	Thinking & Investigation 25%	Communication 10%	Application 20%
Knowledge and understanding of content.	Use of initiating and planning skills and strategies; use of processing skills and strategies; use of critical thinking processes, skills and strategies.	Expression and organization of ideas and information; communication for different audiences and purposes; use of conventions, vocabulary and terminology of the discipline in oral, visual and or written forms	Application of knowledge and skills; transfer of knowledge and skills; making connections between science, technology, society and the environment; proposing courses of practical action to deal with problems relating to STSE

SNC1D

Grade 9 Science Anchor Marks

Anchor marks are designated marks for each level of achievement assigned to students during reporting cycles based on evidence of learning from observations, conversations and student products. They support criterion-referenced assessment. Anchor marks are not true midpoints in the mathematical sense. Teachers still use both mathematical calculations and professional judgment to arrive at an anchor mark, combined with the principle of most consistent achievement with special consideration for more recent evidence.

Description	Achievement Level	Anchor Mark
Exemplary Performance	4*	100
	4++	97
	4+	91
Exceeds Provincial Standard	4	88
	4-	84
Meets Provincial Standard	3+	78
	3	75
	3-	71
Approaches Provincial Standard	2+	68
	2	65
	2-	61
Below Provincial Standard	1+	58
	1	55
	1-	51
Remedial	R	45
Incomplete	I	35