# Grade 9 Academic Science SNC 1DI Course Outline

School: Huron Heights Secondary School

**Department:** Science

District: Waterloo Region District School Board

Credit Value: 1.0



**Description/Rationale:** This course enables students to understand basic concepts in biology, chemistry, earth and space science and physics; to develop skills in the processes of scientific inquiry; and to relate science to technology, society, and the environment. Students will learn scientific theories and conduct investigations related to cell division and reproduction; atomic and molecular structures and the properties of elements and compounds; the universe and space exploration; and the principles of electricity.

Major Units of Study and Timeline:

Unit	Unit Title	Approximate	Unit Test or
		Number of Days	<b>Completion Date</b>
1. Chemistry	Atoms Elements and Compounds		
2. Biology	Sustainable Ecosystems		
3. Physics	The Characteristics of Electricity		
4. Earth and Space Science	The Study of the Universe		
5. Scientific Skills	Scientific Investigation Skills and		
	Career Exploration		

### **Teaching/Learning Strategies:**

This course will be delivered using a variety of instructional strategies, which will include among others:

- Socratic instruction

- laboratory experimentation

- teacher demonstration

- self-directed experimentation

- research projects

- multimedia presentations

- interactive computer assisted learning

#### **Assessment/Evaluation Techniques:**

Students will be evaluated using a variety of instruments including;

- written tests and quizzes

- practical skills assessment

- written laboratory reports

- learning skills assessment

- homework assignments

- independent and group projects

#### **Assessment and Evaluation:**

Achievement Component- This is based upon The Achievement Chart for Science from the Ontario Curriculum, Grades 9 and 10; Science, 1999. The purpose of this component is the generation of a numerical mark for the report card for Term 1 and Term 2. The weights and percentages suggested in this section are tentative; flexibility exists to recognize variations within the curriculum for individual school boards, departments, teachers and students needs. The Culminating Performance Task and Final Exam comprise the 30% Ministry mandated weight of a Summative Performance Task. A <u>sample</u> achievement component evaluation breakdown is as follows:

Unit	Percentage of Course Grade	
Science Skills	7 %	
Chemistry	11 %	
Ecology	11 %	
Electricity	11 %	
Astronomy	10 %	
Labs	20 %	
Exam	30 %	

All courses at Huron Heights conform to the assessment, evaluation and reporting policies and procedures of the Waterloo Region District School Board. Please visit our website (hrh.wrdsb.ca) for more information.

Course Profiles outlining a breakdown of required student mastery concepts and required activities are also available through administrators for this course.

Learning Skills- the following skills are assessed for each student, by the classroom teacher.

Learning Skills and Work Habits	E-	Excellent G – Good S – Satisfactory N – Needs Improvement	
Responsibility		Organization	
Fulfils responsibilities and commitments within the learning environment. Completes and submits class work, homework, and assignments according to agreed-upon timelines. Takes responsibility for and manages own behaviour.		Devises and follows a plan and process for completing work and tasks.  Establishes priorities and manages time to complete tasks and achieve goals.  Identifies, gathers, evaluates, and uses information, technology, and resources to complete tasks.	
Independent Work		Collaboration	
<ul> <li>Independently monitors, assesses, and revises plans to complete tasks and meet goals.</li> <li>Uses class time appropriately to complete tasks.</li> <li>Follows instructions with minimal supervision.</li> </ul>		<ul> <li>Accepts various roles and an equitable share of work in a group.</li> <li>Responds positively to the ideas, opinions, values, and traditions of others.</li> <li>Builds healthy peer-to-peer relationships through personal and media-assisted interactions.</li> <li>Works with others to resolve conflicts and build consensus to achieve group goals.</li> <li>Shares information, resources, and expertise, and promotes critical thinking to solve problems and make decisions.</li> </ul>	
Initiative		Self-Regulation	
<ul> <li>Looks for and acts on new ideas and opportunities for learning.</li> <li>Demonstrates the capacity for innovation and a willingness to take risks.</li> <li>Demonstrates curiosity and interest in learning.</li> <li>Approaches new tasks with a positive attitude.</li> <li>Recognizes and advocates appropriately for the rights of self and others.</li> </ul>		Sets own individual goals and monitors progress towards achieving them. Seeks clarification or assistance when needed. Assesses and reflects critically on own strengths, needs, and interests. Identifies learning opportunities, choices, and strategies to meet personal needs and achieve goals. Perseveres and makes an effort when responding to challenges.	

#### **Academic Standards**

It is your responsibility to provide evidence of your learning within established timelines. Due dates for assignments and the scheduling of tests will be communicated well in advance to allow you to schedule your time. If you aren't going to be able to follow an agreed upon timeline you should demonstrate your responsibility and organizational skills by discussing with your teacher the challenges you're facing as far in advance of the deadline as possible.

It is your responsibility to be academically honest in all aspects of your schoolwork so that the marks you receive are a true reflection of your achievement.

Plagiarism is using the words, ideas or work of someone else without giving appropriate credit to the original creator. This is a form of cheating.

Consequences for not meeting these academic standards may include:

- Requiring you to complete the original or alternative work after school or during your lunch hour;
- Assigning an "incomplete" for an assignment not completed prior to an agreed upon closure date. This may result in "insufficient evidence of learning" and which may lead to a failing grade.

## Learning Materials (Students *must* bring these items to class <u>daily</u>)

- chromebook - scientific calculator

- pencil, eraser, pens (blue and red) - ruler

- course textbook - lined paper

### **Technology in the classroom**

This year I will be using <u>Google Classroom</u> to organize and share information such as notes, assignments, videos and announcements. The Classroom will be accessible to every student in the class, from any device that can connect to the internet. Students will be expected to submit many assignments electronically, using Google Classroom. In those cases, students will be required to use Google Docs to ensure that feedback can be given electronically.

**Schoology** will be used to communicate updated marks as well as to complete online quizzes.

My website: will be used to keep a daily agenda, solutions to worksheets and links to videos or websites that get used every year <a href="https://mrwhite.updog.co">https://mrwhite.updog.co</a>