

<p><b>Course Description:</b></p> <p>This course enables students to develop a deeper understanding of concepts in biology, chemistry, Earth and space science, and physics, and to apply their knowledge of science in real-world situations. Students are given opportunities to develop further practical skills in scientific investigation. Students will plan and conduct investigations into everyday problems and issues related to human cells and body systems; chemical reactions; factors affecting climate change; and the interaction of light and matter.</p>	<p><b>Level:</b> Applied</p>
	<p><b>Credit Value:</b> 1.00</p>
	<p><b>Pre-requisite:</b> SNC1P1 or SNC1D1</p>
<p><b>Department:</b> SCIENCE</p>	<p><b>Teacher:</b> Mr. Cuff</p>
<p><b>Course Fees:</b></p>	<p>Field Trip: Associated with SATEC's environmental focus Approximate Cost: \$10</p>

<p><b>Textbooks &amp; Resources:</b></p> <ul style="list-style-type: none"> <li>• <i>The Ontario Curriculum Grades 9 and 10 Science, Revised 2008</i></li> <li>• <i>Growing Success: Assessment, Evaluation and Reporting in Ontario Schools, First Edition, Covering Grades 1 to 12, 2010</i></li> <li>• McGraw-Hill Ryerson Science Links 10</li> </ul>
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**Course Evaluation:** Student Evaluation consists of three components...

<p><b>1) Learning Skills &amp; Work Habits:</b> Students are evaluated on 6 Learning Skills &amp; Work Habits and are evaluated on a scale of Excellent (E), Good (G), Satisfactory (S) &amp; Needs Improvement (N) and reported on the report card.</p>	<p><b>The skills and habits consist of:</b></p> <ul style="list-style-type: none"> <li>• Responsibility</li> <li>• Organization</li> <li>• Independent Work</li> <li>• Collaboration</li> <li>• Initiative</li> <li>• Self-Regulation</li> </ul>	<p>Skills and work habits <b>are not</b> included in the student's final mark unless specified in the curriculum expectations</p>							
<p><b>2) Term Mark (Assessment of Learning):</b> <i>It is the student's responsibility to submit evidence of the term's learning in a complete and timely manner.</i></p> <p>Student performance standards for knowledge and skills are described in the curriculum Achievement Chart. The curriculum expectations in science are grouped in <b>three categories</b> as follows:</p> <p><b>1. Understanding Basic Concepts</b> <b>2. Developing Skills of Investigation and Communication</b> <b>3. Relating Science to Technology, Society, and the Environment</b> :</p>	<p><b>The term evaluation consists of:</b></p> <table border="1"> <tr> <td><b>Knowledge</b></td> <td>30%</td> <td rowspan="3"><b>70%</b></td> </tr> <tr> <td><b>Thinking, Investigation, &amp; Communication (TIC)</b></td> <td>30%</td> </tr> <tr> <td><b>Application</b></td> <td>10%</td> </tr> </table>	<b>Knowledge</b>	30%	<b>70%</b>	<b>Thinking, Investigation, &amp; Communication (TIC)</b>	30%	<b>Application</b>	10%	
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<p><b>3) Final Evaluation (Assessment of Learning)</b></p>	<p><b>The final evaluation consists of:</b></p> <table border="1"> <tr> <td>Summative evaluation (based on the entire course.)</td> <td></td> <td><b>30%</b></td> </tr> </table>	Summative evaluation (based on the entire course.)		<b>30%</b>					
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**Final Mark = 70% Term Mark + 30% Final Evaluations**

For a detailed description on Course Evaluation, see "How Did I Get That Mark!" at [www.satec.on.ca](http://www.satec.on.ca)

**Course Conduct Policies:** See Student Agenda.

**Please retain this page in the front of your notebook for future reference.**



<b>Course Outline:</b>			
<b>Unit</b>	<b>Overall Expectations</b>	<b>Approximate Length</b>	<b>Major Unit Evaluation</b>
<b>Biology: Tissues, Organs and Systems</b>	B1. analyse the impact of human activity on terrestrial or aquatic ecosystems, and assess the effectiveness of selected initiatives related to environmental sustainability; B2. investigate some factors related to human activity that affect terrestrial or aquatic ecosystems, and describe the consequences that these factors have for the sustainability of these ecosystems; B3. demonstrate an understanding of characteristics of terrestrial and aquatic ecosystems, the interdependence within and between ecosystems, and the impact humans have on the sustainability of these ecosystems.	6 weeks	Unit Test
<b>Chemistry: Chemical Reactions &amp; Their Practical Applications</b>	C1. analyse how properties of common elements and/or simple compounds affect their use, and assess the social and environmental impact associated with their production or use; C2. investigate, through inquiry, physical and chemical properties of common elements and simple compounds; C3. demonstrate an understanding of the properties of common elements and simple compounds, and general features of the organization of the periodic table.	5 weeks	Unit Test
<b>Earth and Space Science: Earth's Dynamic Climate</b>	D1. analyse the major challenges and benefits of space exploration, and assess the contributions of Canadians to space exploration; D2. investigate the properties of different types of celestial objects in the solar system and the universe; D3. demonstrate an understanding of major astronomical phenomena and of the principal components of the solar system and the universe.	3 weeks	Unit Test
<b>Physics: Light &amp; Applications of Optics</b>	E1. assess the major social, economic, and environmental costs and benefits of using electrical energy, distinguishing between renewable and non-renewable sources, and propose a plan of action to reduce energy costs; E2. investigate, through inquiry, the properties of static and current electricity and the cost of the consumption of electrical energy; E3. demonstrate an understanding of the concepts and principles of static and current electricity.	3 weeks	Unit Test
<b>Scientific Investigation Skills &amp; Career Exploration</b>	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.	Integrated into each unit	
<b>Note:</b>	At least 3 of the above 4 projects will be assigned. All of the above units will also include tests, quizzes, labs, and assignments.		
<b>Note: The order of the units of study may change due to student needs and resources available during the course.</b>			

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<p><b>General Information:</b></p> <p><u>1 – As per SATEC school policy students are expected to come to class:</u></p> <ul style="list-style-type: none"> <li>a) in uniform and,</li> <li>b) with cell phones, mp3 players etc... unseen and not in use during class time.</li> </ul> <p><u>2- To be successful in Science, students are expected to:</u></p> <ul style="list-style-type: none"> <li>a) come to class prepared with pen/pencil, paper binder and resources for your particular Science course,</li> <li>b) demonstrate academic honesty with their own work and when working with others,</li> <li>c) complete assignments in a timely manner and,</li> <li>d) follow necessary safety rules and procedures of a Science Lab.</li> </ul> <p><u>3- To seek extra help:</u></p> <ul style="list-style-type: none"> <li>a) speak to your Science Teacher and schedule a time to meet,</li> <li>b) use the school's homework club to access peer tutors and/or, speak to your guidance counsellor to arrange for a tutor.</li> </ul>	<p><b>Science Department deadlines and plagiarism policy.</b></p> <ul style="list-style-type: none"> <li>● Each assignment will have a due date. Handing in an assignment <b>after the due date may result in a deduction of marks</b> at the discretion of the teacher.</li> <li>● Students must be in class on dates of any major assessments. IF you miss a major assessment (i.e. unit test, exam, presentation) you must give your teacher a note <b>written and signed by your doctor or parent</b> stating the health reasons that kept you from class. Without a doctor's note, you will receive a mark of <b>zero</b> for that missed major assessment.</li> <li>● If you know ahead of time that you will have an appointment, field trip, game, etc at the same time as the major evaluation, you must either arrange with your teacher to complete the evaluation before the scheduled date, or cancel your other plans so you can attend the evaluation.</li> <li>● <b>Plagiarism includes:</b> copying another student's work, buying essays, copy/paste web info and call it your own work, using information from print or internet media without identifying the source.</li> <li>● To avoid plagiarism: Do not cheat; Do not copy Keep your eyes on your own paper during tests and exams Do not steal intellectual property We only need to <u>suspect</u> cheating to penalize you. There will be no warnings, only marks of <b>zero</b>.</li> </ul>
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