

<b>Course Overview</b>	<p>Science 30 consists of four units of study:</p> <p>A. Living Systems Respond to Their Environment          B. Chemistry and the Environment          C. Electromagnetic Energy          D. Energy and the Environment</p>										
<b>Prerequisite</b>	<p><i>Please refer to Alberta Education's Provincially Authorized Senior High School Courses and Course Codes Document</i></p>										
<b>Required Materials &amp; Resources</b>	<ul style="list-style-type: none"> <li>• Four Modules and Four Assignment Books</li> <li>• Textbook: Science 30 published by Alberta Education.</li> <li>• Textbook CD or the <a href="http://www.learnalberta.ca">www.learnalberta.ca</a> website. (User ID LA12 Password 2953)</li> </ul>										
<b>Learning Outcomes</b>	<p><b>The student will:</b></p> <p>A. analyze how the human circulatory system facilitates interaction between blood cells and the external environment and investigate cardiovascular health</p> <p>B. analyze the defense mechanisms used by the human body to protect itself from pathogens found in the external environment</p> <p>C. apply the principles of heredity and molecular genetics to explain how human diseases can arise from inherited traits, the risks and benefits of genetic technology, and the need for ethical considerations in the application of scientific knowledge</p> <p>D. analyze the sources of acids and bases and their effects on the environment</p> <p>E. analyze the sources of organic compounds and their effects on the environment</p> <p>F. analyze, from a variety of perspectives, the risks and benefits of using chemical processes in meeting human needs and assess technologies for reducing the impact of chemical compounds on the environment</p> <p>G. explain field theory and analyze its applications in technologies used to produce, transmit and transform electrical energy</p> <p>H. describe the properties of the electromagnetic spectrum and their applications in medical technologies, communication systems and remote-sensing technologies used to study the universe</p> <p>I. explain the need for balancing the growth in global energy demands with maintaining a viable biosphere</p> <p>J. describe the sun as Earth's main source of energy and explain the functioning of some conventional and alternative technologies that convert solar, nuclear, tidal and other energy sources into useable forms</p>										
<b>Note</b>	<p><b><i>Within Alternative Education all teachers are required to follow a common course outline and gradebook set up.</i></b></p>										
<b>Assessment</b>	<p>The student's grade is determined by the knowledge the student has acquired based on the program of studies and the skills the student is able to show in articulating his or her knowledge.</p> <p>The student's grade will be calculated based on the following: <i>(70% of the school grade will be combined with 30% of the diploma exam grade to calculate an overall final grade)</i></p> <p><b>Coursework –25%</b></p> <p><b>Quizzes– 25%</b></p> <p><b>Midterm – 25%</b></p> <p><b>Final Exam – 25%</b></p>										
<b>Topics of Study</b>	<table border="1"> <thead> <tr> <th>MODULE</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Maintaining Health</td> </tr> <tr> <td>2</td> <td>Chemistry and the Environment</td> </tr> <tr> <td>3</td> <td>Electromagnetic Energy</td> </tr> <tr> <td>4</td> <td>Energy and the Environment</td> </tr> </tbody> </table>	MODULE	TITLE	1	Maintaining Health	2	Chemistry and the Environment	3	Electromagnetic Energy	4	Energy and the Environment
MODULE	TITLE										
1	Maintaining Health										
2	Chemistry and the Environment										
3	Electromagnetic Energy										
4	Energy and the Environment										

**An Important Note About Assessment**

A wide range of assessment information is used in the development of a student's final grade. Within Alternative Education, individualized assessments provide specific information regarding student progress and overall performance in the course. Student assessments may vary from student to student to adapt to differences in student needs, learning styles, preferences and paces. The teacher will apply best teaching practices to determine appropriate assessment.

**TEACHER'S CONTACT INFORMATION:**

<b>Teacher's Name:</b>	
<b>Teacher's Phone Number:</b>	
<b>Teacher's Email Address:</b>	