



Course Overview	<p>Science 14 consists of four units of study: Unit 1: Investigating Properties of Matter Unit 2: Understanding Energy Transfer Technologies Unit 3: Investigating Matter and Energy in Living Systems Unit 4: Investigating Matter and Energy in the Environment</p>
Prerequisite	<p><i>Please refer to Alberta Education’s Provincially Authorized Senior High School Courses and Course Codes Document</i></p>
Required Materials & Resources	<ul style="list-style-type: none"> • Four Modules and Four Assignment Books • Textbook: Science Connect 1, McGraw-Hill Ryerson, 2002
Course Content	<p><i>The student will:</i></p> <ol style="list-style-type: none"> A. classify various forms of matter, including commonly used household substances, on the basis of their properties, and relate these properties to their safe use, storage and disposal B. describe solutions and solubility, solutes and solvents; and then describe how these concepts are applied to the production of prepared foods and other useful materials C. describe the properties of elements and compounds, and use the periodic table to identify trends in properties D. describe how natural and technological cooling and heating systems are based upon the transfer of thermal energy (heat) from hot to cold objects E. explain the functioning of common methods and devices designed to control the transfer of thermal energy F. describe and compare simple machines as devices that transfer energy and multiply forces or distances G. describe, in general terms, the exchange of matter by the digestive and circulatory systems, the functional relationship between the two systems and the need for a healthy diet and lifestyle H. describe disorders of the digestive and circulatory systems as imbalances induced by genetic, lifestyle and environmental factors I. describe, in general terms, the structure and function of plant and animal cell parts; and trace the development of the cell theory J. identify and compare, in general terms, the life functions common to living systems, from cells to organ systems K. describe how the flow of matter in the biosphere is cyclical along characteristic pathways and can be disrupted by human activity L. analyze a local ecosystem in terms of its biotic and abiotic components, and describe factors of the equilibrium
Note	<p><i>Within Alternative Education all teachers are required to follow a common course outline and gradebook set up.</i></p>
Assessment	<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:</p> <p>Coursework –25%</p> <p>Quizzes– 25%</p> <p>Midterm – 25%</p> <p>Final Exam – 25%</p>

Topics of Study	MODULE	TITLE
	1	<i>Investigating Properties of Matter - A</i> <i>Investigating Properties of Matter – B</i>
	2	<i>Energy Flow in Technological Systems - A</i> <i>Energy Flow in Technological Systems – B</i>
	3	<i>Cycling of Matter in Living Systems - A</i> <i>Cycling of Matter in Living Systems - B</i>
4	<i>Energy in Global Systems - A</i> <i>Energy in Global Systems - B</i>	

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.
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TEACHER’S CONTACT INFORMATION:

Teacher’s Name:	
Teacher’s Phone Number:	
Teacher’s Email Address:	