

Course Overview	<p>Science 24 consists of four units of study:</p> <p>Unit 1: Applications of Matter and Chemical Change</p> <p>Unit 2: Understanding Common Energy Conversion</p> <p>Unit 3: Disease Defence and Human Health</p> <p>Unit 4: Motion, Change and Transportation Safety</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 Booklets • Textbook: Science.Connect 2, McGraw-Hill Ryerson, 2002
Learning Outcomes	<p><i>The student will:</i></p> <ol style="list-style-type: none"> A. describe how everyday life depends upon technological products and processes that produce useful materials and energy B. investigate and classify chemical reactions C. explain the law of conservation of mass when balancing chemical reactions D. analyze common technological products and processes encountered in everyday life and careers, and analyze their potential effects on the environment E. investigate and interpret transformation and conservation of various forms of energy in physical and technological systems F. investigate and analyze electrical energy conversion devices in terms of energy conversions, rate of energy transfer and efficiency G. investigate and describe the energy conversions associated with change in chemical and biological systems H. analyze and describe the impact of fossil fuel based technologies and their importance in meeting human needs I. describe how human health is affected by societal and environmental factors, and describe the need for action by society to improve human health J. analyze the relationship between human health and environmental pathogens K. describe the natural mechanisms that protect the human organism from pathogens L. describe the role of genes in inherited characteristics and human health M. analyze how longevity in humans has increased over time as a result of a better understanding of pathogens and genetics, and improved sanitary conditions and personal hygiene N. use explanatory models from their own learning in science or personal experience to distinguish between scientific and personal opinion and to analyze the need for safety systems and regulations O. describe the change in position and speed of objects mathematically and graphically P. apply concepts of force, mass and the law of conservation of momentum to investigate one-dimensional collisions of two objects Q. apply the principles underlying the motion of objects to explain the need for safety devices and practices
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>

Final Exam – 25%											
Topics of Study	<table border="1"> <thead> <tr> <th>MODULE</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><i>Matter and Chemical Change - A</i> <i>Matter and Chemical Change – B</i></td> </tr> <tr> <td>2</td> <td><i>Energy Transformations - A</i> <i>Energy Transformations – B</i></td> </tr> <tr> <td>3</td> <td><i>Disease Defence and Human Health - A</i> <i>Disease Defence and Human Health - B</i></td> </tr> <tr> <td>4</td> <td><i>Safety in Transportation - A</i> <i>Safety in Transportation - B</i></td> </tr> </tbody> </table>	MODULE	TITLE	1	<i>Matter and Chemical Change - A</i> <i>Matter and Chemical Change – B</i>	2	<i>Energy Transformations - A</i> <i>Energy Transformations – B</i>	3	<i>Disease Defence and Human Health - A</i> <i>Disease Defence and Human Health - B</i>	4	<i>Safety in Transportation - A</i> <i>Safety in Transportation - B</i>
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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:											
Teacher’s Name:											
Teacher’s Phone Number:											
Teacher’s Email Address:											