



**MATHEMATICS 20-2**

**MAT2792**

**5 Credit Course**

**ALTERNATIVE EDUCATION**

<b>Prerequisite</b>	<ul style="list-style-type: none"> <li>A course mark of 50% or higher in Mathematics 10C.</li> </ul>	
<b>Required Materials &amp; Resources</b>	<ul style="list-style-type: none"> <li>Textbook: Principles in Mathematics 11</li> <li>Formula Sheet</li> <li>Alberta Approved Graphing calculator</li> </ul>	
<p><b>Course Overview</b> Math 20-2 consists of 6 units of study, as outlined below. The student's <u>school-based</u> mark is weighted as follows:</p>		
<b>Units &amp; Topics of Study</b>	<b>Weighting</b>	
Unit 1: Radicals <ul style="list-style-type: none"> <li>Solve problems that involve operations on radicals and radical expressions with numerical and variable radicands (limited to square roots); Solve problems that involve radical equations (limited to square roots or cube roots).</li> </ul>	12%	
Unit 2: Quadratics <ul style="list-style-type: none"> <li>Demonstrate an understanding of the characteristics of quadratic functions, including vertex, intercepts, domain, and range; Solve problems that involve quadratic equations.</li> </ul>	23%	
Unit 3: Logic and Reasoning <ul style="list-style-type: none"> <li>Analyze and prove conjectures, using inductive and deductive reasoning, to solve problems</li> </ul>	11%	
Unit 4: Geometry <ul style="list-style-type: none"> <li>Demonstrate an understanding of the relationships among scale factors, areas, surface areas and volumes of similar 2-D shapes and 3-D objects; Solve problems that involve the cosine law and the sine law, excluding the ambiguous case.</li> </ul>	11%	
Unit 5: Proportional Reasoning <ul style="list-style-type: none"> <li>Solve problems that involve scale diagrams, using proportional reasoning; Analyze puzzles and games that involve spatial reasoning, using problem-solving strategies; Solve problems that involve the application of rates.</li> </ul>	7%	
Unit 6: Statistics <ul style="list-style-type: none"> <li>Demonstrate an understanding of normal distribution, including standard deviation and z-scores; Interpret statistical data, using confidence intervals, confidence levels and margin of error.</li> </ul>	11%	
	Final Exam (Common Summative Assessment)	25%
	<b>*Total</b>	100%

<b>Assessment</b>	<p>*The student's grade will be calculated based on the following (within each unit of study):</p> <table border="1" data-bbox="289 132 1193 210"> <tr> <td data-bbox="289 132 912 170">Assignments/Modules</td> <td data-bbox="912 132 1193 170">20%</td> </tr> <tr> <td data-bbox="289 170 912 210">Quizzes, exams, labs, projects</td> <td data-bbox="912 170 1193 210">80%</td> </tr> </table> <ul style="list-style-type: none"> <li>• Alternative Education does not publish report cards.</li> <li>• Parents and students are encouraged to keep up to date on PowerSchool and contact their teacher if there are any issues.</li> <li>• Final Grade: <ul style="list-style-type: none"> <li>○ 75% School Awarded Mark + 25% Final Exam (Common Summative Assessment)</li> </ul> </li> </ul>	Assignments/Modules	20%	Quizzes, exams, labs, projects	80%
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<b>Important Note Regarding Assessments.</b>	<p>A wide range of assessment information is used in the development of a student's final grade. In Edmonton Catholic Schools, individualized assessments provide specific information regarding student progress and overall performance in class. Assessment may vary from student to student, differentiating for various student needs. It should also be noted that not all assignments are used to determine the final grade, and that scale factors may have been used to determine the weight of individual assignments.</p>				