



# Superior Collegiate and Vocational Institute

333 N. High Street, Thunder Bay, ON  
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<b>Course Name:</b> Grade 11 Functions and Applications		<b>Code:</b> MCF 3M1 - University/College Prep.	
<b>Course Description:</b> This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modeling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.			
<b>Units:</b>			
1. Quadratic Functions		- applications with quadratic functions	
2. Exponential Functions		- graphing and applications involving exponential functions	
3. Trigonometric Functions		- applications of simple and compound interest, annuities and mortgages - development of fundamental trig ratios; advanced trig applications - graphical analysis of trigonometric ratios including transformations/translations	
<b>Text(S):</b> Functions and Applications (Nelson) Geometer's Sketch Pad software TI-83 Graphing Calculators Other resources as required		<b>Replacement Cost:</b> - \$85.00 - n/a - \$135.00	
<b>Prerequisite:</b> MPM2D (grade 10 academic math, Principles of Mathematics) or MFM2P (grade 10 applied math, Foundations of Mathematics)			
<b>Assessment and Evaluation</b>			
Term Work	70%	Tests will incorporate the achievement chart categories. Quizzes will incorporate the achievement chart categories. Tasks/assignments, performance investigations, rich tasks.	
Summative Evaluation	30%	End of semester exam, culminating activity Study package, other activity, etc.	
Late assignments will be reduced by 5% on the first day, 10% on the second day and consequences will be assigned at the teachers discretion beyond the third day.			
<b>Learning Skills:</b>	Responsibility Independent Work Collaboration Organization Initiative Self Regulation	Levels of Achievement	Level 1 Needs Improvement Level 2 Satisfactory Level 3 Good Level 4 Excellent
<b>ONLINE REFERENCE:</b> <a href="http://www.edu.gov.on.ca/eng/document/curriculum/secondary/progplan/progplan.html">http://www.edu.gov.on.ca/eng/document/curriculum/secondary/progplan/progplan.html</a>			
<b>STUDENT RESPONSIBILITIES AND EXPECTATIONS:</b>			
Students are expected to come to class on time, prepared (notebook, textbook, PENCIL, and scientific calculator), and ready to put forth their best effort. Student Code of Conduct is consistent with the information outlined in the Student Handbook.			
<b>ONLINE REFERENCE:</b> <a href="http://www.edu.gov.on.ca/eng/document/brochure/conduct/conduct.html">http://www.edu.gov.on.ca/eng/document/brochure/conduct/conduct.html</a>			
<b>TEACHER CONTACT:</b>		<b>PHONE:</b> 768-7284 Ext.	
<b>STUDENT SIGNATURE</b>		<b>DATE:</b>	

\*A detailed course outline is on record at the main office. It can be viewed at your request. Please keep this as page 1 of your notebook.