



Superior Collegiate and Vocational Institute

333 N. High Street, Thunder Bay, ON
807-768-7284 www.superiorcvi.ca



Course Name: Grade 12 - Advanced Functions		Code: MHF 4U1 - University	
Course Description: The Grade 12 university preparation course Advanced Functions satisfies the mathematical prerequisite for some universities in areas that include business, social science, and health science programs. The strands in this course help students deepen their understanding of functions by revisiting the exponential and trigonometric functions introduced in Grade 11 to address related concepts such as radian measure and logarithmic functions and by extending prior knowledge of quadratic functions to explore polynomial and rational functions. The Characteristics of Functions strand addresses some of the general features of functions through the examination of rates of change and methods of combining functions.			
Units:		- connecting graphs and equations of polynomial functions, solving polynomial equations, solving inequalities	
1. Exponential and Logarithmic Functions		- understanding rates of change, combining functions	
2. Trigonometric Functions		- connecting graphs and equations of rational functions, solving rational equations	
3. Polynomial and Rational Functions		-evaluating logarithmic expressions, connecting graphs and equations of logarithmic functions, solving exponential and logarithmic equations	
4. Characteristics of Functions		- understanding and applying radian measure, connecting graphs and equations of trigonometric functions, solving trigonometric equations, using functions models to solve problems	
Text(S): Advanced Functions (Nelson) TI-83 Graphing Calculators - various other recourses and handouts		Replacement Cost: - \$85.00 - \$135.00 - na	
Prerequisite: - MCR3U (Grade 11 Functions and Relations) or MCT4C (Grade 12 Mathematics for College Technology)			
Assessment and Evaluation			
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.			
Learning Skills: Responsibility Independent Work Collaboration Organization Initiative Self Regulation		Levels of Achievement Level 1 Needs Improvement Level 2 Satisfactory Level 3 Good Level 4 Excellent	
ONLINE REFERENCE: http://www.edu.gov.on.ca/eng/document/curricul/secondary/progplan/progplan.html			
STUDENT RESPONSIBILITIES AND EXPECTATIONS:			
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.			
ONLINE REFERENCE: http://www.edu.gov.on.ca/eng/document/brochure/conduct/conduct.html			
TEACHER CONTACT:		PHONE: 768-7284 Ext.	
STUDENT SIGNATURE		DATE:	

*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.