



A. Y. Jackson S. S.
www.ayjackson.ca

MHF4U Advanced Functions Grade 12, University

General Course Information

Prerequisite:	MCR3U
Department:	Mathematics
Extra Help:	By appointment Before school, lunch and after school
Textbook and Replacement Cost:	Advanced Functions 12 – Nelson (\$90 fee is charged for lost textbook)
Material Required:	Binder, pen, pencil, ruler, graph paper and scientific calculator

Course Description

This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic, and trigonometric functions; develop techniques for combining functions; broaden their understanding of rates of change; and develop facility in applying these concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. This course is intended both for students taking the Calculus and Vectors course as a prerequisite for a university program and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs.

The course is organized into 4 strands:

- Trigonometric Functions
- Exponential and Logarithmic Functions
- Polynomial and Rational Functions
- Characteristics of Functions

A detailed list of the course expectations can be found at: www.edu.gov.on.ca/eng/curriculum/secondary/math1112currb.pdf

Assessment and Evaluation

To promote student success, ongoing assessment and feedback will be given regularly to the students. A variety of assessment and evaluation strategies will be used in this course, including quizzes, tests and assignments. Expectations will be evaluated based on the provincial curriculum expectations and the achievement levels outlined in the ministry document.

Expectations are organized into four categories of knowledge and skills. The categories and their maximum corresponding weighting is as follows:

Knowledge and Understanding	35%
Thinking	15%
Communication	15%
Application	35%

Each student's final mark will be in the form of a percentage grade based on their achievement in the 4 categories on the achievement chart. The breakdown of the final mark is as followed:

Term Evaluation	70%
Final Evaluation	30%

The final Evaluation will be completed during the final 6 weeks of the course and may include a variety of summative activities including an exam, a presentation, a seminar, or an essay or another writing assignment.

In addition to students' performance in the achievement categories, students will also be assessed on their performance in the following learning skills:

- Responsibility
- Organization
- Independent Work
- Collaboration
- Initiative
- Self-Regulation

For specific policies on assessment and evaluation, and academic honesty, please refer to *School Procedures* in the student agenda.