Growing Minds

Mathematics Department
Course Outline
Advanced Functions and Introductory Calculus 12
(MCB 4U)

This course is based on the following Ministry of Education documents: The Ontario Curriculum Grades 11 and 12, Mathematics, 2000.

Course Name: Advanced Functions and Introductory Calculus, Grade 12, University Preparation

Course Type: University Preparation

Course Code: MCB4U

Credit Value: One credit

Hours: 110 hours

Prerequisite: Functions and Relations, Grade 11, University Preparation, or Functions, Grade 11, University/College Preparation

<u>Course Description (As specified in the Ministry of Education Policy Document)</u>

This course builds on students' experience with functions and introduces the basic concepts and skills of calculus. Students will investigate and apply the properties of polynomial, exponential, and logarithmic functions; broaden their understanding of the mathematics associated with rates of change; and develop facility with the concepts and skills of differential calculus as applied to polynomial, rational, exponential, and logarithmic functions. Students will apply these skills to problem solving in a range of applications.