MHV4U
Advanced Functions (Grade 12)
University Preparation

Teacher: Mr. Sweeney

Prerequisite: Functions, Grade 11, MCR3U

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.

Contact Information

It may be necessary for Mr. Sweeney to contact the parent or guardian of any student in the course. For that reason, please complete the following:

Contact Name	
Phone (daytime)	
e-mail	

My parents/guardians and I have read this course description as well as the pages in the student agenda pertaining to the academic program and attendance policy at Brookfield High School.

Student name: _____

Student signature: _____

Parent / guardian signature:

_____

Course Topics

Unit   Topic

1   Characteristics of Functions
2   Rates of Change
3   Polynomial Functions
4   Polynomial Equations & Inequalities
5   Rational Functions, Equations & Inequalities
6   Trigonometric Functions
7   Trigonometric Identities
8   Exponential & Logarithmic Functions
9   Combinations of Functions

Course Evaluation
Term work 70%
Summative Evaluations
      Board-wide exam.......................   20%
      Board-wide Summative 10%

Assessment Categories (Term work, 70%)
Knowledge / Understanding ....   ~25%
Applications ....   ~25%
Communication ....   ~10%
Thinking …...   ~10%

How to find Mr. Sweeney

At school:
      Rm. 209 (our classroom)
      Rm. 211 (Math office)

By email:
      steven.sweeney@ocdsb.ca

Materials needed daily:
- three ring binder divided into sections
- textbook
- lined paper & graph paper
- pencil, eraser & coloured pen
- scientific calculator
  - requires trigonometric, logarithmic functions
- ruler
- school planner/agenda

Extra help with Mr. Sweeney in room 209 <u>every day</u> after school.

Homework will be assigned <u>daily</u>.