



Cawthra Park Secondary School Mathematics Department Functions, Grade 11 University Mathematics Course Overview

COURSE CODE: MCR3U
PREREQUISITE: MPM2D

DEPARTMENT HEAD: L. Fernandes
CREDITS: One

GOALS OF THE MATHEMATICS PROGRAM

1. To develop and extend numeracy and algebraic skills.
2. To analyze and apply appropriate strategies to solve both familiar and unfamiliar problems.
3. Use appropriate mathematical conventions to effectively communicate solutions to problems.

OVERVIEW

This course introduces the mathematical concept of the function by extending students' experiences with linear and quadratic relations. Students will investigate properties of discrete and continuous functions, including trigonometric and exponential functions; represent functions numerically, algebraically, and graphically; solve problems involving applications of functions; investigate inverse functions; and develop facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

COURSE STRANDS

Characteristics of Functions
Discrete Functions

Exponential Functions
Trigonometric Functions

ASSESSMENT AND EVALUATION

Evaluation in this course takes many forms, and may be based on **products**, **conversations** and **observations**. A student's final mark is made of two parts: 70% is based on evaluation across the entire semester, and 30% is based on one or more components of a final evaluation, administered at or toward the end of the semester.

Teachers use their **professional judgment** to determine a final mark, based on the following four categories:

1. Knowledge and Understanding: Subject-specific content acquired in the course (knowledge), and the comprehension of its meaning and significance (understanding).
2. Application: The use of knowledge and skills to make connections within and between various contexts.
3. Thinking: The use of critical and creative thinking skills and/or processes.
4. Communication: The conveying of meaning through various forms.

Students' **learning skills** and **work habits**, including timely completion of homework and assignments, attendance and punctuality, collaborative work, and responsible student behaviour, will also be assessed on an ongoing basis.

USE OF PERSONAL DIGITAL DEVICES

With teacher approval, devices may be used during class time for class-related work, time-management and planning, or other academic uses. Inappropriate use of devices may result in this courtesy being revoked. Teachers are free to set their own rules regarding the use of devices in class, and to change them at any time.

ADDITIONAL INFORMATION

Cawthra Park can be a very busy place. Students should establish deadlines and assessment dates with their teachers in advance, when possible. Daily attendance is essential in mathematics, due to its cumulative nature. Plagiarism, including misrepresentation of original work, cheating, theft of evaluation instruments, use of unauthorized aids, and false representation of identity, will result in appropriate consequences. Please refer to the Student Handbook under the "About Us" section of the Cawthra Park website (<http://www.cawthrapark.com>) for more details on assessment and evaluation policies.