Cawthra Park Secondary School Mathematics Department
Mathematics of Data Management, Grade 12 University Mathematics
Course Overview

COURSE CODE:	**MDM4U**	**ACTING HEAD:**	**J. Garvin**
PREREQUISITE:	**MCR3U or MCF3M**	**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 broadens students' understanding of mathematics as it relates to managing data. Students will apply methods for organizing and analyzing large amounts of information; solve problems involving probability and statistics; and carry out a culminating investigation that integrates statistical concepts and skills. Students will also refine their use of the mathematical processes necessary for success in senior mathematics. Students planning to enter university programs in business, the social sciences, and the humanities will find this course of particular interest.

COURSE STRANDS

Counting and Probability
Probability Distributions
Organization of Data for Analysis
Statistical Analysis
Culminating Data Management Investigation

ASSESSMENT AND EVALUATION

Evaluation in this course may be diagnostic, formative, or summative. A student's final mark is made of two parts:

1. Term Evaluation 70 %
2. Final Evaluation (15% Culminating Project, 15% Final Exam) 30 %

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 placed on desks, in silent mode, and used discreetly during class time for class-related work, time-management and planning, or other academic uses. Inappropriate use of digital devices may result in this courtesy being revoked.

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.