

MAP4C1 **Foundations for College Mathematics** Grade 12, College

General Course Information

Prerequisite: MBF3C or MCF3M or MCR3U Teacher: 416-396-6793 Ext 20458

Department: Mathematics

Extra Help: After In-Class time or an Online Tutorial planned with your teacher

Textbook and Replacement Cost:

Required Materials: binder, paper, scientific calculator, ruler, pencil, eraser, graph paper

Course Description

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

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 tests, quizzes, group work, and presentations. 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. The categories and their corresponding weighting is as follows:

Knowledge and Understanding Thinking 5% 35% Application 20% Communication 10%

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 Final Culminating Activity 30% 70%

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 Code of Conduct.

The course is organized into the following strands:

Personal Finance **Mathematical Modelling** Interpret Graphical Models • Solve Problems Involving Annuities Manipulating Expressions Research the Process of Renting and Owning Accommodations Solving Exponential Equations · Design, Justify, and Adjust Budgets **Geometry and Trigonometry Data Management** Investigating Optimal Values of Measurements

- · Solving Problems Involving Perimeter, Area, Surface Area, and Volume
- Solve Problems Using Primary Trigonometric Ratios
- Collect, Analyse, and Summarize Two Variable Data
- Understanding Common Statistical Terms
- Create a Graphical Summary of Two Variable Data