

## MCF3M Functions and Applications Grade 11, University/College Preparation

| General Course Information  |   |  |
|---|---|--|
| Prerequisite:   | MPM2D, MPM2P  |  |
| Department:   | Math  |  |
| Extra Help:   | Check with the teacher                                |  |
| Textbook and Replacement Cost:  | Functions and Applications 11, \$80                   |  |
| Material Required:  | 3-ring binder, calculator, ruler, pencil, graph paper |  |
| Course Fee:   | none  |  |
| Course Description  |   |  |
| This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems. |   |  |
| <ul> <li>The course is organized into 3 strands:</li> <li>Quadratic Functions, Exponential Functions, Trigonometric Functions</li> </ul>  |   |  |
| A detailed list of the course expectations can be found at<br>http://www.edu.gov.on.ca/eng/curriculum/secondary/math1112currb.pdf   |   |  |
| 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, and assignments. 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 of knowledge and skills. The categories and their corresponding weighting is as follows:  |   |  |
| Knowledge and Understanding   | 35%   |  |
| Thinking  | 15%   |  |
| Communication   | 15%   |  |

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:

35%

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| Term Evaluation  | 70%                |
| Final Evaluation | 30%                |

The final Evaluation will be split into a midterm exam written at the end of the 3 Quadratic Functions units and a final exam on exponential and trigonometric functions written during the last week of the course. The midterm and final exams will carry equal weighting of 15% of the final mark.

In addition to students' performance in the achievement categories, students will also be assessed on their performance in the following learning skills:

Responsibility

Application

- Organization
- Independent Work
- Collaboration
- Initiative
- Self-Regulation

For specific policies on assessment and evaluation, and academic honesty, please refer to *School Procedures* in the student agenda.