



**St. Joseph Secondary School
Department of Mathematics**

Course Code: MCF 3M1
Course Name: Functions – U/C
Level: Grade 11

Student's Name: _____

Textbook #: _____

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 modeling 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.

Overall Course Expectations:

This course integrates appropriate technologies into the learning and skill development of quadratic, trigonometric, and exponential functions. Students will have the opportunity to work with graphing calculators to broaden their understanding and knowledge of the mathematical concepts covered. As a result, students will be expected to use the equipment with respect.

Students are given sufficient notice of upcoming evaluations and assignments. As such, students should provide their teachers with sufficient notice for any valid absences. Together with their teacher, they can determine how best to deal with the missed course evaluation. Any evaluation or assignment missed due to truancy will be recorded as a mark of 0.

Ontario Catholic School Graduate Expectations (Vision of the Learner):

The graduate is expected to be:

1. A discerning believer
2. An effective communicator
3. A reflective, creative and holistic thinker
4. A self-directed, responsible, lifelong learner
5. A collaborative contributor
6. A caring family member
7. A responsible citizen

Efforts will be made to meet the individual learning needs of students to promote student success with respect to meeting the expectations of this course.

My signature below indicates that I have read the Course Handout, and I am in agreement with its contents.

Parent's/Guardian's Signature: _____ **Date:** _____

Student's Signature: _____ **Date:** _____

Units of Study – Gr. 11 U/C Mathematics:

Unit 1 - Introduction to the Quadratic Function

Unit 2 - The Algebra of Quadratic Expressions

Unit 3 - Working with Quadratic Functions: Standard and Factored Forms

Unit 4 - Working With Quadratic Functions: Standard and Vertex Form

Unit 5 - Trigonometry

Unit 6 - Sinusoidal Functions

Unit 7 - Exponential Functions

Unit 8 - Finance

Culminating Performance Tasks will be administered in two parts: at mid-semester and towards the end of the course and will be weighted 10% of the final mark.

Resources:

The course will use a variety of resources which will be distributed to students during the first week of the course. The text and all other resources assigned to each student are the responsibility of the student.

Resources for this course include:

TI-84 calculators, Functions and Applications 11 Text, individual student resources to complete projects.

Any damage incurred will result in payment for replacement.

\$90 for text, \$195 for TI-84

Evaluation Policies

1. Student marks will be determined by evaluating process & product according to 4 categories (see below) & 4 levels of the Achievement Chart as found in the Ministry Policy document.

Evaluation Structure:

Knowledge/Understanding	30%
Application	30%
Communication	20%
Thinking	20%

Term Evaluations: 70% of the final mark. Final Evaluation

Final Evaluations: 30% of the final mark (20% exam and 10% CPT)

2. Feedback will also be provided for student **learning skills**: Responsibility, Organization, Independent Work, Collaboration, Initiative and Self-Regulation are assessed apart from student achievement in the four categories outlined above and will conform to the coding:

E – Excellent

G – Good

S – Satisfactory

N - Needs Improvement

3. **Assignments** submitted after the due date established by the teacher will receive a penalty **in accordance with our Board Assessment & Evaluation Policy Document** as outlined in the student agenda.
4. Should a student miss an evaluation due to a legitimate absence, **in accordance with our Board A&E Policy Document**, the student and teacher will make arrangements to address the missed evaluation in a timely manner. In the cases of **extended vacation** or **prolonged absence**, consultation with the appropriate administrator is required.
5. In the event that the student does not make up the missed evaluation(s), a zero may be assigned. If it is determined that the evaluation(s) has/have been missed as a result of a skip/truancy or has/have been plagiarized, a zero may be assigned.
6. For all other cases of absence and/or missed evaluations (including absence during the final examination period), please refer to our Board A&E Policy as outlined in the student agenda.

May God bless your efforts this semester!