

HOLY TRINITY CATHOLIC SECONDARY SCHOOL

COURSE OUTLINE



Name of Course/Course Code: Functions and Relations, MCR 3U

Course Prerequisite: MPM2D, Principles of Mathematics, Grade 10, Academic

Course Description:

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 a facility in determining equivalent algebraic expressions. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Catholic Graduate Expectations:

The mind and its capacity for rational analysis are seen as gifts from the Creator to be used and enjoyed. The training of the intellect ensures that all knowledge can be scrutinized and the divine and the human more deeply understood. In this sense, knowledge is illuminated with the light of faith. In Catholic education, the commitment to maturity of mind and academic excellence is always in reference to God's revealed wisdom as to life's purpose and meaning.

Units of Study

Unit 1	<i>Functions</i>
Unit 2	<i>Trigonometric Functions</i>
Unit 3	<i>Financial Applications of Sequences and series</i>
Unit 4	<i>Investigation of Exponential Functions</i>

Evaluation

70%	30%
Knowledge/Understanding	Culminating Task
Thinking/Inquiry	10%
Communication	Exam
Application	20%

Course Resources Required:

Scientific Calculator
Ruler
Pencil
Eraser
Binder with paper
Textbook (Provided)

For a detailed course description of this course, please visit
<https://www.edu.gov.on.ca/eng/curriculum/secondary>