# ST. THOMAS AQUINAS SECONDARY SCHOOL

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*We believe that each one, created in the image and likeness of God, is called by name into the Dufferin-Peel community to realize the Ontario Catholic School Graduate Expectations to the fullest extent as we all journey from the early years to vocation.*

# COURSE OUTLINE

| Department Name: | Mathematics |
|---|---|

| Course Name: | Grade 12 College Technology Mathematics |
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| Course Code and Section: | MCT4C1 |

| Course Description: |
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| This course enables students to extend their knowledge of functions. Students will investigate and apply properties of polynomial, exponential, and trigonometric functions; continue to represent functions numerically, graphically, and algebraically; develop facility in simplifying expressions and solving equations; and solve problems that address applications of algebra, trigonometry, vectors, and geometry. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for a variety of college technology programs. **Prerequisite: MCF3M1 (11 University/College) or MCR3U1 (11 University), NOT MBF3C1 (11 College)** |

| Strand / Units | Catholic Graduate Expectations |
|---|---|
| 1. Trigonometry<br>2. Simplifying Functions<br>3. Sketching Graphs<br>4. Solving Equations<br>5. Solving Non-Linear Systems<br>6. Circles<br>7. Vectors | The course will help students address the Ontario Catholic School Graduate Expectations that they adopt a holistic approach to life by integrating learning from various subject areas and experience, including …<br>1) A reflective and creative thinker who evaluates situations & solves problems.<br>2) A self-directed, responsible learner who sets appropriate goals and priorities in school, work and personal life, and applies effective communication, decision-making, problem-solving, and time management skills.<br>3) A collaborative contributor who achieves excellence, originality, and integrity in one's own work and supports these qualities in the work of others.<br>4) A responsible citizen who accepts accountability for one's own actions. |

## Assessment and Evaluation:

| Category Weightings | Weight |
|---|---|
| Knowledge/Understanding | 30 |
| Thinking | 20 |
| Application | 30 |
| Communication | 20 |

| Final Summative Assessments | Grade Distribution |
|---|---|
| Term Work | 70 |
| Course Culminating | 10 |
| Exam | 20 |