

## **Teaching and Learning**

## **Math Essentials**

Math Essentials (160351) is a math credit for students earning a Career Diploma.

This course is designed to provide students with a comprehensive foundation in essential math concepts needed for success beyond high school. This course aims to strengthen students' understanding of fundamental mathematical concepts, improve problem-solving skills, and support critical thinking while exploring real-world examples of how math applies in their everyday lives. This course will engage students in problem-based learning including hands-on activities, class discussions, and practical applications to reinforce learning. Students will work in a collaborative setting as well as individually to solve math problems and communicate their reasoning. By the end of the course, students will have gained confidence in their math abilities, have a solid understanding of core math concepts, and developed skills essential for success in the workforce and everyday life.

## **Suggested Math Essentials Topics:**

Statistics and Probability

- Explore, organize, analyze, and interpret data using various representations, including algebraic functions, graphs, and tables.
- Sampling and displaying data
- Use spreadsheets to organize and analyze data
- Measures of central tendency, dispersion and distribution

Measurement and Proportional Reasoning

- Use area and volume to solve problems
- Apply unit conversions (standard to standard, metric to metric, and metric to standard)
- Graph proportional relationships
- Compare proportional relationships

## Number Sense

- Problem-solving in the real world using fractions, decimals, and percentages
- Multi-step real-world problems

Problem Solving using expressions, equations, and inequalities within real-world contexts