# MTH 65: Introductory Algebra - Second Term

Introduces algebraic concepts and processes with a focus on polynomials, exponents, roots, geometry, dimensional analysis, solving quadratic equations, and graphing parabolas. Emphasizes number-sense, applications, graphs, formulas, and proper mathematical notation. The OCCC math department recommends that students take MTH courses in consecutive terms.

#### **Addendum to Course Description**

A scientific calculator and access to a graphing utility may be required.

Students are no longer required to have physical graphing calculators in MTH 60, 65, 70, 95, 111, and 112. Where physically possible instructors will demonstrate using Desmos, GeoGebra, or other online programs in class. Assessments requiring the use of a graphing utility may be done outside of proctored exams.

#### Credits 4

## **Prerequisites**

Students have the option of taking the co-requisite MTH 65L in place of completing the prerequisites.

## Subject

**Mathematics** 

#### **Course Outcomes**

Upon completion of the course students should be able to:

- Recognize and apply the operations necessary to simplify expressions and solve equations.
- · Perform polynomial addition, subtraction, and multiplication and perform polynomial division by a monomial.
- Use exponent and radical properties to simplify expressions and solve radical and quadratic equations.
- Solve systems of equations by graphing, substitution, and elimination and use systems in solving applications.

## **Prerequisite Courses**

MTH 60

**Co-Requisite Courses** 

MTH 65L