MTH 95 : Intermediate Algebra

Introduces algebraic concepts and processes with a focus on factoring, functions, rational expressions, solving equations (quadratic, rational, radical, absolute value), and solving inequalities. 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

Access to a graphing utility will be required and a scientific calculator may be required.

Students are no longer required to have physical graphing calculators in MTH 60, 65, 70, 95, 111, or 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 the proctored exams.

Credits 4

Prerequisites

Or placement into WR 115 also accepted. Equivalent placement test scores also accepted.

Subject

Mathematics

Course Outcomes

Upon completion of the course students should be able to:

- 1. Factor expressions and use factoring to simplify rational expressions and solve quadratic equations.
- 2. Create quadratic models, make predictions, and interpret the meaning of intercepts, vertices, and maximum or minimum values
- 3. Solve absolute value, quadratic, rational, radical equations, and compound inequalities both symbolically and graphically.
- 4. Interpret information provided in function notation given a function expressed in graphical, symbolic, numeric, or verbal form.
- 5. Use variables to represent unknown quantities, create a function to model a situation, and use algebra and/or technology to find and interpret a result.
- 6. Interpret properties of functions and relations, such as the meaning of a function, ordered pairs, domain and range, maximum and minimum values, and intercepts.

Prerequisite Courses

WR 115 MTH 65