MTH 111: College Algebra

Explores relations and functions graphically, numerically, symbolically, and verbally. Examines exponential, logarithmic, polynomial, and rational functions. Investigates applications from a variety of perspectives. Graphing technology is required, such as Desmos and/or GeoGebra which are available at no cost. It's recommended that students take MTH courses in consecutive terms.

Students are no longer required to have physical graphing calculators in either MTH 95 or MTH 111. Where physically possible instructors will demonstrate using Desmos, GeoGebra, or other online programs in class. Assessments requiring the use of a graphing calculator will be done outside of the proctored exam grade component.

Course Student Learning Outcomes

Upon successful completion students should be able to:

- Demonstrate an understanding of functions including function notation, function algebra, domain/range, inverse functions, piecewise functions, graph transformations, and symmetry.

- Analyze polynomial, rational, exponential, and logarithmic functions represented numerically, symbolically, verbally and graphically and identify properties of these functions using technology.

- Use variables to represent unknown quantities; create models; solve exponential, logarithmic, polynomial, and rational equations; and interpret the results.

- Demonstrate a mastery of the skills necessary for future course work that requires the use of college algebra concepts.

Credits: 5
Prerequisites: **WR 115 RD 115 MTH 95** Equivalent placement test scores also accepted.
Program: **Mathematics**