

**SYLLABUS**  
**MATH 10035 – Fundamental Mathematics V**  
(1 Credit Hour)

**Catalog Information:**

Polynomial functions, medium level factoring techniques; solving equations and inequalities; problem solving.

Prerequisite: Appropriate placement test score or a grade of C (2.0) or better in either MATH 10005 or MATH 10034.

**Text:** Math Department e-book available at

<http://www.math.kent.edu/~reed/FUNMATHV/Contents.htm>

**Medium-Level Factoring Techniques, Polynomials (4 days)**

- Grouping
- Difference of two squares, including case where factors have irrational coefficients (e.g.,  $x^2 - 5$ )
- Sum and difference of two cubes
- Trinomials reducible to quadratic form

**Equations and Inequalities (8 days)**

(Apply to function-graphing concepts—zeros, above/below  $x$ -axis, intersection of function graphs)

- Function notation and reading graphs
- Quadratic functions
- Quadratic equations, including completing the square and Quadratic Formula
- Quadratic inequalities
- Moderately difficult equations involving trinomials reducible to quadratic form
- Easy to moderate radical equations

**Problem Solving (2 days)**

**Testing (1 day)**