

Mathematics 75
Au, Wi, Sp, Su

4 credits

Pre-College Mathematics II

Prerequisite:

Mathematics 50, or Course Code S on Math Placement Test. Not open to students with credit for any math course except 50.

Catalog Description:

Factoring, rational expressions and equations, graphs, systems of linear equations and inequalities, problem solving, roots and radicals, quadratic equations, complex numbers.

Purpose of Course:

To meet the needs of students entering the University with Course Code S on Math Placement Test, or with credit for 50. In addition, students placing at Course Code R and who need Math 130, must take 104 prior to enrolling in 130. Completion of Math 75 is required for entry into numerous degree granting colleges; however, credit for 75 will not count toward graduation in any degree granting program. It is designed for students continuing in Math 105 or 116.

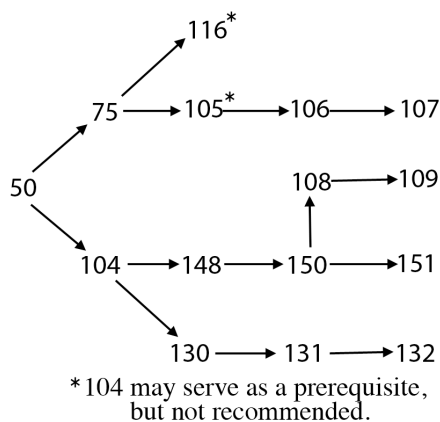
Follow-up Courses:

Math 104 for students switching to science, computer science, business or engineering curriculum.

Math 105 for students intending to pursue MEd in early or middle childhood.

Math 116 for students in liberal arts or students in the precertification programs on regional campuses.

Sequencing Chart:



Text:

Beginning Algebra With Applications, 7th Edition, Aufmann/Barker/Lockwood, Cengage
ISBN 9780618969913

Continued:

Topics List:

- 5.3–5.4 Graphing**
Slopes of straight lines
Slope-intercept form
Point-slope form
- 6.1–6.4 Solving systems of linear equations**
Solving systems of linear equations by graphing
Solving systems of linear equations by substitution
Solving systems of linear equations by addition
Systems of linear equations and problem solving
- 8.1–8.5 Factoring polynomials**
Greatest common factor and factoring by grouping
Factoring trinomials
Factoring binomials
Solving quadratic equations by factoring
- 9.1–9.7 Rational expressions**
Simplifying rational expressions
Multiplying and dividing rational expressions
Least common denominator
Adding and subtracting rational expressions
Complex fractions
Solving equations containing rational expressions
Ratio and proportion
Rational equations and problem solving
- 10.1–10.4 Roots and radicals**
Introduction to radicals
Simplifying radicals
Adding and subtracting radicals
Multiplying and dividing radicals
Solving equations containing radicals
Radical equations and problem solving
- 11.1–11.4 Quadratic equations**
Solving quadratic equations by the square root method
Solving quadratic equations by completing the square
Solving quadratic equations by the quadratic formula
Complex numbers