

# COURSES

## PDF MATH

### **MATH96D Algebra Review for Math 126 2 Credits**

Corequisite: Math 126 Offers a second course in algebra. Includes multiplying, dividing, and factoring polynomial expressions, solving polynomial and rational equations, algebraic techniques involving exponents and radicals, and systems of linear equations.

### **MATH20 Learning Support for MATH 120 1 Credit**

Prerequisites: None. Corequisite: Enrollment in designated section of Math 120. Provides foundational material to support students in Math 120, Fundamentals of College Mathematics.

### **MATH24 Learning Support for MATH 124 1 Credit**

Prerequisites: None. Corequisite: Enrollment in designated section of Math 124. Provides foundational material to support students in Math 124, College Algebra.

### **MATH26 Learning Support for MATH 126 1 Credit**

Prerequisites: None. Corequisite: Enrollment in designated section of Math 126. Provides foundational material to support students in Math 126, Precalculus I.

### **MATH90 Elementary Arithmetic 1 Credit**

Provides individualized instruction in basic math skills including addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals. Intended for students who need a review of whole numbers before studying fractions. Instruction is tailored specifically to each student's needs.

### **MATH91 Basic Mathematics 3 Credits**

Provides the fundamental operation of whole numbers, fractions and mixed numbers, decimals, percentage, measurement and geometry. The course is intended to provide a thorough review of basics needed in future mathematics courses and in applied fields.

### **MATH92 Algebra Review 1 Credit**

Prerequisite: Previous success in Intermediate Algebra or Algebra II or higher algebra course. Provides a review of algebra that will refresh previously taught concepts. Designed for students who have successfully completed Algebra II or Intermediate Algebra or similar course sometime in the past. Provides a condensed review of topics from Intermediate Algebra intended to help students place into the appropriate course via Accuplacer Exam.

### **MATH93 Pre Algebra 3 Credits**

Prerequisites: MATH91 or equivalent or consent of instructor Prepares students for MATH 95. Helps students who have experienced difficulties with math to get an introduction to the language and concepts of algebra. Provides a transition from self-paced, basic math to the quick pace required in MATH 95.

### **MATH95 Elementary Algebra 3 Credits**

Offers a first course in algebra. Topics include operations with signed numbers; algebraic symbols; evaluating formulas; operations with polynomial, radical and rational expressions; solving equations and application problems using algebra; and elementary graphing. Provides a foundation for the math used in business, science, engineering and related fields.

### **MATH96 Intermediate Algebra 3 Credits**

Offers a second course in algebra. Studies polynomial, rational and radical expressions; linear, quadratic and polynomial equations; linear and absolute value inequalities; relations, functions and their graphs; systems of linear equations; and applications.

### **MATH98 Developmental Mathematics 3 Credits**

Prerequisite: None Prepares students for college-level mathematics. Self-paced, computer aided course designed to provide students with the concepts and skills of pre, elementary and intermediate algebra.

### **MATH100 Math for Allied Health 1 Credit**

Reviews basic mathematics with emphasis on those skills that apply to calculating drug dosages. Includes fractions, decimals, proportions, percents, English, apothecary and metric systems of measurements.

### **MATH110 Mathematics for Industry 3 Credits**

Covers fractions, decimals, percentages, ratios, proportions, measurement, geometry, and briefly, the fundamentals of algebra and right triangle trigonometry.

### **MATH120 Fundamentals of College Mathematics 3 Credits**

Prerequisite: Success in intermediate algebra, algebra II, MATH 96 or similar course is recommended as preparation for this course. Students should meet with a Counselor to determine readiness based on placement or equivalent exam, high school coursework, or other factors. Studies probability, statistics, business, finance and consumer mathematics. Course is broad in scope and emphasizes applications.

### **MATH122 Number Concepts for Elementary School Teachers 3 Credits**

Prerequisites: MATH120 or consent of instructor Introduces elementary problem solving with emphasis on the nature of numbers and the structure of the real number system. Designed for students seeking a teaching certificate in elementary education.

### **MATH123 Statistical & Geometrical Concepts for Elementary School Teachers 3 Credits**

Prerequisites: MATH120 or consent of instructor Presents elementary problem solving with emphasis on patterns and geometric relationships. Designed for students seeking a teaching certificate in elementary education.

### **MATH124 College Algebra 3 Credits**

Prerequisites: Success in intermediate algebra, algebra II, MATH 96 or similar course is recommended as preparation for this course. Students should meet with a WNC Counselor to determine readiness based on placement or equivalent exam, high school coursework, or other factors. Covers equations and inequalities; relations and functions; linear, quadratic, polynomial, exponential, and logarithmic functions; systems of linear equations.

### **MATH126 Precalculus I 3 Credits**

Prerequisite: Success in intermediate algebra, algebra II, MATH 96 or similar course is recommended as preparation for this course. Students should meet with a Counselor to determine readiness based on placement or equivalent exam, high school coursework, or other factors. Provides a third course in algebra. Topics include: polynomial, rational and radical equations; absolute value and quadratic inequalities; relations and functions; linear, quadratic, polynomial exponential and logarithmic functions, their graphs and applications; and systems of equations.

### **MATH127 Precalculus II 3 Credits**

Prerequisites: MATH 126 with a grade of C- or higher or appropriate score on the WNC placement or equivalent exam or three units of high school mathematics at the level of algebra and above, or consent of instructor Studies circular functions, trigonometric identities and equations, conic sections, complex numbers, and discrete algebra.

### **MATH128 Precalculus and Trigonometry 5 Credits**

Prerequisites: MATH 096 with a grade of C- or better or appropriate score on the WNC math placement or equivalent exam or three units of high school mathematics at the level of algebra and above with a grade of C- or better within the last three years. Studies relations, functions and their graphs; polynomial, rational, exponential, logarithm and trigonometric functions; analytic trigonometry; systems of equations and inequalities; conics; mathematical induction; sequences and series.

### **MATH176 Introductory Calculus for Business & Social Sciences 3 Credits**

Prerequisites: MATH 124, 126 or 128 or equivalent or consent of instructor. Instructs students in fundamental ideas of analytical geometry and calculus. Includes plane coordinates, graphs, functions, limits, derivatives, integrals, the fundamental theorem of calculus. Includes applications to rates, extremalization, and interpretation of integrals.

### **MATH181 Calculus I 4 Credits**

Prerequisites: MATH 127 or MATH 128 or appropriate score on the WNC placement or equivalent exam. Offers fundamental concepts of analytical geometry and calculus, functions, graphs, limits, derivatives, and integrals.

### **MATH182 Calculus II 4 Credits**

Prerequisites: MATH181 or equivalent or consent of instructor. Teaches transcendental functions, methods of integration, conics, vectors.

**MATH251      Discrete      Mathematics  
I                                  3 Credits**

Prerequisite: Math 182 A first course in discrete mathematics that provides an introduction to logic, set theory, relations, functions, digraphs, and cardinality.

**MATH283      Calculus III      4 Credits**

Prerequisites: MATH182 or equivalent or consent of instructor Covers infinite series, vectors, differential and integral calculus of functions of several variables, and introduction to vector analysis.

**MATH285      Differential Equations      3  
Credits**

Prerequisites: MATH283 Presents methods of solving ordinary differential equations with application to physical systems. Includes systems of equations, series solution, numerical solution, and Laplace transforms.

**MATH299      Directed Study      1 Credit**

Prerequisite: Consent of instructor. Provides individual study conducted under the direction of a faculty member.

**MATH330      Linear Algebra      3 Credits**

Prerequisite: Math 283 Vector analysis continued; abstract vector spaces; bases, inner products; projections; orthogonal complements, least squares; linear maps, structure theorems; elementary spectral theory; applications.