MATH (MATH)

MATH 100 - Math for Allied Health Programs
A review of basic mathematics with emphasis on those mathematical skills needed for the dental assisting program. This course will include a review of arithmetic, material on the metric system, apothecary system, dosages and solutions.
Transferability: May not transfer towards an NSHE bachelor's degree
Term Offered: AS NEEDED
Units: 3

MATH 105 - Applied Topics in Math
A course including the following topics: review of arithmetic, algebra, geometry and graphical representation.
Transferability: May not transfer towards an NSHE bachelor's degree
Term Offered: AS NEEDED
Units: 3

MATH 106 - Geometry
This course is designed to provide a basic understanding of practical geometry for students who have never taken a course in geometry or who need a refresher course. Theory is not emphasized. Some of the topics covered are: area of plane figures, similarity, volume of solids, angle measure, and properties of special triangles.
Transferability: May not transfer towards an NSHE bachelor's degree
Enrollment Requirements: Prerequisite: MATH 95 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (taken within 2 years).
Term Offered: AS NEEDED
Units: 3

MATH 107 - Real Estate Math
Review of basic arithmetic principles. A general mathematics course designed to assist the student who wishes to pass the state exam and the student who wants to be more proficient and knowledgeable in the real estate profession. Decimals, percentages, fractions, prorations, tax rate, interest, discount and depreciation are included.
Transferability: May not transfer towards an NSHE bachelor's degree
Term Offered: AS NEEDED
Units: 3

MATH 108 - Math for Technicians
This applied mathematics course is designed to give the student math skills as they are applied to specific career choice areas. Topics for all individual applied areas (transportation, metalworking, construction, etc.) will include algebra and trigonometry, but the focus of the presentation and utilization will be specific to the industry area. The course will include demonstrations and hands-on exercises applying mathematics as it will be needed in the specific technical environment.
Transferability: May not transfer towards an NSHE bachelor's degree
Enrollment Requirements: Prerequisite: Qualifying ACCUPLACER, ACT/SAT test results. A graphing calculator may be required for this course.
Term Offered: AS NEEDED
Units: 3

MATH 109 - Fundamentals of College Mathematics II
A continuation of Math 19 covering remaining topics of Math 120. Presentation is adapted to needs of students with learning or physical disabilities. (This course may be substituted for Math 120 in degrees and programs) Mathematical concepts particularly relevant to informed and aware citizenship in modern society. Topics covered include functions, graphs, problem solving, topics in finance, geometry, probability and statistics. Satisfies UNR core curriculum. Note: Computer use and graphing calculator may be required (TI-83/84 recommended). Note: Completing Math 119 is designed to be equivalent to completing Math 120. Therefore, Math 119 satisfies Math Gen Ed for AA and AAS but not AS.
Enrollment Requirements: Prerequisite: A grade of ‘C’ or better in MATH 19. A graphing calculator may be required.
Term Offered: AS NEEDED
Units: 3

MATH 120 - Fundamentals of College Mathematics
This course covers the mathematical concepts particularly relevant to non-science majors. Topics covered include problem-solving, topics in finance, probability, statistics, and additional real-world applications. Satisfies UNR core curriculum. Note: Computer use and graphing calculator may be required (TI-83/84 recommended).
Enrollment Requirements: Prerequisite: A grade of ‘A’ or ‘B’ in MATH 95, or a grade of ‘C’ or better in MATH 96, or equivalent, or qualifying ACCUPLACER, ACT/SAT test results (within 2 years). A graphing calculator may be required.
Term Offered: All Semesters
Units: 3

MATH 120E - MATH 120 Expanded
This course covers the same material as MATH 120 and requires students to be concurrently enrolled in a co-requisite section of MATH 96A. This course covers mathematical concepts particularly relevant to informed and aware citizenship in modern society. Topics covered include functions, graphs, problem solving, topics in finance, geometry, probability and statistics.
Enrollment Requirements: Corequisite: MATH 96A
Term Offered: AS NEEDED
Units: 3

MATH 122 - Number Concepts for Elementary School Teachers
Mathematics needed by those teaching new-content mathematics courses at the elementary school level with emphasis on the structure of the real number system and its subsystems. Designed for students seeking a teaching certificate in elementary education. Open to others with approval of department chair.
Enrollment Requirements: Prerequisite: A grade of ‘C’ or better in MATH 120 or MATH 126 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (taken within 2 years). A graphing calculator may be required for this course.
Term Offered: Spring and Fall
Units: 3

MATH 123 - Statistical & Geometrical Concepts for Elementary School Teachers
A continuation of MATH 122. Topics covered may include geometry, algebra, probability, statistics and computers.
Enrollment Requirements: Prerequisite: A grade of ‘C’ or better in MATH 120 or MATH 126 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (taken within 2 years). A graphing calculator may be required for this course.
Term Offered: Spring and Fall
Units: 3

MATH 124 - College Algebra
The study of equations and inequalities, relations and functions, linear, quadratic, polynomial, rational, exponential, logarithmic and their applications.
Enrollment Requirements: Completion of Math 096, Math 120, ACT of 19, SAT 510, or Accuplacer Score of QAS 263
Units: 3

MATH 125 - Pre-Calculus I
The study of equations and inequalities involving radical, rational, quadratic or absolute value terms. Also includes polynomial, rational, exponential and logarithmic functions, their graphs and applications.
Note: Computer use and graphing calculator may be required (TI-83/84 recommended).
Enrollment Requirements: Prerequisite: A grade of ‘C’ or better in MATH 96 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (within 2 years). A graphing calculator may be required.
Term Offered: All Semesters
Units: 3
MATH 126E - Math 126 Expanded  
**Units:** 3  
The course is equivalent to MATH 126, but students enrolled in this course must also be enrolled in MATH 96D. The course covers the study of functions, their properties and their graphs, including quadratic functions, polynomials, rational functions, exponential and logarithmic functions, and their applications.  
**Enrollment Requirements:** Prerequisite: A grade of ‘C’ or better in MATH 96 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (within 2 years). A graphing calculator may be required.  
**Term Offered:** AS NEEDED

MATH 176 - Introductory Calculus for Business and Social Sciences  
**Units:** 3  
Topics covered include graphing functions, derivatives, integrals, applications, the Fundamental Theorem of Calculus. This course is designed for business, social science or biological science majors.  
**Enrollment Requirements:** Prerequisite: A grade of ‘C’ or better in MATH 126 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (taken within 2 years). A graphing calculator may be required.  
**Term Offered:** All Semesters

MATH 181 - Calculus I  
**Units:** 4  
Topics covered include functions, the derivative, differentiation of functions, applications of the derivative, understanding the definite integral, finding integrals and applications of integrals. Throughout the course topics will be viewed geometrically, numerically and algebraically. This course is oriented toward students of mathematics, physical science and engineering. Satisfies UNR math core curriculum. Note: Computer use and graphing calculator may be required (TI-83/84 recommended).  
**Enrollment Requirements:** Prerequisite: A grade of ‘C’ or better in MATH 127 or MATH 128 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (within 2 years). A graphing calculator may be required.  
**Term Offered:** Spring and Fall

MATH 182 - Calculus II  
**Units:** 4  
A continuation of MATH 181. Topics covered include a continuation of the definite integral, finding integrals and applications of integrals, differential equations and approximations of functions with simpler functions. Throughout the course topics will be viewed geometrically, numerically and algebraically. This course is oriented toward students of mathematics, physical science and engineering. Note: Computer use and graphing calculator may be required (TI-83/84 recommended).  
**Enrollment Requirements:** Prerequisite: A grade of ‘C’ or better in MATH 181 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (taken within 2 years). A graphing calculator may be required.  
**Term Offered:** Spring and Fall

MATH 19 - Fundamentals of College Mathematics I  
**Units:** 3  
This is the first half of a 2-semester course covering Math 120 content. Presentation is adapted to needs of students with learning or physical disabilities. Enrollment by departmental permission. (Credit does not apply to any baccalaureate degree program.) Mathematical concepts particularly relevant to informed and aware citizenship in modern society. Topics covered include functions, graphs, problem solving, topics in finance, geometry, probability and statistics. Satisfies UNR core curriculum. Note: Computer use and graphing calculator may be required (TI-83/84 recommended).  
**Transferability:** May not transfer towards an NSHE bachelor’s degree  
**Enrollment Requirements:** Prerequisite: A grade of ‘C’ or better in MATH 96 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (within 2 years). A grade of ‘B-’ or better in MATH 95 in lieu of MATH 96.  
**Term Offered:** AS NEEDED

MATH 20 - Learning Support for MATH 120/120E-2 credits  
**Units:** 2  
Provides a review of algebra, corequisite mathematical support, and just in time material for MATH 120, Fundamentals of College Mathematics.  
**Transferability:** May not transfer towards an NSHE bachelor’s degree

MATH 24 - Learning Support for MATH 124/124E - 3 credits  
**Units:** 3  
This course provides the just-in-time algebraic support for Math 124. The course will refresh, review and introduce a variety of concepts to be successful in Math 124, College Algebra, including exponents and their properties, polynomials, rational and radical expressions, graphing, interval notation, proportions and variations.  
**Transferability:** May not transfer towards an NSHE bachelor’s degree  
**Enrollment Requirements:** ACT of at least 17 or Accuplacer Score NGAR of at least 263.

MATH 283 - Calculus III  
**Units:** 4  
A continuation of Math 182. Topics covered include vectors, differentiating and integrating functions of many variables, optimization, parametric curves and surfaces, line integrals, flux integrals and vector fields. Throughout the course topics will be viewed geometrically, numerically and algebraically. This course is oriented toward students of mathematics, physical science and engineering. Note: Computer use and graphing calculator may be required (TI-83/84 recommended).  
**Enrollment Requirements:** Prerequisite: A grade of ‘C’ or better in MATH 182 (taken within 2 years).  
**Term Offered:** Spring and Fall

MATH 285 - Differential Equations  
**Units:** 3  
Theory and solving techniques for constant and variable coefficient linear equations and a variety of non-linear equations. Emphasis on those differential equations arising from real world phenomena. Note: Computer use and graphing calculator may be required (TI-83/84 recommended).  
**Enrollment Requirements:** Prerequisite: A grade of ‘C’ or better in MATH 182 or equivalent. A graphing calculator may be required for this course.  
**Term Offered:** Spring and Fall

MATH 295 - Proof Writing for Math/Stat Major  
**Units:** 3  
Foundations of mathematical proof writing for advanced courses in the Math/Stat majors. Proof methods will be applied to topics in logic; mathematical induction; elementary set theory; functions; properties of integers and real numbers.  
**Enrollment Requirements:** Math 283 with a C or better

MATH 330 - Linear Algebra  
**Units:** 3  
Vector analysis continued; abstract vector spaces, bases, inner products, projections, orthogonal complements, least squares, linear maps, structure theorems, elementary spectral theory, applications.  
**Enrollment Requirements:** Co-requisite: Math 283
MATH 90 - Continuing Studies in Math  
Units: 0.5-3  
This developmental course is for assessment purposes. Developmental students may register for this course without taking Accuplacer.  
Enrollment Requirements: Prerequisite: MATH 93 or equivalent or qualifying Accuplacer score, ACT/SAT test results.  
Term Offered: Spring and Fall

MATH 92 - Algebra Review  
Units: 1  
Provides a review of algebra that will refresh previously taught concepts.  
Term Offered: AS NEEDED

MATH 95 - Elementary Algebra  
Units: 3  
A first course in algebra. Topics covered include the fundamental operations on real numbers, first degree equations, inequalities in one variable, polynomials, integer exponents, solving quadratic equations by factoring. Note: Computer use and graphing calculator may be required (TI-83/84 recommended).  
Enrollment Requirements: Prerequisite: SKC 80, CTM 85, CTM 86, CTM 87, qualifying ACCUPLACER, ACT/SAT test results or equivalent (taken within 2 years).  
Term Offered: All Semesters

MATH 96 - Intermediate Algebra  
Units: 3  
A second course in algebra. Topics covered include: solving quadratic, rational and radical equations, simplifying rational and radical expressions and complex numbers, and solving application problems. Note: Computer use and graphing calculator may be required (TI-83/84 recommended).  
Enrollment Requirements: Prerequisite: A grade of 'C' or better in MATH 95 or equivalent or qualifying ACCUPLACER, ACT/SAT test results (taken within 2 years).  
Term Offered: All Semesters

MATH 96A - Intermediate Algebra - Basic Properties  
Units: 1  
This course is a co-requisite course for MATH 120E. Students need to be enrolled in both MATH 96A and MATH 120E. This course reviews the algebraic concepts needed to be successful in Math 120. Topics include, but are not limited to, exponents and radicals, solving linear, nonlinear, and absolute value equations and inequalities, and algebraic techniques involving exponents, radical, rational expressions and their applications.  
Enrollment Requirements: You MUST enroll in MATH 120-2207, MATH 20-2207 meets just before the MATH 120-2207  
Term Offered: AS NEEDED

MATH 96D - Algebra Review for Math 126  
Units: 2  
This course is a corequisite course for MATH 126E. Students need to be enrolled in both MATH 096D and MATH 126E. This course reviews the algebraic concepts needed to be successful in Math 126. Topics include, but are not limited to, algebraic operations of polynomials and rational expressions, solving nonlinear and absolute value equations and inequalities, and algebraic techniques involving exponents and radicals and their applications.  
Enrollment Requirements: Enroll in MATH 20-2207-OR-have the following prereq completed within 2 years: Grade of A or B in MATH 95-or-grade of C or better in MATH 96 (or equivalent)-or-WCSD Pathways,qualifying ACCUPLACER, ACT/SAT test scores.  
Term Offered: AS NEEDED