MATH - MATHEMATICS

MATH 0097 Developmental Math I (4-0-4)
Review of basic mathematics and introductory algebra with emphasis on applications, including linear functions and related topics. Non-degree credit.

MATH 0098 Developmental Math II (4-0-4)
Prerequisite: MATH 0097 or required COMPASS score. Review of essential topics of basic algebra with emphasis on applications, including linear and quadratic functions and related topics. Non-degree credit.

MATH 0997A Support for Quantitative Reasoning A (0-6-3)
Co-requisite: MATH 1001 Quantitative Reasoning. This Learning Support course provides corequisite support in mathematics for students enrolled in MATH 1001 – Quantitative Reasoning. Topics will parallel topics being studied in MATH 1001 and the course will provide support for the essential quantitative skills needed to be successful in MATH 1001. Taken with MATH 1001, topics to be covered will include logic, basic probability, data analysis and modeling from data.
Prerequisite(s): Math Course Placement with a score of 0997C and MATH 1001 (may be taken concurrently) with a minimum grade of D

MATH 0997B Support for Quantitative Reasoning B (0-4-2)
Co-requisite: MATH 1001 Quantitative Reasoning. This Learning Support course provides corequisite support in mathematics for students enrolled in MATH 1001 – Quantitative Reasoning. Topics will parallel topics being studied in MATH 1001 and the course will provide support for the essential quantitative skills needed to be successful in MATH 1001. Taken with MATH 1001, topics to be covered will include logic, basic probability, data analysis and modeling from data.
Prerequisite(s): Math Course Placement with a score of 0997B and MATH 1001 (may be taken concurrently) with a minimum grade of D

MATH 0997C Support for Quantitative Reasoning C (0-2-1)
Co-requisite: MATH 1001 Quantitative Reasoning. This Learning Support course provides corequisite support in mathematics for students enrolled in MATH 1001 – Quantitative Reasoning. Topics will parallel topics being studied in MATH 1001 and the course will provide support for the essential quantitative skills needed to be successful in MATH 1001. Taken with MATH 1001, topics to be covered will include logic, basic probability, data analysis and modeling from data.
Prerequisite(s): Math Course Placement with a score of 0997C and MATH 1001 (may be taken concurrently) with a minimum grade of D

MATH 0999A Support for College Algebra A (0-6-3)
Co-requisite: MATH 1111 College Algebra. This Learning Support course provides co-requisite support in mathematics for students enrolled in MATH 1111 – College Algebra. Topics will parallel topics being studied in MATH 1111 and the course will provide support for the essential quantitative skills needed to be successful in MATH 1111. Taken with MATH 1111, this course provides an in-depth study of the properties of algebraic, exponential and logarithmic functions as needed for calculus. Emphasis is on using algebraic and graphical techniques for solving problems involving linear, quadratic, piece-wise defined, rational, polynomial, exponential and logarithmic functions.
Prerequisite(s): Math Course Placement with a score of 0999A and MATH 1111 (may be taken concurrently) with a minimum grade of D

MATH 0999B Support for College Algebra B (0-4-2)
Co-requisite: MATH 1111 College Algebra. This Learning Support course provides co-requisite support in mathematics for students enrolled in MATH 1111 – College Algebra. Topics will parallel topics being studied in MATH 1111 and the course will provide support for the essential quantitative skills needed to be successful in MATH 1111. Taken with MATH 1111, this course provides an in-depth study of the properties of algebraic, exponential and logarithmic functions as needed for calculus. Emphasis is on using algebraic and graphical techniques for solving problems involving linear, quadratic, piece-wise defined, rational, polynomial, exponential and logarithmic functions.
Prerequisite(s): Math Course Placement with a score of 0999B and MATH 1111 (may be taken concurrently) with a minimum grade of D

MATH 0999C Support for College Algebra C (0-2-1)
Co-requisite: MATH 1111 College Algebra. This Learning Support course provides co-requisite support in mathematics for students enrolled in MATH 1111 – College Algebra. Topics will parallel topics being studied in MATH 1111 and the course will provide support for the essential quantitative skills needed to be successful in MATH 1111. Taken with MATH 1111, this course provides an in-depth study of the properties of algebraic, exponential and logarithmic functions as needed for calculus. Emphasis is on using algebraic and graphical techniques for solving problems involving linear, quadratic, piece-wise defined, rational, polynomial, exponential and logarithmic functions.
Prerequisite(s): Math Course Placement with a score of 0999C and MATH 1111 (may be taken concurrently) with a minimum grade of D

MATH 1001 Quantitative Skills and Reasoning (3-0-3)
This course is for students needing practical, comprehensive instruction, with a focus on life applications, college level study abilities, and clear understanding of mathematics for additional coursework, careers and everyday living. NOTE: This course is an alternative in Area A of the General Education Core Curriculum and is not intended to supply sufficient algebraic background for students who intend to take College Algebra, Pre-calculus, or Calculus. Students may not receive credit for both MATH 1001 and MATH 1101.
Prerequisite(s): (Math Course Placement with a score of 110B or Math Course Placement with a score of 1001 or Math Course Placement with a score of 1101 or Math Course Placement with a score of 1111 or Math Course Placement with a score of 1113 or Math Course Placement with a score of 1125 or Math Course Placement with a score of 1131 or Math Course Placement with a score of 0110S or MATH 1101 with a minimum grade of D or MATH 1111 with a minimum grade of D or MATH 1113 with a minimum grade of D or MATH 1125 with a minimum grade of D or MATH 1131 with a minimum grade of D)
Restriction(s):
Students cannot enroll who have a major in Biology - Teacher Cert, Mathematics - Teacher Cert, Biology, Biology and Secondary Ed, Pre-Engineering/RETP, Chemistry, Chemistry and Secondary Ed, Earth and Space Science Sec Ed, Mathematics, Comp Sci - Software Systems, Comp Sci - Applied Computing or Comp Sci - Games Programming.

MATH 1101 Introduction to Mathematical Modeling (3-0-3)
This course is an introduction to mathematical modeling using graphical, numerical, symbolic, and verbal techniques to describe and explore real-world data and phenomena. Emphasis is on the use of elementary functions to investigate and analyze applied problems and questions, supported by the use of appropriate technology, and on effective communication of quantitative concepts and results. NOTE: This course is an alternative in Area A of the General Education Core Curriculum and is not intended to supply sufficient algebraic background for students who intend to take College Algebra, Pre-calculus, or Calculus. Students may not receive credit for both MATH 1001 and MATH 1101.
Prerequisite(s): (Math Course Placement with a score of 110B or Math Course Placement with a score of 1101 or Math Course Placement with a score of 1111 or Math Course Placement with a score of 1113 or Math Course Placement with a score of 1125 or Math Course Placement with a score of 1131 or Math Course Placement with a score of 0110S or MATH 1111 with a minimum grade of D or MATH 1113 with a minimum grade of D or MATH 1125 with a minimum grade of D or MATH 1131 with a minimum grade of D)

MATH 1111 College Algebra (3-0-3)
Prerequisite: Satisfactory Mathematics Placement. This course is a functional approach to algebra that incorporates the use of appropriate technology. Emphasis will be placed on the study of functions, and their graphs, inequalities, and linear, quadratic, piece-wise defined, rational, polynomial, exponential, and logarithmic functions. Appropriate applications will be included. Course is designed to develop algebraic concepts to a level sufficient for the study of calculus.
Prerequisite(s): (Math Course Placement with a score of 1111 or Math Course Placement with a score of 1113 or Math Course Placement with a score of 1125 or Math Course Placement with a score of 1131 or MATH 0195 with a minimum grade of D< or MATH 1001 with a minimum grade of C or MATH 1101 with a minimum grade of C)

MATH 1113 Pre-Calculus (4-0-4)
This course is designed to prepare students for calculus, physics, and related technical subjects. Topics include an intensive study of algebraic and transcendental functions accompanied by analytic geometry and trigonometry.
Prerequisite(s): MATH 1125 or MATH 1501 or MATH 1131 or MATH 1111 with a minimum grade of C

MATH 1125 Applied Calculus (3-0-3)
Prerequisite: MATH 1111 with a grade of C or better, MATH 1113 with a grade of C or better, or an appropriate math placement score. Introduction to limits and continuity, differential calculus of algebraic, exponential, and logarithmic functions and integration. Applications in the fields of the behavioral, biological, and managerial sciences are included.
Prerequisite(s): MATH 1111 with a minimum grade of C or MATH 1113 with a minimum grade of C

MATH 1131 Calculus with Analytic Geometry I (4-0-4)
Prerequisite: MATH 1113 with a grade of C or better or an appropriate math placement score. Topics include exponential and logarithmic functions, introduction to limits and derivatives, computation and application of derivatives, and the definite integral.
Prerequisite(s): Math Course Placement with a score of 1131 or MATH 1113 with a minimum grade of C

MATH 1132 Calculus with Analytic Geometry II (4-0-4)
Prerequisite: MATH 1131 with a grade of C or better. Topics include the definite and indefinite integrals, improper integrals, techniques of integration, applications of integration, and infinite sequences and series.
Prerequisite(s): MATH 1131 with a minimum grade of C or MATH 1501 with a minimum grade of C

MATH 1165 Computer-Assisted Problem Solving (3-0-3)
Prerequisite or Co-requisites: MATH 1125 or MATH 1131. Problem solving using contemporary technology such as graphing calculators, spread sheets, and computer algebra systems. Topics may include interpolation; linear regression; elementary differential models; and an introduction to the fundamentals of computer algebra systems, including manipulation of lists, sets, data structures, functions, plots, and program control structures.
Prerequisite(s): MATH 1125 with a minimum grade of C or MATH 1131 with a minimum grade of C

MATH 1401 Introduction to Statistics (3-0-3)
The course is a course in basic statistics. Topics include descriptive statistics, probability, distributions, hypothesis testing, inferences, correlation, and regression. Course available through eCore.

MATH 1501 Calculus I (4-0-4)
This course includes material on functions, limits, continuity, the derivative, anti-differentiation, the definite integral, and techniques of integration. This course is available through eCore.
Prerequisite(s): eCore Introduction with a score of C and MATH 1113 with a minimum grade of C

MATH 2008 Foundations of Numbers and Operations (3-0-3)
Prerequisite: Completion of any of the following courses with a grade of "C" or better: MATH 1001, MATH 1101, MATH 1111, MATH 1113, MATH 1125, or MATH 1131, and a declared major of Education. An exploration of number systems (whole numbers, integers, rational numbers and real numbers), the relationships between these systems. Understanding operations, including why standard computational algorithms work. Problem solving using multiple strategies and appropriate technology. This course will not count toward the mathematics minor.
Prerequisite(s): MATH 1001 with a minimum grade of C or MATH 1101 with a minimum grade of C or MATH 1111 with a minimum grade of C or MATH 1113 with a minimum grade of C or MATH 1125 with a minimum grade of C or MATH 1131 with a minimum grade of C or MATH 1113H with a minimum grade of C or MATH 1131H with a minimum grade of C
Restriction(s):
Students cannot enroll who have a major in Mathematics.

MATH 2115 Introduction to Linear Algebra (3-0-3)
Prerequisite or Co-requisite: MATH 1131. Systems of linear equations, matrix algebra, vector spaces, bases for a vector space, linear transformations, eigenvalues and eigenvectors, and matrix decompositions.
Prerequisite(s): MATH 1131 (may be taken concurrently) with a minimum grade of D or MATH 1131H with a minimum grade of D

MATH 2125 Introduction to Discrete Mathematics (3-0-3)
Prerequisites: MATH 1113 or MATH 1131 with a grade of C or better or a satisfactory math placement score. Topics include logic and proof, sets, functions, algorithms, the integers, matrices, mathematical reasoning, induction, recursion, counting, discrete probability, relations, graphs, trees, and Boolean algebra.
Prerequisite(s): MATH 1113 with a minimum grade of C or MATH 1113H with a minimum grade of C or MATH 1131 with a minimum grade of C or MATH 1131H with a minimum grade of C

MATH 2135 Calculus with Analytic Geometry 3 (4-0-4)
Prerequisite: MATH 1132 with a grade of C or better. Topics include parametric equations and polar coordinates, vectors, dot and cross products, vector functions of one real variable, real valued functions of several variables, differential calculus of functions of several variables, and multiple integrals.
Prerequisite(s): MATH 1132 with a minimum grade of C or MATH 1132H with a minimum grade of C

MATH 3106 Mathematical Theory of Interest (3-0-3)
Prerequisite: MATH 1125 or MATH 1131 with a grade of C or better. Measurement of interest, time value of money, annuities, amortization and sinking funds, bonds, depreciation, capitalized cost and finance applications including net present value, yield rates, and stock and option pricing.
Prerequisite(s): MATH 1125 with a minimum grade of C or MATH 1131 with a minimum grade of C

MATH 3107 Differential Equations (3-0-3)
Analytic, qualitative, and numerical techniques for ordinary differential equations. Eigenvalue method and matrix exponential for solving linear systems. Laplace transform methods. Use of appropriate software and technology.
Prerequisite(s): MATH 1132 with a minimum grade of C and MATH 2115 with a minimum grade of C

MATH 3108 Introduction to Actuarial Science (3-0-3)
An introduction to risk management in property/casualty and life insurance. Applications of calculus. Applications of probability.
Prerequisite(s): MATH 3175 with a minimum grade of C

MATH 3139 Mathematical Preparation for Business, Industrial, and Government Careers (3-0-3)
The goal of the course is to engage students in business, industrial, and government research as upperclassmen in problems outside of academia which are mathematical in nature. In this course, students work in groups to complete mathematical research projects from local businesses, industry, and government. Students learn to interact in a business setting, manage deadlines, produce technical documents, and think critically to find solutions.
Prerequisite(s): (STAT 1401 with a minimum grade of C and MATH 1131 with a minimum grade of C) or (STAT 1401 with a minimum grade of C and MATH 1131H with a minimum grade of C) or (STAT 1127 with a minimum grade of C and MATH 1131 with a minimum grade of C) or (STAT 1127H with a minimum grade of C and MATH 1131 with a minimum grade of C) or (STAT 1127 with a minimum grade of C and MATH 1131H with a minimum grade of C) or (STAT 1127H with a minimum grade of C and MATH 1131H with a minimum grade of C)
Restriction(s):
Enrollment limited to Junior or Senior students.
Enrollment limited to students major in Mathematics.
Enrollment limited to students in the College of Letters Sciences college.

MATH 3155 Introduction to Mathematical Proofs (3-0-3)
Preparation in mathematical reasoning and proof-writing necessary for upper division course work in mathematics. Topics include fundamentals of logic, techniques of proof, sets and relations, equivalence relations and partitions, divisibility, mathematical induction, and functions (including injectivity and surjectivity).
Prerequisite(s): MATH 3154 with a minimum grade of C or (MATH 2125 with a minimum grade of C and MATH 1131 with a minimum grade of C)

MATH 3175 Introduction to Probability (3-0-3)
Topics include counting techniques, discrete and continuous random variables, discrete, continuous and multivariate probability distributions, and functions of random variables. Appropriate uses of technology will be implemented to analyze data and to simulate random variables from specified probability distributions. Applications of probability.
Prerequisite(s): MATH 1132 with a minimum grade of C

MATH 3556 Selected Topics in Mathematics (3-0-3)
Prerequisite: Consent of the instructor. This course provides an opportunity for faculty to propose study of topics not normally available to students in existing curricula. Topics for this course will vary.

MATH 4195 Undergraduate Research (3-0-3)
Prerequisite: Math 3155 with a grade of C or better and consent of the Department Chair. Student selection of a research topic, completion of a written research proposal, and in association with a faculty mentor, the execution of the research plan. Each student will prepare both written and oral presentations of the work, and where appropriate, students will be encouraged to make presentations at regional or professional meetings, or submit work to a journal for publication.
Prerequisite(s): MATH 3155 with a minimum grade of C
Restriction(s):
Enrollment limited to students in the Department Prerequisite college.

MATH 4698 Internship in Mathematics (0-0-(3-6))
Prerequisite: MATH 1132 with a minimum grade of C. Practical, supervised experience in the field with an approved company or organization. Students will take on projects that require the application of calculus based techniques such as mathematical modeling and simulation.
Prerequisite(s): MATH 1132 with a minimum grade of C
Restriction(s):
Freshman or Sophomore students may **not** enroll.

MATH 4715 Putnam Exam Preparation (2-0-1)
Prerequisite: MATH 3155 with a grade of C or better. The course is designed to prepare students for the Putnam Exam (a competitive national mathematics exam for undergraduates) which is scheduled for the first Saturday in December. The topics covered are proof techniques used in undergraduate mathematics: by contradiction, by induction, by invariance principle, pigeon whole principle, optimization principle, and other add-hock methods in the context of solving old Putnam problems or similar ones.
Prerequisite(s): MATH 3155 with a minimum grade of C

MATH 4795 Senior Seminar in Mathematics (3-0-3)
Prerequisites: Senior standing and a grade of "C" or better in MATH 5111 or in MATH 5151 or approval of the department chair. Readings and presentations in selected topics in mathematics. May be repeated for credit.
Prerequisite(s): MATH 5111U with a minimum grade of C or MATH 5151U with a minimum grade of C
Repeatability: Repeatable for credit up to 99 times or 99 hours.
Restriction(s):
Enrollment limited to Senior, Non-Degree - Undergrad PostBac or Degree - Undergrad PostBac students.

MATH 5111G Introduction to Abstract Algebra I (3-0-3)
Topics include groups, subgroups, group homomorphisms, and Lagrange's Theorem.
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5111U Introduction to Abstract Algebra I (3-0-3)
Topics include groups, subgroups, group homomorphisms, and Lagrange's Theorem.
Prerequisite(s): MATH 3155 with a minimum grade of C or MATH 3154 with a minimum grade of C

MATH 5112G Introduction to Abstract Algebra II (3-0-3)
Prerequisite: MATH 5111 with a grade of C or better. A continuation of group theory as well as study of rings, integral domains, and fields.
Prerequisite(s): MATH 5111G with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5112U Introduction to Abstract Algebra II (3-0-3)
Prerequisite: MATH 5111 with a grade of C or better. A continuation of group theory as well as study of rings, integral domains, and fields.
Prerequisite(s): MATH 511U with a minimum grade of C

MATH 5114G Set Theory (3-0-3)
Prerequisite: MATH 1125, MATH 1131, or MATH 2125 with a grade of C or better. This course is an introduction to intuitive set theory. Topics include sets, operations for sets, relations, equivalence relations, functions, ordering relations, natural numbers, cardinal numbers, and countable sets. Emphasis will be placed on the extension of the natural numbers to the real numbers. This includes Cantor.
Prerequisite(s): MATH 1125 with a minimum grade of C or MATH 1131 with a minimum grade of C or MATH 2125 with a minimum grade of C
Restriction(s):
Freshman, Sophomore, Junior or Senior students may **not** enroll.

MATH 5114U Set Theory (3-0-3)
Prerequisite: MATH 1125, MATH 1131, or MATH 2125 with a grade of C or better. This course is an introduction to intuitive set theory. Topics include sets, operations for sets, relations, equivalence relations, functions, ordering relations, natural numbers, cardinal numbers, and countable sets. Emphasis will be placed on the extension of the natural numbers to the real numbers. This includes Cantor
Prerequisite(s): MATH 1125 with a minimum grade of C or MATH 1131 with a minimum grade of C or MATH 2125 with a minimum grade of C

MATH 5116G Number Theory (3-0-3)
Prerequisite: MATH 3155 with a grade of C or better. Congruences, algebraic number fields, and prime number theorems.
Prerequisite(s): MATH 3155 with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5116U Number Theory (3-0-3)
Prerequisite: MATH 3155 with a grade of C or better. Congruences, algebraic number fields, and prime number theorems.
Prerequisite(s): MATH 3155 with a minimum grade of C

MATH 5125G Discrete Mathematics (3-0-3)
MATH 1132 with a grade of C or better or MATH 2125 with a grade of C or better. Topics include enumeration, relations, graphs, trees, and modeling computation
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5125U Discrete Mathematics (3-0-3)
Prerequisite: MATH 1132 with a grade of C or better or MATH 2125 with a grade of C or better. Topics include enumeration, relations, graphs, trees, and modeling computation.
Prerequisite(s): MATH 1132 with a minimum grade of C or MATH 2125 with a minimum grade of C

MATH 5126G Actuarial Regression and Time Series (3-0-3)
Prerequisite: Math 3175 with a grade of C or better. This course has been designed to meet the SOA requirements for VEE (Validation by Educational Experience) credit for Applied Statistical Methods. Content includes least square estimates of parameters, single linear regression, multiple linear regression, hypothesis testing and confidence intervals in linear regression models, testing of models, data analysis and appropriateness of models, linear time series models, moving average, autoregressive and/or ARIMA models, estimation, data analysis and forecasting with time series models, and forecast errors and confidence intervals.
Restriction(s):
Enrollment is limited to Graduate Level level students.
Enrollment limited to students in the Department Prerequisite college.

MATH 5126U Actuarial Regression and Time Series (3-0-3)
Undergraduate Prerequisite: Math 3175 with a grade of C or better. Graduate Prerequisite: Permission of Chair. This course has been designed to meet the SOA requirements for VEE (Validation by Educational Experience) credit for Applied Statistical Methods. Content includes least square estimates of parameters, single linear regression, multiple linear regression, hypothesis testing and confidence intervals in linear regression models, testing of models, data analysis and appropriateness of models, linear time series models, moving average, autoregressive and/or ARIMA models, estimation, data analysis and forecasting with time series models, forecast errors and confidence intervals.
Prerequisite(s): MATH 3175 with a minimum grade of C

MATH 5135G College Geometry (3-0-3)
Prerequisite: MATH 1132 or MAED 3137 with a grade of C or better. Axiomatic development of plane geometry and discussion of non-Euclidean geometry.
Prerequisite(s): MATH 1132 with a minimum grade of C or MAED 3137 with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5135U College Geometry (3-0-3)
Prerequisite: MATH 1132 with a grade of C or better. Axiomatic development of plane geometry and discussion of non-Euclidean geometry.
Prerequisite(s): MATH 1132 with a minimum grade of C or MAED 3137 with a minimum grade of C

MATH 5151G Introduction to Real Analysis I (3-0-3)
Prerequisite: MATH 3155 with a grade of "C" or better. Topology of real line, sequences, convergent sequences, monotone sequences, Cauchy sequences, limits of functions, continuous functions, the derivative, the Mean Value Theorem, L'Hospital's rule, and Taylor's theorem.
Prerequisite(s): MATH 3155 with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5151U Introduction to Real Analysis I (3-0-3)
Prerequisite: MATH 3155 with a grade of "C" or better. Topology of real line, sequences, convergent sequences, monotone sequences, Cauchy sequences, limits of functions, continuous functions, the derivative, the Mean Value Theorem, L'Hospital's rule, and Taylor's theorem.
Prerequisite(s): MATH 3155 with a minimum grade of C

MATH 5152G Introduction to Real Analysis II (3-0-3)
Prerequisite: MATH 5151 with a grade of "C" or better. The Riemann Integral, the properties of the Riemann Integral, the Fundamental Theorem of Calculus, Infinite Series, convergence of infinite series, convergence tests, power series, sequences and infinite series of functions.
Prerequisite(s): MATH 5151G with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5152U Introduction to Real Analysis II (3-0-3)
Prerequisite: MATH 5151 with a grade of "C" or better. The Riemann Integral, the properties of the Riemann Integral, the Fundamental Theorem of Calculus, Infinite Series, convergence of infinite series, convergence tests, power series, sequences and infinite series of functions.
Prerequisite(s): MATH 5151U with a minimum grade of C

MATH 5165U Numerical Analysis (3-0-3)
Prerequisites: MATH 3155 with a grade of C or better and MATH 1165 with a grade of C or better. Use of computers to solve mathematical problems. Topics may include root finding, interpolation, numerical differentiation and integration, solutions to initial value problems in ordinary differential equations. Error analysis. Use of appropriate software and technology.
Prerequisite(s): MATH 3155 with a minimum grade of C

MATH 5166U Game Theory (3-0-3)
Prerequisites: MATH 2115 and MATH 3175, both with a grade of C or better. Two and N-Person games, Solution concepts and methods, applications. Use of appropriate technology.
Prerequisite(s): MATH 2115 with a minimum grade of C and MATH 3175 with a minimum grade of C

MATH 5175G Mathematical Statistics (3-0-3)
Prerequisite: MATH 3175 with a grade of C or better. Statistical inference, estimation, tests of statistical hypotheses, multivariate distributions, linear regression. Appropriate computational devices and statistical software will be used.
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5175U Mathematical Statistics (3-0-3)
Prerequisite: MATH 3175 with a grade of C or better. Statistical inference, estimation, tests of statistical hypotheses, multivariate distributions, linear regression. Appropriate computational devices and statistical software will be used.
Prerequisite(s): MATH 3175 with a minimum grade of C

MATH 5185G History of Mathematics (3-0-3)
Prerequisite: MATH 1132 with a grade of C or better. This course is designed to acquaint the student with the development of the discipline of mathematics in various cultures from antiquity to modern times. Special emphasis will be given to the evolutionary and Multicultural character of the principal ideas of modern mathematics.
Prerequisite(s): MATH 5135 with a minimum grade of C
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5185U History of Mathematics (3-0-3)
Prerequisite: MATH 1132 with a grade of C or better. This course is designed to acquaint the student with the development of the discipline of mathematics in various cultures from antiquity to modern times. Special emphasis will be given to the evolutionary and Multicultural character of the principal ideas of modern mathematics.
Prerequisite(s): MATH 1132 with a minimum grade of C and MATH 5135U with a minimum grade of C

MATH 5555G Selected Topics in Mathematics (3-0-3)
Prerequisite: MATH 3155 with a grade of C or better. Topics for this course will vary. May be repeated for credit with consent of the advisor and if topics are different.
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 5555U Selected Topics in Mathematics (3-0-3)
Prerequisite: MATH 3155 with a grade of C or better. Topics for this course will vary. May be repeated for credit with consent of the advisor and if topics are different.
Prerequisite(s): MATH 3155 with a minimum grade of C

MATH 6301 College Geometry (3-0-3)
GOML

MATH 6505 Selected Topics in Mathematics for Teachers (3-0-3)
Prerequisite: Approval of Department Chair. Topics will be suitable for elementary and middle school teachers. Mathematics majors may not receive credit for this course.
Restriction(s):
Enrollment is limited to Graduate Level level students.

MATH 6547 Introduction to Statistical Methods (3-0-3)
GOML