

# Mathematics

## First-Year Program

**MATH-1013. Introduction to Calculus I**  
This course covers the fundamentals of differential and integral calculus. Topics include limits, derivatives, and applications of the derivative. Prerequisite: MATH-1033. Credit: 3.00

**MATH-1033. Introduction to Calculus II**  
This course covers the fundamentals of differential and integral calculus. Topics include limits, derivatives, and applications of the derivative. Prerequisite: MATH-1013. Credit: 3.00

**MATH-1103. Introduction to Mathematical Reasoning**  
This course covers the fundamentals of mathematical reasoning. Topics include logic, set theory, and proof techniques. Prerequisite: MATH-1033. Credit: 3.00

## MATH-1013. Introduction to Calculus I

This course covers the fundamentals of differential and integral calculus. Topics include limits, derivatives, and applications of the derivative. Prerequisite: MATH-1033. Credit: 3.00

## MATH-1023. Introduction to Calculus II

This course covers the fundamentals of differential and integral calculus. Topics include limits, derivatives, and applications of the derivative. Prerequisite: MATH-1013. Credit: 3.00

## MATH-1033. Finite Mathematics for the Social Sciences

This course covers the fundamentals of finite mathematics for the social sciences. Topics include probability, statistics, and linear algebra. Prerequisite: MATH-1013. Credit: 3.00

## MATH-1103. Introduction to Mathematical Reasoning

This course covers the fundamentals of mathematical reasoning. Topics include logic, set theory, and proof techniques. Prerequisite: MATH-1033. Credit: 3.00

## MATH-2213. Linear Algebra

This course covers the fundamentals of linear algebra. Topics include vector spaces, linear transformations, and eigenvalues. Prerequisite: MATH-1103. Credit: 3.00

**MATH-2513. Introduction to Logic (PHIL)**

PHIL 2513 is a course in logic, which is a branch of philosophy. It is a course that is required for students who are majoring in philosophy. The course covers the basics of logic, including propositional logic, predicate logic, and modal logic. It also covers the history of logic and the philosophy of language. The course is taught by Professor [Name].

**MATH-2613. Elementary Differential Equations**

MATH 2613 is a course in elementary differential equations. It is a course that is required for students who are majoring in mathematics. The course covers the basics of differential equations, including first-order differential equations, second-order differential equations, and systems of differential equations. It also covers the applications of differential equations. The course is taught by Professor [Name].

**MATH-3613. Partial Differential Equations**

MATH 3613 is a course in partial differential equations. It is a course that is required for students who are majoring in mathematics. The course covers the basics of partial differential equations, including Laplace's equation, Poisson's equation, and the wave equation. It also covers the applications of partial differential equations. The course is taught by Professor [Name].

**Math-3813. Introduction to Logic (PHIL 3813)**

PHIL 3813 is a course in logic, which is a branch of philosophy. It is a course that is required for students who are majoring in philosophy. The course covers the basics of logic, including propositional logic, predicate logic, and modal logic. It also covers the history of logic and the philosophy of language. The course is taught by Professor [Name].

**MATH-3913. Statistics with Applications**

MATH 3913 is a course in statistics with applications. It is a course that is required for students who are majoring in mathematics. The course covers the basics of statistics, including descriptive statistics, inferential statistics, and regression analysis. It also covers the applications of statistics. The course is taught by Professor [Name].

**Independent Study**

**MATH-4013. Independent Study**

MATH 4013 is a course in independent study. It is a course that is required for students who are majoring in mathematics. The course allows students to work on a project or paper of their own choosing. The course is taught by Professor [Name].

