

In Math 1310, students learn about:

- Functions, Compositions, Exponentials, Logarithms, Inverses
- Parametric Curves, Velocity, Limits, Limit Laws
- Continuity, Derivatives, Rate of Change
- Relationship between a Function and its Derivative
- Derivatives of Polynomials, Exponentials, Products and Quotients
- Derivatives of Trig Functions, Chain Rule, Implicit Differentiation
- Inverse Trig Functions, Logs and their Derivatives, Applications
- Linear Approximation, Differentials, Related Rates, Max/Min
- Shapes of Curves, Graphing, l'Hopital's Rule
- Optimization, Newton's Method, Anti-derivatives
- Areas, Distances, Evaluating Definite Integrals
- Fundamental Theorem of Calculus, Substitution, Integration by Parts
- Integration Techniques, Approximate Integration
- Improper Integrals, Areas Between Curves, Volumes via shells, cylinders