

# MATH& 152 : Calculus II

**Credits** 5

**Quarter Offered** Winter

Integration involving algebraic and transcendental functions. Applications of integration, including an introduction to differential equations. This class may include students from multiple sections. (Quantitative Skills, Natural Sciences, Elective)

**Prerequisites**

2.0 or higher in [MATH& 151](#) or equivalent

**Course Outcomes**

Students who successfully complete this class should be able to:

State the Fundamental Theorem of Calculus and apply it to solve definite integrals.

Use various integration techniques to calculate definite, indefinite, and improper integrals.

Calculate areas between curves, volumes, arc lengths, and areas of a surface of revolution.

Use integration to solve separable differential equations.