### MATH 1179: Calculus I for Life Sciences

#### **4 Credit Hours**

Prerequisite: MATH 1113, or By Placement

This is a first course in Calculus in which special emphasis will be given to using the tools of calculus to build and analyze mathematical models, especially those arising in the life sciences. This course introduces the central concepts of single variable calculus including limits, derivatives, and integrals of algebraic and transcendental functions with particular motivations from and application to the Biological Sciences.

Notes: Students completing this course may not also receive credit for MATH 1190. This course is not appropriate for mathematics, chemistry/biochemistry, physics, computer science, or engineering technology majors or minors. Credit for MATH 1189 can be combined with credit for MATH 1179 to satisfy the prerequisite for MATH 2202.

# MATH 1189: Bridge to Calculus II

### **1 Credit Hours**

Prerequisite: MATH 1179

This 1-hour course is for students who have completed Calculus for Life Sciences and will prepare them to be successful in Calculus II. A brief review of Calculus I is provided with special emphasis on select topics that are not covered in MATH 1179. These include Continuity, Limits involving infinity, Calculus of Inverse Trigonometric functions, The Mean Value Theorem, and L'Hôpital's rule.

# MATH 1190: Calculus I

### **4 Credit Hours**

Prerequisite: MATH 1113, or By Placement

This course is the first in the calculus curriculum and introduces the central concepts of calculus. Topics include limits, continuity, derivatives of algebraic and transcendental functions of one variable, applications of these concepts and a brief introduction to the integral of a function.