



Mathematics of Biological Systems I

Fall 2022, MTuWTh 1:25-2:15 pm

MA168 may be taken by biology students instead of the regular Calculus I course (MA 125) and is designed specifically to satisfy the mathematical needs at this level of life science students in general. Unlike the regular Calculus I course (which tends to be devoid of practical life science applications, such as predator-prey populations, hormone regulation and how to stop the spruce budworm from eating our trees), we begin with these and carefully isolate the need for Calculus, before tackling the Calculus itself. To assist with visualization, plotting, and simulation you will learn to use the Python-based software SageMath with the added bonus of learning to program in Python as you figure out how Calculus works. We assume no prior programming knowledge.

Prerequisite: MA106 or MA107, or equivalent

The placement test requirements are the same as those for MA 125, and a follow up course MA268 is planned for Spring 2023.