

Applied Calculus

There are many reasons that a student might decide to take math. Here are a few:

- A deep love and appreciation for all things mathematical.
- It's a prerequisite for another course or program of study that interests them.
- It satisfies the math requirement for a degree or for transfer.
- They would like to develop their reasoning and logic skills to be more marketable in the work force.

The course introduces the derivative, one of the coolest concepts ever developed by humans. We will start by reviewing functions and function ideas that you should be somewhat familiar with from algebra, then go on to define limits and derivatives, then see how calculus makes certain types of questions answerable. Although there are more business applications than any other type, our textbook has applications in other fields as well. Of course, the ideas can be applied to any field!

To give you an idea of what I expect you to come out of this class with, I will share three Student Learning Outcomes with you. They are:

At the end of the semester:

- Students will be able to solve real world application problems using the concepts of an average or instantaneous rate of change and will use appropriate techniques for solving such problems.
- Students will recognize, apply, and interpret multiple representations (graphic, symbolic, numerical/data, verbal/applied) of the derivative and its applications.
- Students will develop skills and attitudes for effectively solving problems at an applied calculus level.