

# 12021 Calculus for Life Sciences (4)

## **Knowledge**

Should understand the differential and integral calculus using examples and problems in life sciences.

## **Comprehension**

Should understand the notions of Limits, Derivatives, and Continuous Time Phenomena, as well as First Order Differential Equations and the Integral, and The Solution of Autonomous (Separable) Equations.

## **Application**

The main and most important application is to solve many different problems related to the subject.

## **Analysis**

Should be able to use analytic skills to Diffusion across a membrane problems and a model for neuron firing: Fitzhugh-Nagumo Equations.

## **Synthesis**

Should be able to apply the abstract thinking to the real life problems.

## **Evaluation**

Should complete homework, pass mid-term tests and a final exam.

## **Class Activities**

To solve problems in class and discuss theorems.

## **Out of class Activities**

To submit homework assignments.