

Basic concepts and tools in our course, ‘Mathematics for the Life Sciences,’ will be presented. This course is designed to train the future ‘new biologists,’ undergraduate students with a broad spectrum of majors, connected with the life sciences. The goals and methods include

- Develop a student’s ability to quantitatively analyze problems arising in biological areas.
- Illustrate the utility of mathematical models to provide answers to key biological problems.
- Develop an appreciation of the diversity of mathematical approaches potentially useful in the life sciences.
- Provide experience using computer software to analyze data, investigate mathematical models and provide some exposure to programming.

The course starts with statistics, discrete models and probability, and then calculus concepts come in the second semester. The text for this course is being developed by Erin Bodine, Louis Gross and Suzanne Lenhart.