1035-B1-629   **James P. Peirce*** (`peirce.jame@uwlax.edu`), University of Wisconsin - La Crosse, Mathematics Department, 1725 State Street, La Crosse, WI 54601. *BioMath I: Getting Biology Students Prepared for a Course in Mathematical Biology.* Preliminary report.

The University of Wisconsin - La Crosse is currently developing a biomathematics course, BioMath, introducing biology majors (with no calculus pre-requisite) to calculus and statistics-based mathematical modeling in biology. Unlike a traditional calculus course for the life sciences, BioMath takes the perspective of a biologist trying to set up a mathematical model based upon experimental observations. Students are asked to analyze data, provided in part by our biology faculty, drawing sound conclusions about the underlying processes using their developing knowledge of calculus and statistics.

The course content includes topics in discrete-time dynamical systems, probability, differential and integral calculus. Students who successfully complete this course will be able to participate equally with math majors in a mathematical biology course.

In this talk I will present an overview of the course content including a couple of specific examples that illustrate the course goals. In addition I will report on recent data accessing student's connections of biological scenarios with the graphs of elementary functions. (Received September 12, 2007)