

1023-K1-1826 **Joseph F. Kolacinski*** (jkolacinski@elmira.edu), Elmira College, One Park Place, Elmira, NY , and **John E. Beam** (beam@uwosh.edu), Mathematics Department, 800 Algoma Blvd., Oshkosh, WI 54901-8631. *Biology Content in Calculus Labs*. Preliminary report.

Many applications of Mathematics in Biology involve higher levels of mathematics such as Differential Equations and Dynamical Systems, while many Biology students never take mathematics classes that advanced. In order to enhance the mathematical background of their Biology Majors, the University of Miami developed a learning community linking the first year sequence in Biology with Calculus I and II. This learning community existed for 3 academic years, from 1998 to 2001.

The centerpiece of the program was a series of Mathematica labs demonstrating how the concepts and methods of Elementary Calculus can be applied to naturally occurring biological questions. These labs were recently reconfigured for MAPLE, expanded, and used in the Freshman Calculus sequence at Elmira College. In this presentation we will give an overview of the Learning Community, give several examples of the biological content in the calculus labs and discuss student outcomes. (Received September 27, 2006)