

1035-B1-1800 **Glenn Ledder*** (gledder@math.unl.edu), Department of Mathematics, 203 Avery Hall,
University of Nebraska-Lincoln, Lincoln, NE 68588-0130. *Probability and dynamical systems for
biology students with minimal calculus background.* Preliminary report.

Biology educators are largely agreed on the need for their students to learn more mathematics, yet their curricula have little room for new courses. At the University of Nebraska-Lincoln, biology students take two mathematics courses, Calculus I and either statistics or any course with a calculus prerequisite. Based on input from quantitatively-oriented ecologists, it became clear that the appropriate second course should look nothing like Calculus II; instead, it should focus on probability (with applications in statistics) and dynamical systems, both discrete and continuous. This discovery poses a pedagogical challenge: how to package these advanced topics in a way that is useful to students with only a Calculus I background. In this talk, we report on successes and failures in our attempts to meet this challenge. (Received September 20, 2007)