Laurie J Heyer* (laheyer@davidson.edu), Box 6959, Davidson, NC 28035-6959. A Two-Semester Sequence in Calculus and Modeling.

Because of the changing nature of biology and medicine, future life scientists need a broader background in mathematics than the traditional calculus sequence. We have integrated topics from single and multi-variable calculus, discrete dynamical systems, differential equations, linear algebra, and probability into a two semester introductory calculus and modeling sequence. All topics are motivated by examples in the life sciences. I will describe my course development process and report on outcomes from the first semester. (Received September 20, 2007)