1014-Z1-1759 Raina S. Robeva* (robeva@sbc.edu), Department of Mathematical Sciences, Sweet Briar College, Sweet Briar, VA 24595, and Michael L. Johnson (mlj8e@virginia.edu), University of Virginia School of Medicine, Charlottesville, VA 22901. Teaching Undergraduate Courses in Biomathematics. Preliminary report.

As contemporary characterization of biological systems reaches unparalleled level of detail, virtually any advance in the life sciences requires sophisticated mathematical approaches. Modeling of biological systems is evolving into an important partner of experimental work. As a result there is a rapidly increasing demand for people with training in the field of biomathematics.

We present two interdisciplinary courses designed for an undergraduate audience of students with minimal background in calculus and statistics, created jointly by faculty from Sweet Briar College and the University of Virginia School of Medicine with funding from the National Science Foundation and the National Institutes of Health. Both courses utilize a hands-on approach using contemporary projects based on ongoing research at the UVA School of Medicine. We discuss the educational results of our approach as well as share successes, problems, and key questions that were raised in the context of teaching the courses. (Received September 29, 2005)