Bates College began offering Mathematical Models in Biology in 1995. This course, cross-listed in both math and biology, was originally designed by faculty in both departments as a 100-level elective. Over the intervening years, the distribution of students taking the class has changed and the nation has seen a push for increased integration of biology with mathematics. For these reasons, and catalyzed by a college-wide change in general education requirements, we are now reorganizing the class. Our goals include appealing to a broader range of students, incorporating Math & Bio 2010 recommendations, and transforming this elective into a more central component of the math curriculum.

This talk begins by sharing the successes and challenges of eleven years with our original Math/Biology course. These include ideas on constructing such a class as well as choosing which requirements it fulfills; in our experience such administrative decisions have a huge influence on the population of students who take the class. We then share some specific plans for our newly designed course, from content to position within the broader curriculum for math and biology students. As a conclusion, we invite ideas from faculty at other schools who are designing or considering similar courses. (Received September 25, 2006)