Sarah A Hews* (shews@hampshire.edu) and Christina Cianfrani. Introducing Mathematical Modeling and Improving Quantitative Skills in Collaborative Courses.

The First Year Integrated Sciences Program is a new initiative at Hampshire College that aims to challenge students to learn about complex systems and systems thinking, improve quantitative skills, make connections among fields of science, to design innovative collaborative projects, and create a vibrant science community. During the first semester of the new program, three natural science faculty combined to teach three quantitative science courses centered around a new Living Building on campus. The three courses were Water, Carbon, and Nutrient Flows in a Living Building, Modeling Systems in a Living Building, and Microbes in a Living Building. Student met with their respective classes twice a week learning field specific skills and met all together once a week to complete interdisciplinary labs. In this talk the faculty who taught the collaborative courses will give a brief overview of the program, describe in detail the structure of the collaborative courses including how quantitative skills and mathematical modeling were included, and share data collected on the effectiveness of the collaborative courses. (Received September 22, 2015)