1116-K1-443 Angela B. Shiflet* (shifletab@wofford.edu) and George W. Shiflet. Using Agent-Based Modeling to Gain Insight into the Natural World.

With enhanced computational abilities and upsurge in quantities of data, scientists routinely implement computation to test hypotheses and direct their research. We have developed a course that employs computational approaches to investigate scientific questions. In the course, students explore science concepts and, using computational tools and algorithmic thinking, apply the scientific method to understand the natural world. Fulfilling a science requirement, the course is designed to be taught by faculty from any mathematics, science, or computer science department. We report here on the implementation of the course over a two-semester period with different instructors. (Received September 01, 2015)