In the first Calculus course at Wartburg College, students start with Euler’s Method learning how to compute numerical solutions of differential equations. Examples include drug metabolism, parachute air resistance, predator-prey systems, and bungee cords. As a final project, students find journal articles from partner disciplines and replicate the models with the numerical solution software. The course develops geometric intuition and the language of differential equations and is a fundamental part of the Calculus sequence we offer to all science, Engineering and math students. We will discuss practical considerations for delivering this class as well as the advantages for the students. (Received September 12, 2013)