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Courtney L Davis* (courtney.davis2@pepperdine.edu) and **Timothy A Lucas** (timothy.lucas@pepperdine.edu). *Teaching Modeling Through Poster Projects in Differential Equations.*

In order to emphasize mathematical modeling within our curriculum, we have incorporated semester-long modeling projects into our Ordinary Differential Equations class. In these projects, the students develop and analyze differential equation models to investigate applications beyond mathematics. They choose a quantitative question to explore, make simplifying assumptions, develop model equations, conduct appropriate mathematical analysis, and interpret results in context. These projects are often the students' first encounter with creating their own mathematical models. Each group must fully analyze their models while demonstrating sufficient mastery of analytical, graphical, and numerical techniques from the course. The semester-long projects culminate in the students creating conference-quality posters and presenting their work formally to each other and to faculty judges during a final poster session. Thus, they gain experience communicating their findings to both a lay and expert audience. We will share how judging and grading rubrics have evolved over six years of projects. We will also discuss how we use project assessment data to more broadly assess learning outcomes for our mathematics major. (Received September 20, 2016)