## 1125-J5-2755

Nathan Pennington\* (nathanpennington@creighton.edu), Department of Mathematics, Hixson Leid Science Building, 2500 California Plaza, Omaha, NE 68178. Integrating First Year Mathematics and Physics through a Problem-Based Modeling Course.

Mathematical Modeling of the Physical World is a problem-based team-taught Calculus II and General Physics course aimed at incoming first-year students. The core of the course is a collection of open-ended modeling projects work on in groups throughout the semester. In this talk we discuss the structure of the course, finding compelling modeling problems, and the positives and negatives of building a course around modeling projects. (Received September 20, 2016)