

1116-K1-920 **Maeve Lewis McCarthy*** (mmccarthy@murraystate.edu), Mathematics & Statistics, Murray State University, 6C Faculty Hall, Murray, KY 42071. *Flexibility in a Mathematical Modeling class.*

Mathematical Modeling at Murray State University is taught as a cross-listed undergraduate and graduate course with different syllabi. Given the mixed mathematical backgrounds, the course must incorporate examples that are both accessible and challenging. In this presentation, we discuss a content outline that has this kind of flexibility while still maintaining an appropriate standard for both audiences. The course includes optimization, dynamical systems and stochastic models and focuses on building a wide range of models and solving them with Matlab. (Received September 15, 2015)