James P. Howard, II* (jphoward@faculty.umuc.edu). Augmenting the Classroom with Web-Based Interactive Demonstrations.

This presentation will look at using the Wolfram Demonstrations and Wolfram—Alpha Widgets to augment the classroom. These tools, which provide an interactive environment for mathematical experimentation, are freely available and provide a rich set of capabilities. Those capabilities include rapid deployment, real-time updates, and symbolic computation. Further, there are thousands of freely available interactive examples ready to deploy in undergraduate instruction. Finally, examples of combining these tools with other freely-available are presented. Focus is given to applying these tools in the introductory college mathematics courses along with discussion of the purely online mathematics education environment. (Received September 06, 2013)