1116-K5-1573 Gail Tang* (gtang@laverne.edu), 1950 Third St., La Verne, CA 91750. Invisible Theatre: Math and Metaphor on the Digital Stage.

In an undergraduate honors program, we developed a unique course that integrates concepts from mathematics and theatre arts to strengthen students' understanding of both disciplines and to challenge the false notion that mathematics is an unapproachable topic that is unrelated to other fields. Through inquiry-based and hands-on learning, students were responsible for making connections across both disciplines using metaphor. Leveraging metaphors in plays, literature, poetry, and history, students investigated upper level mathematical fields that are not traditionally presented to math majors let alone non-math majors, such as knot theory, and also revisited elementary ideas, such as place-value. To deepen their understandings, students also researched the topics on their own and constructed objects in the theatre shop to tangibly grasp the abstract ideas presented. For example, a group chose to study the Klein Bottle for their final project; they knew that a Mobius strip was embedded in the surface, but they didn't fully grasp that idea until they welded the Klein Bottle. This talk will present some assignments from the class, their implementation, and some preliminary data on the effects of the interdisciplinary course on students' mathematical attitudes. (Received September 20, 2015)