

1096-F5-1090      **Alexandra Seceleanu\*** (aseceleanu@unl.edu) and **Kathryn (Katie) Haymaker**. *Math in the City: connecting the classroom to the local community through mathematical modeling.*

Math in the City is an interdisciplinary course developed at the University of Nebraska-Lincoln, in which students engage in a hands-on learning experience. Using mathematical modeling, the students try to understand and address current major societal issues of local and national interest. The course is run in collaboration with local businesses, research centers and government organizations that provide data and act as consultants throughout the course, thus creating strong connections between academia and industry, while engaging students in a learning and discovery process.

The talk will evaluate the benefits of this capstone course for the students and local organizations involved, based on the presenter's experience in teaching the course in the Fall of 2013. This offering of the course focused on modeling the availability of fresh water resources in south-east Nebraska as a hot topic of interest under recurring drought conditions, using mathematical models based on ordinary differential equations. We shall explain how, in the words of a student, "Math in the City made you think. A lot." (Received September 12, 2013)