1125-G1-655   **Timothy Redl*** (`redlt@uhd.edu`), University of Houston-Downtown, Department of Mathematics and Statistics, One Main Street, Suite S705, Houston, TX 77002. *Teaching Honors College Algebra with Inquiry-Based Instruction at the University of Houston-Downtown.* Preliminary report.

During the Fall 2015 semester, I had the pleasure and privilege of teaching College Algebra to 17 students in the Honors Program at UH-Downtown. This was the first-ever offering of an Honors-designated section of College Algebra (or any Honors-designated mathematics course, for that matter) at UHD. As an Honors section, it focused more on using algebra and functions in the context of inquiry-based learning to model and solve real-world problems within the context of natural science, advanced mathematics, social science, business, statistics and engineering, than a traditional College Algebra course. We used technology such as graphing calculators, Wolfram Alpha, and Microsoft Excel to model, analyze, and predict solutions, and engaged in meaningful conversations and made decisions about the appropriateness of different modeling strategies and solutions to these problems. In lieu of a final exam, students completed end-of-semester group projects to gain exposure to and acquire knowledge of mathematical topics that were beyond the scope of the traditional College Algebra course – topics usually encountered in pre-calculus or calculus. In this talk, I will describe and demonstrate some of the technologies, class activities, and projects from the course. (Received September 08, 2016)