1046-Z1-1083 **Timothy A. Redl*** (`REDLT@UHD.EDU`), University of Houston Downtown, Dept. of Computer & Mathematical Sciences, One Main Street, Suite S705, Houston, TX 77002. *Development and Analysis of a New Course in Computational Mathematics with MATLAB at the University of Houston-Downtown.*

Plans are in motion for the University of Houston-Downtown's Computer and Mathematical Sciences Dept. (CMS) to establish a computational science program consistent with that of Rice University's Computational and Applied Mathematics Dept. (CAAM). As a means of achieving this dream, the author, a current faculty member in CMS at UH-Downtown and a 2004 Ph.D. graduate of CAAM at Rice, has developed a new course, MATH 2301: Introduction to Computational Mathematics, recently added as a degree requirement for all UH-Downtown applied mathematics majors. Taught since Spring 2008, MATH 2301 is a problem-solving applied mathematics and programming course involving modeling, simulation, and visualization using a computer algebra system. We document the history of the development of this course, along with an analysis of its first two semesters of existence (Spring and Fall 2008 with MATLAB), in terms of course content, student success, and its goal of being a practical introduction to computational science that will benefit students at UH-Downtown in their future mathematics courses and undergraduate research projects.