

1106-G5-2578 **Oscar Chavez*** (oscar.chavez@utsa.edu), Department of Mathematics, One UTSA Circle, San Antonio, TX 78249. *Inquiry-Based Learning in Honors Calculus I*. Preliminary report.

First year Calculus courses are usually taught with the purpose of teaching students a set of specific methods and procedures of calculus related to limits and derivatives, and their applications to "real life" problems. While this may be an efficient way to convey abundant information to students in a limited time, it frequently results in students' misunderstandings of basic concepts of calculus and a limited ability to prove and present arguments in mathematics. In this paper we discuss the implementation of an inquiry-based Calculus I course for honors students. Through the examination of assessment data, survey data, and anecdotal evidence we show that the course fostered positive attitudes about mathematics and encouraged multiple approaches to solving problems. We show that this type of course has some clear advantages over lecture-based courses. We also discuss the challenges of implementing such a course into a class where there is an expectation of covering a considerable amount of material. (Received September 16, 2014)