Abstract— Both national data and observations from faculty at UCA show that the first course in Calculus is often a challenge for students and can be a major influence in determining their major and career plans. In this discussion, we will present some national data about student performance in and attitudes about Calculus I. We will present some UCA data concerning overall pass/fail/drop rates for Calculus I students and the relationship between these rates and Math ACT scores. We will also present results from some of our efforts to determine student readiness and improve student performance in Calculus I. These efforts include readiness tests, targeted review sessions, tutoring in the new Math Resource Lab, “gateway” quizzes, and projects to foster students’ calculus skills in contextual situations. Our hope is that we will have a fruitful discussion about potential changes to our Calculus placement and preparation strategies in order to improve student performance and student attitudes about Calculus I.