Improving students’ experiences in their introductory courses is one of the common goals of researchers and practitioners of undergraduate mathematics education. As part of a larger study of university precalculus/calculus, we surveyed 4,969 Precalculus, Calculus 1, and Calculus 2 students at 12 institutions about their experience in and perceptions of their class. We present student data on their changing attitudes toward themselves and mathematics, reports of classroom climate, reports of instructional practices, and their perceptions of the helpfulness of those instructional practices. Most students reported a lack of interest, confidence, enjoyment, or ability to learn mathematics with minimal changes in these across the term. Students report that their regular class meetings are characterized by traditional lecture practices, which they believe is helpful for their learning. We discuss the importance of these findings for further understanding and improving students’ entire experience of their courses and consider their impact on interpreting student evaluations in active learning classrooms. (Received September 18, 2018)