One of the primary functions of algebra and precalculus courses in high school and college is to prepare students for the first course in calculus. It is this "preparing for calculus" course, specifically in the college and university setting, that many believe fails in its stated purpose. The small percentage of those who complete precalculus and continue on to complete the calculus I course makes it clear that something is wrong. For those students who have had three years of algebra in high school but are still not prepared for calculus, another precalculus course in college may not be the solution. We will discuss an alternative one-year course that integrates the review of precalculus topics in a just-in time basis; students apply precalculus concepts to calculus as they review them. This course has shown documented success in helping a larger number of students succeed in calculus I. We will describe the course, share sample assignments, and present assessment data. (Received September 20, 2006)