This study’s purpose is to identify characteristics of successful students in a nonstandard business calculus class. Using a blended learning technique, this course allows students asynchronous online access to course materials, including the text, assignments, and practice quizzes, but also requires face-to-face meetings for exam times. In an attempt to offer materials useful to a variety of learners, the course materials include video tutorials, and a tutoring lab is available for students. In this study, we use five semesters of student data to characterize the successful and non-successful student. Characteristics under discussion include those of incoming mathematics SAT scores and college grade point averages as well as students’ grades while in the course, online habits with course materials, and the relationship between student learning styles and use of course materials. A previous study identified math SAT and college GPA predictors of success. The fall 2006 section is the first section in which these predictors were communicated to the students as an aid to self-selection in the course. This presentation will discuss the results of informed self-selection and will consider the impact of suggested prerequisites on student success in light of previous semesters. (Received September 25, 2006)