962-D1-599 **Sonya S Stanley*** (ssstanle@samford.edu), Mathematics and Computer Science, Birmingham, AL 35229. *Revitilizing Precalculus Using Problem-Based Learning.* Preliminary report.

Problem-Based Learning (PBL) is an educational strategy that was first used in medical schools but has since experienced considerable use from K-12 classrooms to professional schools such as pharmacy, business, and veterinary schools. The primary characteristic of PBL is its use of ill-structured "real world" problems to motivate students to discover the key concepts of a course or discipline in a cooperative learning setting. In 1998, Samford University received a generous grant from the Pew Charitable Trust to implement PBL in numerous courses across the arts and sciences curriculum as well as in four of its professional schools in order to study the feasibility of using PBL at the university level. The precalculus course was one of the courses chosen for redesign at Samford. We chose a partial implementation of PBL in the redesigned precalculus course, using a combination of problems that students worked on in groups both inside and outside of class, smaller discovery exercises that students worked on in groups inside class, and occasional lectures. The presentation will address the course design process, student reaction to PBL, use of technology, the interdisciplinary nature of PBL, as well as provide sources for further information about PBL. (Received September 15, 2000)