

1086-VB-2914 **Lipika Deka*** (ldeka@csumb.edu), 100 Campus Center, Seaside, CA 93955, and **Gabriela Stanica**. *Improving Calculus learning through Boot camp and Study Hall*. Preliminary report.

Calculus is a gatekeeper to entry into most STEM majors. Yet, it is considered one of the hardest courses for STEM majors at California State University-Monterey Bay (CSUMB). The pass rates have been discouraging for years. At CSUMB, three primary reasons for failure for students stand out: poor preparation, lack of study skills and lack of student engagement. The students struggle so much with the lack of necessary skill sets that they fail to learn the beauty of Calculus. The class time is not sufficient to support the students with the poor skill sets along with covering the heavy syllabus. To solve this problem we introduced two types of supplementary workshops, called Boot Camp and Study Hall, which are facilitated by the instructors themselves with the support of tutors. After two semesters of using these workshops we see a big difference in students learning and engagement. In addition, these workshops build a sense of community among the instructors, tutors and the students that helped to improve student engagement. This talk will discuss the details of what these workshops are and talk about the successes and the challenges they faced. (Received September 26, 2012)