1056-M1-2044   **Michael B Scott*** (`mscott@csumb.edu`), Mathematics & Statistics Department, California State University, Monterey Bay, 100 Campus Center, Seaside, CA 93955. *Using Online Homework and Data Mining to Assess Student Learning in Mathematics Courses.* Preliminary report.

CSU Monterey Bay uses a web-based homework system to supplement Pre-Calculus, Calculus, and Mathematics for Elementary School Teachers courses. The infrastructure of the homework system has expanded into a course management system used to coordinate every aspect of the course. Expansion of the system makes possible the collection of rich data streams about individual students. Mining this data enables longitudinal studies of student learning. The presenter will discuss strategies for incorporating online homework into mathematics courses, and will also share his work exploring mathematical performance patterns as students progress from lower-division courses into upper-division courses. (Received September 22, 2009)