

Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Studio Physics at the Colorado School of Mines: A model for iterative development and assessment PATRICK KOHL, VINCENT KUO, Colorado School of Mines — The Colorado School of Mines (CSM) has taught its first-semester introductory physics course using a hybrid lecture/Studio Physics format for several years. Based on this previous success, over the past 18 months we have converted the second semester of our traditional calculus-based introductory physics course (Physics II) to a Studio Physics format. In this talk, we describe the recent history of the Physics II course and of Studio at Mines, discuss the PER-based improvements that we are implementing, and characterize our progress via several metrics, including pre/post Conceptual Survey of Electricity and Magnetism (CSEM) scores, Colorado Learning About Science Survey scores (CLASS), failure rates, and exam scores. We also report on recent attempts to involve students in the department's Senior Design program with our course. Our ultimate goal is to construct one possible model for a practical and successful transition from a lecture course to a Studio (or Studio-like) course.

Patrick Kohl
Colorado School of Mines

Date submitted: 12 Jan 2009

Electronic form version 1.4