

Abstract Submitted
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From Syllabus To Diagnostic Exam: Learnings from the New Faculty Workshop Applied In the Intro Physics Classroom MICHAEL TANOFF, Kalamazoo College — Kalamazoo College offers a “one-size-fits-all” concept-based introductory physics sequence. The widely varying demographic composition of the class — including majors in biology, chemistry, pre-med, physics, and math, along with occasional humanities majors — adds obvious challenges to the successful learning experience. As such, educational techniques that apply across the demographic are required. Several ideas presented at the Fall 2005 New Faculty Workshop apply to the needs of this broad range of students at Kalamazoo College, including an “organic” course syllabus that has been allowed to grow to whatever extent necessary to address recurring student concerns and misunderstandings about course expectations, policies, and guidelines, and to provide advice on recurring themes; peer instruction for maximizing classroom value; and hiring teaching assistants with first hand experience in the course and the labs. Details on implementing these techniques, including developing a syllabus with unusual section headings such as “Attendance and Homework Dramas” and “Introductory Physics Survival Requirements,” will be presented. Success of the techniques, as evidenced by performance on diagnostic exams, class attendance, and comments from course evaluations, will be discussed.

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