An Introduction to the new AP Physics algebra-based program: A new focus on best practices\textsuperscript{1}

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Advanced Placement (AP) credit was always designed to represent good college courses. After a call from the NRC, the College Board undertook a redesign of the AP Science courses to improve the quality of teaching and learning in the nation’s high schools, modeling best practices at the college level. The Physics Redesign has focused on the AP Physics B course, the equivalent of the algebra-based introductory college physics course. This talk will focus on the background to this undertaking, the process that was followed, and the resulting courses. The impact these changes will have on current teaching practices will be discussed. Currently, Physics B is supposed to follow a preparatory course. Now, the material is divided up and deepened to make each year a stand-alone, rigorous, conceptual and problem-solving course. The significantly deeper conceptual level for the newly designed course allows teachers more time for inquiry-based, student-centered learning. Because of the two-course design, the first year will be accessible to more students. These can be placed flexibly into a school’s curriculum; examples will be discussed. Examples from the new curriculum framework for these courses will be presented.

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