Abstract Submitted for the APR05 Meeting of The American Physical Society

Modifying "Six Ideas that Shaped Physics" for a Life-Science major audience at Hope College¹ CATHERINE MADER, Hope College — The "Six Ideas That Shaped Physics" textbook has been adapted and used for use in the algebra-based introductory physics course for non-physics science majors at Hope College. The results of the first use will be presented. Comparison of FCI for pre and post test scores will be compared with results from 8 years of results from both the algebra-based course and the calculus-based course (when we first adopted "Six Ideas that Shaped Physcs" for the Calculus-based course). In addition, comparison on quantitative tests and homework problems with prior student groups will also be made. Because a large fraction of the audience in the algebra-based course is life-science majors, a goal of this project is to make the material relevant for these students. Supplemental materials that emphasize the connection between the life sciences and the fundamental physics concepts are being be developed to accompany the new textbook. Samples of these materials and how they were used (and received) during class testing will be presented.

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