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Anand L. Pardhanani* (pardhan@earlham.edu), Department of Mathematics, Earlham College, Richmond, IN 47374. *A 21st century makeover of a classic introductory differential equations course.*

Advances in computational technology, together with evolving teaching paradigms, have led to a variety of efforts to re-vision content and strategy for teaching introductory differential equations courses. Well-known examples include the Boston University ODE Project, the Connected Curriculum Project, the C*ODE*E Project, and the IDEA project.

These and other similar efforts provide several resources to help instructors develop more modern, interesting and relevant differential equations courses. Despite the availability of these resources, it remains challenging to successfully transform a classic course into an effective modern one. This not only involves making crucial decisions about topics and content, but also successfully integrating them with choice of textbook, teaching and assessment methods, technology resources, application emphases and student interests.

In this presentation I will discuss my approach to reshaping a classic ODE course at a liberal arts college. I will describe my experiments with topic, content and textbook, as well as with teaching and assessment strategies based on mini projects and case studies. The presentation will include pointers on how to find sources for projects and case studies, and how to integrate them in standard ODE courses. (Received September 19, 2009)