

Abstract Submitted  
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**Case-studies approach to transferring introductory STEM classes: a course on astrobiology** LIOR M. BURKO, SANDRA K. ENGER, University of Alabama in Huntsville — There is a growing awareness to the need for moving away from lecture-mode approaches in undergraduate STEM education and to the importance of increasing innovation and diversity in STEM education programs. We adopt the case-studies approach, and have taught an introductory course on astrobiology —the science of life in the universe— at the University of Alabama in Huntsville. We have created teaching materials using different types of cases, and have conducted an evaluation study. We intend to refine our teaching materials based on the evaluation study, and repeat the course next year. Following this study the teaching materials will be made available free of charge to any instructor, and the approach will be applied to other disciplines, including large enrollment classes.

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