

Abstract Submitted  
for the APR13 Meeting of  
The American Physical Society

**Case studies approach for an undergraduate astrobiology course**

LIOR M. BURKO, Alabama A&M University, SANDRA ENGER, University of Alabama in Huntsville — Case studies is a well known and widely used method in law schools, medical schools, and business schools, but relatively little used in physics or astronomy courses. We developed an astrobiology course based strongly on the case studies approach, and after teaching it first at the University of Alabama in Huntsville, we have adapted it and are now teaching it at Alabama A&M University, a HBCU. The case studies approach uses several well tested and successful teaching methods - including group work, peer instruction, current interest topics, just-in-time teaching, &c. We have found that certain styles of cases are more popular among students than other styles, and will revise our cases to reflect such student preferences. We chose astrobiology – an inherently multidisciplinary field – because of the popularity of the subject matter, its frequent appearance in the popular media (news stories about searches for life in the universe, the discovery of Earth-like exoplanets, etc, in addition to SciFi movies and novels), and the rapid current progress in the field. In this talk we review briefly the case studies method, the styles of cases used in our astrobiology course, and student response to the course as found in our assessment analysis.

Lior M. Burko  
Alabama A&M University

Date submitted: 14 Jan 2013

Electronic form version 1.4