

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
In Orbit - Postgraduate Space Education (4)

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TEACHING SPACE POLICY: BEST PRACTICES FOR TRANSDISCIPLINARY ENGAGEMENT

Abstract

Space science and engineering courses are part of the core curriculum at many universities, but increasingly, schools are beginning to offer courses on economic, policy, and international relations aspects of space activity. These courses are transdisciplinary in nature and have the potential to bring together students interested in space from across a university. These courses can provide context for students to understand the environment in which programmatic and technical decisions are made: Why do nations fund some space projects and not others? Why are some space technologies developed independently while others involve international partnerships? Why is commercial space activity well-established in some areas and newly emerging in others? How do government decisions impact these commercial trends? They can also act as a concrete method for understanding core social science concepts from economics, policy, and international affairs: What is a market failure, and how can nations address these issues? What are the unique aspects of global collective action challenges, and how can international agreements help to address these? What are the limits of international treaties and agreements?

This project draws on existing literature on best practices for teaching, particularly with respect to space policy courses. I also include input from interviews with numerous individuals with extensive experience teaching space policy at the university level. Based on these sources, I discuss a variety of methods for approaching and organizing a course on Space Policy. I provide examples of course goals that may be considered, decisions on scope, and alterations that may be made based on the specific audience. I also discuss a range of potential teaching methods, including lecture, writing, discussion, scenarios, and interaction with pop culture. The paper includes specific examples and suggestions for incorporating these methods into the course.