student

## IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

On Track - Undergraduate Space Education (3)

Author: Ms. Jaclyn Wiley Embry-Riddle Aeronautical University, United States

Mr. Henry Neiberlien
Embry-Riddle Aeronautical University, United States
Dr. Diane Howard
International Institute of Space Law (IISL), United States
Ms. Samantha Stirmel
Embry-Riddle Astronautical University, United States

## PROJECT ATLANTIS: APPLIED TECHNOLOGY LEARNING ACTIVITIES FOR NON-TRADITIONAL INSTRUCTION ON SPACE

## Abstract

As commercial and governmental space endeavors increase in number and complexity, the need for people educated in space policy and law will also grow. In order to create this well-educated group of space professionals, a sophisticated space policy and law curriculum is needed. As accessibility of technology increases and more students are becoming digital natives, the importance of non-traditional curriculums increases.

This paper describes an educational experiment in which students in an independent study course created space policy and law educational videos based on topics within the curriculum of an existing undergraduate space law course. Two educational models can be derived from this experiment: the creation of the videos as a special project within a traditional classroom or independent study course, or administering the completed videos as part of a flipped-classroom model. This paper proposes measures of success for both educational models derived from the experiment as well.

Beyond engaging students in a flexible, non-traditional curriculum, the benefit of creating the videos was threefold: the activity taught the students the material, developed the digital literacies of the student-creators, and created materials that could be used in a flipped-classroom or a traditional educational setting, or as capacity-building materials. Capacity-building materials are not limited to students at the college levels, but are available through organizations like the United Nations Office of Outer Space Affairs for any situation in which subject matter expertise is lacking. The course materials created in this experiment could be used to complement space law capacity-building materials, for the benefit of all, regardless of gender, generation, or geography. A further benefit to the educational materials made in this project is that they could be used for space law outreach.