

CESR 4825

Sustainable Space Governance

Course Description

As more countries and non-governmental entities develop extraterrestrial ambitions, the sustainability of space activities is at risk. While outer space is vast, Earth's orbital space is finite and susceptible to degradation and depletion, including from space debris, satellite congestion, and radiofrequency interference. Furthermore, our longer term ambitions in space, such as asteroid mining and planetary colonization, arguably raise even more complex governance challenges.

To ensure a sustainable future for space activities, space as a resource is increasingly undergoing a transition from a condition of open access to one of a governed common. The space surrounding our planet is similar to other commons pool resources, and so early warning signs surrounding unsustainable use are already emerging, in the case of orbital debris due to satellite overcrowding and past space voyages. The quintessential governance solution to a tragedy of the commons is to develop mutually beneficial rules surrounding the use of the resource to prevent depletion and other negative outcomes, a topic long-studied in more terrestrial contexts.

Why Take this Course?

The course pedagogy provides an innovative blend of substantive lectures, student analysis of practical cases that reveal principles of outer space governance, and access to a cutting-edge seminar from academic, public sector, and industry practitioners designed to showcase the most current solutions to emergent problems resultant from the increasing pursuit of our extraterrestrial goals.

This course begins by introducing students to core principles of institutional design revealed through the study of natural resource governance, including places like Antarctica and the deep sea, where development most closely mirrors what we can expect in outer space. Following these lessons from successes and failures in the avoidance of the tragedy of the commons within the confines of our planet, the course surveys the existing international law governing outer space.

Finally, once students have a firm understanding of the principles of sustainable governance, current space law, and emerging problems, they will turn to prospective questions in space governance. Which areas can we reasonably expect technological development and national self-interest to govern effectively, and which might require more traditional international cooperation?

Semester: Spring 2021

Days and Times

- Monday, 11:10a–12:25p
- Wednesday, 11:10a–12:25p

Location: Koelbel 216

Course Delivery

- Online
- On Campus
- Hybrid

Instructors

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