

# Space Law – International and National Dimensions

<b>Semester:</b>	Spring Semester- FS 2025
<b>Root Number:</b>	494627
<b>ECTS:</b>	3
<b>Lecturer:</b>	Dr. Ingo Baumann, Dr. Merve Erdem Burger, Mr. Riccardo Loschi
<b>Dates:</b>	<b>June 30 to July 3, 2025</b>
<b>Room:</b>	This a hybrid course. The course will be held on-site at the Silva Casa Auditorium WTI and online via Zoom. Hallerstrasse 6, 3012 Bern.

## Audience:

- Government officials; Embassy staff; people working for international organizations and NGOs, industry, and in legal practice
- Master of Advanced Studies of International Law and Economics (MILE) Students
- Joint LL.M. / Diploma of Advanced Studies Trade and Investment Law (TRAIL+) Students - World Trade Institute / Faculty of Law, Unibe
- Certificate of Advanced Studies / Diploma of Advanced Studies in International Law and Economics (CAS ILE & DAS ILE) Students - World Trade Institute, Unibe
- Students from different universities across Switzerland and beyond

## Course Description

This course provides a comprehensive overview of space law and its current challenges at the international and national levels. First, it examines the historical evolution of international space law before and after the beginning of outer space activities and the legal instruments adopted at the international level that have created today's legal regime governing outer space and outer space activities. Second, the course delves into how international space law is implemented at the national level and how national laws play a role in the development of commercial space activities. Third, it explores the interplay between space activities and sustainable development by analysing, inter alia, the relevance and impact of the UNCOPUOS Long-Term Sustainability of Outer Space Activities (LTS) Guidelines on space activities, how space activities can contribute to the

Sustainable Development Goals (SDGs), and how international organizations and foreign investment can enhance sustainability in and through space activities.

This course emphasizes the importance of legal and policy frameworks that support the responsible and sustainable use of outer space, as well as the role of international organizations and the global community in shaping space governance. Through interactive workshops, case studies, and discussions, participants will analyse the challenges posed by emerging space activities, the implementation of national space laws, and the legal frameworks that address space sustainability.

The course aims to equip students with the tools to engage with space law in a rapidly evolving field, where commercial actors, international cooperation, and environmental protection are central themes.

## Lecturers



### Dr. Ingo Baumann

Dr. Ingo Baumann is a founding partner of BHO Legal, a boutique technology law firm based in Cologne, Germany. He specializes in national, European and international high technology projects, mostly in the space industry. His clients include leading stakeholders such as the European Commission, European Space Agency, German Space Agency, large satellite operators, SME and NewSpace start-ups. Dr. Baumann studied law in Münster and Cologne. He received his PhD from the famous Cologne Institute for Air and Space Law under Prof. Dr. Hobe on the international law of satellite communications.

From 2001 to 2007, Dr. Baumann was in-house lawyer at the German Aerospace Centre (DLR). He was then head of DLR's Galileo Programme Office and administrative CEO of the DLR Gesellschaft für Raumfahrtanwendungen mbH, an affiliate of DLR for the establishment and operations of the German Galileo Control Centre.

Dr. Baumann is member of the International Institute of Space Law (IISL) and the European Centre for Space Law (ECSL). He acts as mentor for space start-ups within SpaceFounders, the French Starburst BLAST and other accelerators and incubators. He chairs the legal/regulatory working group of the BDI NewSpace Initiative and organizes yearly legal sessions or workshops at the Munich NewSpace Summit, the Munich Satellite Navigation Summit or Space Tech Expo Bremen.



### **Dr. Merve Erdem Burger**

Merve Erdem Burger is a postdoctoral researcher at the Chair of Public International Law, Faculty of Law, University of Neuchâtel, Switzerland, where she is conducting a Swiss National Science Foundation-funded research project on the implementation of international space law by states in order to draw lessons for emerging space countries. She also teaches International Space Law at the Master of Law program of Faculty of Law, University of Neuchâtel.

Prior to her position in Switzerland, she had a long academic experience as a Research Assistant and Research Associate at the Chair of International Law at Ankara University Faculty of Law in Türkiye. She holds a Master's degree and a PhD in public law, with a focus on international law. During her research, she also visited other academic institutions such as Leiden University, International Institute of Air and Space Law and Humboldt University, Faculty of Law, International and European Law Institute.

She has a long experience in space law since 2010, during which she participated in various national and international conferences, including the International Astronautical Congress, and gave presentations on systemic and progressive interpretation of the UN space treaties, enabling space law for human settlement in space, balance between freedom of exploration and freedom of use in space, sustainability of space activities through implementation of space law, lectured in summer schools and certificate programs on the history of space law and legal regime of space activities, and received international recognition through the Emerging Space Leader grant from the International Astronautical Federation in 2017.

In addition to her research, she is also involved in civil society activities to promote space law and academic research in general: she is a co-founder of the Swiss Space Law Forum, an interest group of the Swiss Society of International Law, a member of the International Institute of Space Law and the Space Exploration Society in Turkey, and a board member of the Global SNSF Fellows Network.



### **Riccardo Loschi**

Riccardo Loschi is a senior associate at LALIVE, currently based in Zurich, Switzerland. He represents and advises governments, companies, and institutions in complex, high-value disputes and transactions involving foreign investments, environmental and administrative permits, and national security issues across various sectors, including space and technology sectors.

Riccardo holds a law degree from Bocconi University (summa cum laude) and an LL.M. from Columbia Law School (Parker Scholar, Harlan Fiske Stone Scholar). He has completed the Strategic Space Law Course at McGill University, attended the II Series of International Space Law Seminars at Rey Juan Carlos University in collaboration with the University of Leicester, obtained a post-graduate certificate in public policy from the London School of Economics, and studied international economic law and arbitration at the Chinese University of Hong Kong.

Riccardo is a board member of the Space Arbitration Association. In this capacity, he has published articles, spoken at the 2023 International Astronautical Congress in Baku, and taken part to the Consultation on the EU Space Law. He is also an associate fellow of the Helsinki Goeconomic Society, and a former member of the European Centre for Space Law (2021-2023). He served as managing editor of Columbia FDI Perspectives (2020-2022), a policy series published by the Columbia Centre for Sustainable Development and worked as a research assistant at the Columbia Centre for International Commercial & Investment Arbitration (2019-2020).

## **Learning Objectives**

- To provide students with an in-depth knowledge of international space law and the main features of national space laws, including:
  - The history and evolution of space law.
  - Hard law and soft law instruments governing space activities.
  - The legal regime of outer space and the regulation of space activities.
  - Implementation of international space law by states through national space legislation.
  - Exploring legal challenges arising from the implementation of space law at national and international level and discuss possible mechanisms to resolve them (e.g., negotiations, diplomatic relations, mediation, litigation and arbitration frameworks).
- To equip students with a comprehensive understanding of the relationship between space law and sustainable development by analysing:

- UNCOPIOUS Long-Term Sustainability of Outer Space Activities (LTS) Guidelines and their legal implications for the space industry.
- The enabling role of space law in ensuring that space activities contribute to achieving the UN Sustainable Development Goals (SDGs).
- The impact of foreign investments and international cooperation in the space sector on sustainable development in both developed and developing countries.
- To develop skills in critical thinking and legal analysis through case studies and workshops on:
  - Emerging issues in space such as space debris mitigation, space resource utilization, and the legal status of private and commercial entities in space activities and their impact on sustainable development.
  - The environmental impact of space activities and the role of legal frameworks in mitigating negative effects and promoting sustainable practices.
- To create awareness and stimulate dialogue about the challenges, opportunities and the ethical considerations for space law in the context of implementing the LTS Guidelines and achieving the SDGs on Earth.

## Grading

- Class participation (20%); paper (80%).
- Assessment of Participants' knowledge will be based on a short paper (2000 words, excluding footnotes and list of references).
- The paper should analyse and elaborate on one or more legal issues related to space law and sustainable development discussed during the course.
- Regardless of the chosen topic, students are encouraged to submit papers that provide rigorous legal analyses, present original perspectives, apply legal norms to real-world space activities, and propose concrete policy solutions, as such submissions will receive higher consideration.
- With regard to the examination assignment, students are free to choose, in consultation with the lecturers, a topic on space law to be examined. The topics must be specified by 4 July 2025, 17:00, and the final assignment must be submitted before 13 July 2025, 17:00 to [masters.wti@unibe.ch](mailto:masters.wti@unibe.ch).

## Course Overview

Date	Day	Time	Topic
30.06	Monday	10:00-12:00	History of International Space Law and its Resources
		13:00-16:00	The Legal Regime of Outer Space and Outer Space Activities. Workshop 1: The Martian Game

<b>01.07</b>	Tuesday	10:00-12:00	Space Law and Commercial Space Activities <ul style="list-style-type: none"> <li>- Overview of commercial space</li> <li>- Contracting in the space industry</li> <li>- European space procurement</li> </ul>
		13:00-16:00	Regulating (Commercial) Space Activities: Selected examples <ul style="list-style-type: none"> <li>- Guiding Principles and Rationale at national level</li> <li>- Authorization and Supervision</li> <li>- Liability and Insurance</li> <li>- Frequency Management</li> </ul>
<b>02.07</b>	Wednesday	10:00-12:00	Supranational Space Law: The case for Europe Workshop 2: Analysing National Space Law
		13:00-16:00	Sustainable Development in Space: <ul style="list-style-type: none"> <li>- Environmental protection and sustainability of outer space activities</li> <li>- Foreign (Direct) Investments and Transparency and Confidence Building Measures in space</li> </ul>
<b>03.07</b>	Thursday	10:00-12:00	Current legal challenges to space law: <ul style="list-style-type: none"> <li>- The case for commercial space actors' liability at the international level</li> <li>- National security in the space sector and its effect on space activities.</li> </ul>
		13:00-16:00	Current legal challenges to space law (cont'd): <ul style="list-style-type: none"> <li>- Regulation of New Space Activities (LEO constellations, space mining)</li> </ul> <p>Workshop 3: Identifying legal challenges for space activities and advancing proposals for future legislative reforms</p>