

Course Outline

COURSE:	LAWS 4605B OUTER SPACE LAW
TERM:	Winter 2021
PREREQUISITES:	LAWS 2601; LAWS 2908 or PAPM 3000; AND fourth-year Honours standing .
CLASS:	Day & Time: Tuesday 14:35-17:25 Time: All courses during the Winter 2021 semester will be delivered online. The lectures in this course will be delivered “live” online every week, during our regularly scheduled class time, using the Zoom conferencing platform
INSTRUCTOR: (CONTRACT)	Tara Ashtakala
CONTACT:	Office: Office Hrs: By appointment Telephone: Email: Tara.Ashtakala@carleton.ca

CALENDAR COURSE DESCRIPTION

A detailed look at the application and creation of rules and case law relating to: exploration, resource exploitation, environmental protection, astronaut labour rights, technology impacts and property rights, criminal responsibility, civil claims and armed conflict, in this new legal frontier.
Lectures three hours a week.

INSTRUCTOR COURSE DESCRIPTION

Space is the newest “space” for the application and creation of law. The development of the law of outer space not only expands the boundaries of legal scholarship or practice, but it also affords the opportunity for humankind to reflect on how its sense of “the other” has evolved.

It was not that long ago in the history of the universe that our human ancestors first ventured from the familiar environment of their home continent. From that initial foray into the unknown, human groups saw the need to both take some form of collective rules with them and create new ones, in the places

which they settled or simply claimed as property, like the Western Plains of North America, the Polar regions or the sea floor. Now, we are exploring space for the same reasons we explored those previous territories: to understand this new place, to use what it contains to our benefit and, eventually, to inhabit it. In the course of that “discovery”, law – and life – will unfold similarly to how it did in the old frontiers:

1. The nation-States of the Earth will profess to embrace cooperation in exploring outer space for the “common heritage of mankind”;
2. Technology will be developed for that exploration, increasingly by private industry, thereby necessitating rules for the introduction of non-State actors in space;
3. Astronauts - individual people - will be doing work in dangerous conditions, in the course of which they may be injured or killed, and their families will consequently seek compensation;
4. Resources will be exploited, generating waste and, subsequently, pollution of the space environment;
5. We may encounter other living beings and we will fear them initially: those most like us may become allies or even friends, but we will likely annihilate some, subjugate others and out-consume their resources until most of them disappear;
6. We will start to build communities where people will couple, reproduce, split up, accumulate possessions, educate, migrate, retire and die, or travel back and forth from Earth, requiring us to adapt the terrestrial laws that apply to these rites of passage;
7. and when there are too many actors in Space competing for the same resources or seeking domination of this new frontier, States or non-State actors will once again resort to armed force to defend their interests.

What will be different- and yet the same- is the wonder of a new world seen through the eyes of a new generation of lawyers and legal scholars, who will modify existing legal norms and innovate new ones, for life in this new frontier. Outer Space Law is a work in progress.

In this course, we will explore the application of existing international and domestic law and jurisprudence to current activities in outer space, as well as contemplate the new juridical structures that may develop in the future, while appreciating the legal principles that persist no matter which "space" the law operates in..

REQUIRED TEXTS

There is no textbook for the course. Required readings will be accessible online. Case study exercises will be posted during lecture. The readings and exercises reinforce or supplement lecture content. Please note that you are asked to read only selected paragraphs of each reading, as indicated in the pre-lecture notes, not the entire document.

COURSE DELIVERY:

- Pre-lecture notes will be posted on CULearn prior to each class, indicating readings to be done ahead of lecture and containing questions that help the student focus on the most important concepts from each reading.

- Lectures will be delivered synchronously via Zoom, at the time and on the day indicated above for the particular course section. It is during lecture that the answers to the questions in the pre-lecture notes will be discussed.
- Case study exercises, involving groups discussions, will also be conducted during the synchronous lecture session.
- The synchronous portion of the lectures will therefore be of no more than 2 – 2.5 hours duration.
- The presentation and research paper components of evaluation in the course will be submitted by students as per the deadlines indicated in the “Evaluation” section below.

EVALUATION

Standing in a course is determined by the course instructor subject to the approval of the Department and of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Department and the Dean.

All three (3) components must be completed in order to obtain a passing grade

1. Audio-visual Presentation - 20% of final grade

The task for the 10-15 minute (max) presentation is to explain the non-legal knowledge behind the space issue and lay out the proposed legal case to address it, supported by applicable law and relevant case law.

- **VIDEO SUBMISSION DATES: EMAIL ME THE YOUTUBE LINK FOR YOUR VIDEO BY THE FOLLOWING DATES:**

- | | |
|--|--------------------|
| ○ IF YOUR SURNAME STARTS WITH A: | 25 FEBRUARY |
| ○ IF YOUR SURNAME STARTS WITH B (incl): | 4 MARCH |
| ○ IF YOUR SURNAME STARTS WITH C-F (incl): | 11 MARCH |
| ○ IF YOUR SURNAME STARTS WITH G-J (incl): | 18 MARCH |
| ○ IF YOUR SURNAME STARTS WITH L-M (incl): | 25 MARCH |
| ○ IF YOUR SURNAME STARTS WITH N-Z (incl): | 1 APRIL |

2. Term Essay - 35% of final grade

The task for the Term Essay is to write a persuasive factum for the proposed legal case relating to the outer space issue selected,

Due on 14 April 2021: upload to CULearn

Length: 12-15 pages, plus bibliography.

Use **Canadian Guide to Uniform Legal Citation (McGill Guide)** at

https://library.carleton.ca/sites/default/files/help/writing-citing/Using_uniform_legal_citation_2018.pdf

-

Use Canadian spelling only; note: this is not a joke! if you are going to use spell-checking applications to review your text, you should first ensure that the language settings on your computer are set to Canadian English or Multilingual Standard.

3. Open book final examination - 45% of final grade

- the goal of the final exam is to apply the course content to 1) solve a fictitious client's legal problem and to 2) thoroughly discuss a thematic issue.

To be scheduled during formal exam period: 11-27 April, 2021

LATE PENALTIES AND REQUESTS FOR EXTENSIONS:

- Penalties for late submission -without prior permission from instructor -of assignments will be a deduction of 1 point/mark per day, as a matter of fairness to the class members who turned in the assignment on time.
- The granting of extensions is determined by the instructor who will confirm whether an extension is granted and the length of the extension.
- For requests for extensions lasting less than 7 days, please complete the form at the following link and submit it to the instructor prior to the assignment due date <https://carleton.ca/registrar/wp-content/uploads/self-declaration.pdf>.
- **Extensions for longer than 7 days will normally not be granted.** In those extraordinary cases where extensions lasting longer than 7 days are granted, the student will be required to provide additional information to justify the longer extension (up to a maximum of 14 days).

LECTURE TOPIC SCHEDULE

14 Jan INTRODUCTION AND OVERVIEW: THE OLD FRONTIERS AND THEIR RELATION TO SPACE LAW

- Cook, Jason. "Seven Ancient Cultures and How they Shaped Astronomy", Telescopic Watch Blog
- North Sea Continental Shelf cases (Germany v Netherlands), Dissenting Opinion of Lachs J.
- Chicago Convention on International Civil Aviation
- United Nations Convention on the Law of the Sea
- The Antarctic Treaty
- The Outer Space Treaty
- Buono, Stephen. "Merely a Scrap of Paper? The OST in Historical Perspective"

21 Jan LEGAL ISSUES IN THE EXPLORATION OF SPACE

- Ambassador Pardo speech to UNGA
- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies
- Centre for Minority Development Rights (Kenya) and Minority Rights Group International on

- behalf of Endorois Welfare Council v Kenya
- Barcelona Traction, Light and Power Company Ltd. (Belgium v Spain)
- United States v. One Lucite Ball Containing Lunar Material
- North Sea Continental Shelf Cases, dissenting opinion of Lachs J.
- Langevin 2012 QCCS 613

28 Jan SPACE TECHNOLOGY AND TRANSPORT– PROPRIETARY AND OTHER LEGAL ISSUES

- Causby v United States
- Berg v Reaction Motors Division 1962
- Pigott v Boeing 1970
- Hughes Aircraft Co. v. United States 29 Fed. Cl. 197 (1993)
- Moon Express Inc v Intuitive Machines LLC, US District Court for Delaware, C.A. No. 16-344-LPS
- Space-X: Launch Services Agreement
- Appalachian Insurance v McDonnell Douglas, 214 Cal. App. 3d 1, 262 Cal. Rptr. 716 (Cal.App. 4th Dist. 1989).

4 Feb SATELLITES

- The Agreement Relating to the 1971 International Telecommunications Satellite Organization
- Convention of the 1979 International Maritime Satellite Organization
- Anti-Satellite systems
- International Telecommunications Union Convention
- Martin Marietta v. INTELSAT, 991 F. 2d 94 (4th Cir. 1992)
- Hughes Communication Galaxy v. United States 998 F. 2d 953 (Fed. Cir. 1993)
- American Satellite Co. v. United States, 998 F. 2d 950 (Fed. Cir. 1993)
- Alpha Lyracom Space Communications v. COMSAT 1990-2 Trade Cas. (CCH) P69, 188 (S.D.N.Y. 1990)
- Spar Aerospace v American Mobile Satellite Co., SCC 2002

11 Feb SPACE DEBRIS: DAMAGE ON EARTH AND DAMAGE TO SPACE VEHICLES

- Liability Convention
- Registration Convention
- Settlement of Claim between Canada and the Union of Soviet Socialist Republics for Damage Caused by "Cosmos 954"

18 Feb Winter Break: no class

25 Feb ASTRONAUTS' RIGHTS: INJURIES AND LABOUR

- Rescue Convention
- Smith v Morton Thiokol 1988 (Space Shuttle Challenger explosion)
- Smith v United States

4 Mar RESOURCE EXPLOITATION

- Outer Space Treaty
- Responsibilities and Obligations of States Sponsoring Persons and Entities with respect to Activities in the Area (Request for Advisory Opinion Submitted to the Seabed Disputes Chamber), international Tribunal for the Law of the Sea, 1 Feb 2011
- Madrid Protocol to the Antarctic Treaty
- Spurring Private Aerospace Competitiveness and Entrepreneurship Act of 2015 (SPACE Act)-US
- Luxembourg Space Resources Act

11 Mar PROTECTION OF THE SPACE ENVIRONMENT AND OF THE EARTH ENVIRONMENT UPON RETURN FROM SPACE

- Comprehensive Test Ban Treaty
- Florida Coalition for Peace and Justice v. George Herbert Walker Bush, Civil Action No. 89-2682-OG (D.D.C. 1989)
- Environmental Defence Fund v. Massey, 986 F.2d 528 (D.C. Cir. 1993)

18 Mar THE ISS AND INHABITING OUTER SPACE; CRIMINAL AND CIVIL LAW IN SPACE

- The International Space Station Intergovernmental Agreement
- Crew Code of Conduct
- Framework Agreement Between the Government of Canada and the Government of the United States of America for Cooperation in the Exploration and Use of Outer Space for Peaceful Purposes

25 Mar MILITARIZATION OF SPACE AND ARMED CONFLICT IN OUTER SPACE

- The Geneva Conventions of 1949
- OST articles III and IV
- Comprehensive Test Ban Treaty
- The Treaty on the Prohibition of Nuclear Weapons

- Missile Defence and the Laws of Armed Conflict
- Cyber Warfare – that other space:
 - Nuclear Weapons Advisory Opinion (para 39)
 - Tallinn Manual on the International Law Applicable to Cyber Warfare
- Jones v Tsige, ONCA 2012

1 Apr REVIEW OF COURSE

DIVERSITY AND INCLUSION IN COURSE CONTENT AND EXECUTION:

Lawyers need to be able to read statutes, in order to apply them in the courtroom. It is equally important to the success of a lawyer's case to know what the statute does not say.

As we will see in this course, the rules that apply to activities in outer space are found in both international law and in domestic law. While the foundational rules of international outer space law, like those of public international law, were dictated mostly by powerful developed States, rules of domestic law that relate to outer space activities are almost non-existent in those States which are not wealthy or powerful enough to have an active domestic space programme. Therefore, the voices of the citizens of those countries have not been heard in the development of outer space law. Even if international legal disputes that consider space issues are decided by some judges and lawyers who come from historically colonized, enslaved and otherwise suppressed communities, their fellow citizens - who are not trained in law - do not get to voice their concerns by arguing in international courts, nor do they get to publish scholarly articles about them.

You will notice from this Outline that the vast majority of readings in this course are cases, from both international and domestic courts, rather than academic articles. I ask students to read case law so that we can together glean from it the basic concepts of outer space law. It is whilst reading a case that students also have the opportunity to think critically about whose concerns are not addressed and about what impact that omission of voices has on the development of the basic concepts of outer space law; indeed, the questions in the pre-lecture notes for this course will require you to do so. It is also expected that students will include those insights in their presentation and research paper assignments, as well as express them in the honest, yet respectful, debates that comprise the live case study discussions following each lecture.

ACADEMIC ACCOMMODATIONS

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy obligation: Please contact me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic Accommodations for Students with Disabilities: If you have a documented disability requiring academic accommodations in this course, please contact The Paul Menton Centre (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me as soon as possible to ensure accommodation arrangements are made. Please consult the PMC Website for their deadline to request accommodations for the formally-scheduled exam (if applicable) www.carleton.ca/pmc

Plagiarism

Plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own. Plagiarism includes reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source. Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to: books, articles, papers, literary compositions and phrases, performance compositions, chemical compounds, art works, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, and material on the Internet. Plagiarism is a serious offence. More information on the University's Academic Integrity Policy can be found at: <http://carleton.ca/studentaffairs/academic-integrity/>

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or

international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf> For more information on academic accommodation, please contact the departmental administrator or visit: students.carleton.ca/course-outline

Department Policy

The Department of Law and Legal Studies operates in association with certain policies and procedures. Please review these documents to ensure that your practices meet our Department's expectations.

<http://carleton.ca/law/current-students/>