

SPACE POLICY & LAW COURSE

24 TO 26 OCTOBER 2022

ON-LINE**MONDAY 24 OCTOBER 2022**

1. SPACE ENVIRONMENT AND TECHNOLOGY - 09.15 - 10.30* JE

- Delimitation of Space and Airspace
- Environmental characteristics
- Orbits, types of spacecraft, mega-constellations
- Discussion and questions MS

BREAK - 10.30 - 10.45

2. POLICY FORMULATION AND INSTITUTIONS - 10.45 – 12.00 GT

- Policy Principles, Peaceful Use, Non-appropriation, Cooperation and Non-interference
- Policy development and institutions
- International and National Institutions - nature and role
- UN COPUOS, ESA, Regional Organisations and operating methods
- National Policies, formulation and implementation
- Discussion and questions DS & CB

LUNCH - 12.00- 13.00

3. THE LEGAL REGIME - 13.00 – 14.15 PJB

- Sources of Space Law, Outer Space Treaties, UN Resolutions
- Other regimes - Antarctic, Law of the Sea and Air Law
- International Responsibility and Liability distinguished
- National space laws and Licensing
- Norms, Practices, Guidelines, Regulations and Standards
- Discussion and questions IZ

BREAK - 14.15 - 14.30

4. THE LAWS GOVERNING SPACE APPLICATIONS - 14.30- 15.45 JIG

- Sovereignty, Property Rights
- Earth Observation: Data v. Information; UN Principles; Disaster Charter
- Scientific experiment, Exploration and Exploitation
- Manned and Robotic activities: ISS; Chinese Space Station
- Lunar and Planetary Stations
- Discussion and questions OS & FT

BREAK - 15.45 - 16.00

*** Times given are UTC+1 (London time) and need to be corrected for your local time zone.**

5. SATELLITE COMMUNICATIONS – 16.00 – 17.15 YH

- Telecommunications and Broadcasting: The Role of the ITU
- Orbital Positions, Co-ordination
- Spectrum management: Frequency Efficiency and Market Reach
- Harmful interference, jamming, signal interception, cyber security
- Frequency priority, EU and the ITU
- Discussion and questions EQ

TUESDAY 25 OCTOBER 2022

6. COMMERCIAL SPACE ACTIVITIES - 09.15 – 10.30 LJS

- Nature and range of commercial space ventures
- PNT Applications and Services
- Spaceflight and Spaceports
- Small Satellite Constellations, On-orbit Servicing
- Regulation, Market Access
- Discussion and questions MR

BREAK - 10.30 - 10.45

7. RISK, LIABILITY AND INSURANCE - 10.45 – 12.00 AS

- Laws Governing Liability (Risk and Fault)
- Liability for Debris and Obligation not to Create
- Active Debris Removal - Remediation vs Mitigation
- Insurance
- Discussion and questions

LUNCH - 12.00 – 13.00

8. CURRENT AND FUTURE DEVELOPMENTS – 13.00 – 14.15 J-JD

- Constellations, Small Satellites
- Focus on Applications
- Extra-terrestrial habitation
- Artemis Accords
- Discussion and questions GT

BREAK - 14.15 - 14.30

9. CURRENT AND FUTURE DEVELOPMENTS - 14.30 – 15.45 J-JT

- EU and ESA Relationship
- UK ESA and EU Relationship
- Space Powers Mid-century, China, EU, India, Japan, Russia, US
- Discussion and questions RK & SA

BREAK - 15.45 – 16.00

10. MILITARY USES AND SECURITY – 16.00 – 17.15 JG

- Military support functions and Space Weapons
- Space a "war-fighting" domain
- Role of Cyber, Drones and Robotics
- Environmental and humanitarian factors
- Small Satellite Constellations potential and risks
- Discussion and questions

JS

WEDNESDAY 26 OCTOBER 2022

11. SPACE HAZARDS AND SAFETY - 09.15 – 10.30 RC

- Space hazards - Man made and natural: Meteorites, Debris
- Space Domain Awareness and Space Traffic Management
- Space Weather
- Discussion and questions

SE

BREAK - 10.30 - 10.45

12. SPACE HAZARDS AND SAFETY - 10.45 – 12.00 RC

- Debris Reduction and Elimination Measures
- Responsible Behaviour, Transparency and Confidence Building Measures
- Terrestrial environmental impact
- Discussion and questions

LUNCH - 12.00 – 13.00

13. CASE STUDIES – 13.00 – 14.15 SM

- Recovery and Return
- Debris (liability, sovereignty, space domain awareness and other concepts)
- Resource Extraction (Private & State participation, property rights, potential pollution from space, appropriation and the issue of territory vs. resources, and other concepts)
- Active Debris Removal
- Responsible Behaviour in Outer Space

BREAK – 14.15 – 14.30

14. REVIEW & CONCLUSION – 14.30 – 15.45 SM

- Course Summary, Discussion and conclusion

LECTURERS

PJB	Prof PJ Blount, Lecturer, Cardiff Univ; Adj. Prof, Mississippi Univ, Air & Space Law; ISPL Faculty
RC	Prof Richard Crowther, Technical Adviser for Orbital Space, CAA; ISPL Faculty & Adviser
J-JD	Prof Jean-Jacques Dordain, CNES; past ESA Director-General; ISPL Faculty & Adviser
JE	Dr Jonathan Eastwood, Director, Space Lab, Imperial College London
JIG	Prof Joanne Irene Gabrynowicz, Emeritus Professor, Mississippi University; ISPL Faculty
JG	Prof Maj Jeremy Grunert, US Air Force Academy; Mississippi Univ. Air & Space Law Centre
YH	Yvon Henri, Former Chief, Space Services, ITU; Member, Radio Regulation Board, ITU
SM	Prof Sa'id Mosteshar, Barrister; Senior Associate Research Fellow, IALS; ISPL Director
LJS	Prof Lesley Jane Smith, Partner, Weber-Steinhaus & Smith; ISPL Faculty
AS	Alexander Soucek, Head, International Law Division, ESA
J-JT	Jean-Jacques Tortora, Director, European Space Policy Institute (ESPI)
GT	Dr Graham Turnock, Snr Advisor Organisational Developopt, ESA; Former UKSA CEO; ISPL Faculty

DISCUSSANTS

SA	Professor Setsuko Aoki, Faculty of Management, Keio University; ISPL Faculty
CB	Dr Christoph Beischl, ISPL Associate Deputy Director
SE	Dr Stuart Eves, SJE Space; ISPL Faculty
RK	Dr Ranjana Kaul, Partner, Dua Associates; ISPL Faculty
EQ	Elizabeth Quintana, Principal, Satellite Industry Engagement, Ofcom
MR	Air Commodore (Ret'd) Mark Roberts, Defence & Security, RHEA Group; ISPL Faculty
OS	Oonagh Sands, Counsel, Fietta Law
JS	Juliana Seuss, Research Analyst, Military Sciences, Royal United Services Institute RUSI
DS	Prof David Southwood, past Chairman, Steering Board, UK Space Agency; ISPL Board
MS	Prof Sir Martin Sweeting, Executive Chairman, Surrey Satellite Technology; ISPL Board
FT	Dr Fabio Tronchetti, Co-Director, Institute of Space Law and Strategy, Beihang University
IZ	Ilaria Zilioli, Legal Officer, ESA; ISPL Faculty

The Discussants will join the discussion as the occasion arises.