

# Challenges in Using the UN Curricula at Universities and in Online Courses

United Nations/Austria Symposium
Access to Space: Holistic Capacity-Building for the 21st Century
Graz, Austria
September 3 to 7, 2017

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06.09.2017



#### Overview

- Education opportunities in space law
- Challenges
- Role of the Regional Centers
- Concrete projects for UNISPACE+50

# Education opportunities in space law



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- Education Opportunities in Space Law: A Directory
  - Published annually by UNOOSA
  - Latest edition UN Doc A/AC.105/C.2/2017/CRP.10 (23 March 2017)

#### Full-time programmes

- LL.M. at the University of Leiden (NL)
- LL.M. at McGill University (CAN)
- LL.M. at University of Lincoln (USA)
- M.A. in Space Policy at George Washington University (USA)
- Master in Space Law and Telecommunications Law at University of Paris Sud-XI (F)
- Master in Space Law at Beihang University (China)

# Education opportunities in space law (2)



- Courses offered during "normal" law studies
  - Advantage: no extra costs
  - Disadvantage: duration of minimum 2 years
  - Generally not accessible to space scientists and engineers
- Block programmes
  - ECSL Summer Course on Space Law and Policy
    - For students and young professionals
    - Majority of students are law students
  - Outside Europe?

### Space Law in Austria



#### University of Vienna

- No special programme
- Elective courses for law students
- 1 or 2 hours per week, sometimes in a block of 2 weeks
- Taught in English, ~ 40 participants
- Erasmus and international students 50%

#### University of Graz

- No special programme
- Seminar at Faculty of Law on "Space Law and Space Policy"
- Once a year (10 ECTS)
- Taught in English, max. 35 participants

# Challenges (1): Students/target group



#### Law students

- Benefit from specialization and elective courses
- LL.M. programmes duration of 1 to 2 years, substantial costs
- Limited professional opportunities, small market

#### Engineering students

- Lack of awareness for the need to study law
- Investment of time and money substantial

#### Professional technical staff and managers

- Increased awareness of the need to study law
- Problem of time



#### Registration

- Example of GhanaSat-1 with the help of UNOOSA
- What about other satellites? Capacity building is needed

#### Liability

• Is on "launching State" – Who is the launching State?

#### Authorization

The "appropriate State" has to authorize – Who is the appropriate State?

universität

#### Space Debris

Compliance with Space Debris Mitigation Guidelines



# Awareness of importance of space law (2)

#### Frequency allocation

- ITU coordination necessary
- Amateur frequencies often misused

#### Dual use

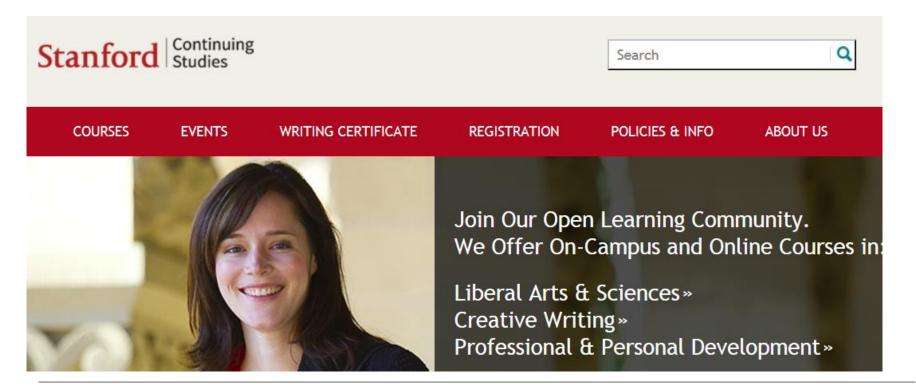
- Almost all space objects and activities are dual use
- Strict legal rules on export control (ITAR, European Regulation

#### Human rights

- Rules on privacy and dataprotection
- Contractual issues

## Challenges (3): Logistics and Finance







#### **BUS 213 — Principles of Product/Market Fit**

Quarter: Fall Day(s): Wednesdays

Course Format: On-campus course Duration: 6 weeks

Date(s): Sep 27—Nov 1 Time: 7:00—8:50 pm

Drop Deadline: Oct 10 Unit: 1

Tuition: \$450 Instructor(s): Edwin Oh

Status: Open

Space Law Course: 20h/week

2 weeks → \$ 1500

3 weeks → \$ 2250







For organisers	For students
Salaries of teachers	Tuition
Material preparation	Books
Accommodation	Accommodation + food
Travel costs	Travel costs
Organisation/administration	

#### BUS 167 W — Mapping Your Path to Career Satisfaction

Quarter: Fall

Course Format: Online course (System Requirements)

Duration: 8 weeks

Date(s): Sep 25-Nov 17

Drop Deadline: Sep 28 Unit: 1

Tuition: \$490 Addtl. Fee: \$30 (non-refundable)

Limit: 35 Instructor(s): Kathleen Sexton

Status: Open

Please Note: Online courses have a new refund policy. The full tuition refund deadline for this course is 9/28 at 5:00 pm (PT); 50% tuition refund deadline is 10/3 at 5:00 pm (PT).







For organisers	For students
Salaries of teachers	Tuition
Material preparation	Books
Organisation/administration	

# Challenges (4): Teaching material

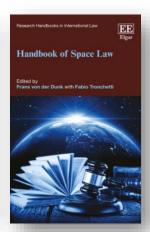


#### **Textbooks**

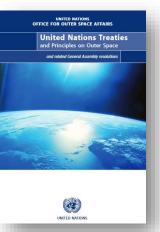








#### **Primary texts**



#### **Role of UN Education Curriculum on Space Law?**

# Challenges (5): Teachers



#### Faculty at Law School

- Public international law
- Private and commercial law
- Technology law

#### Visiting professors

- Short term
- Long term

#### Practitioners

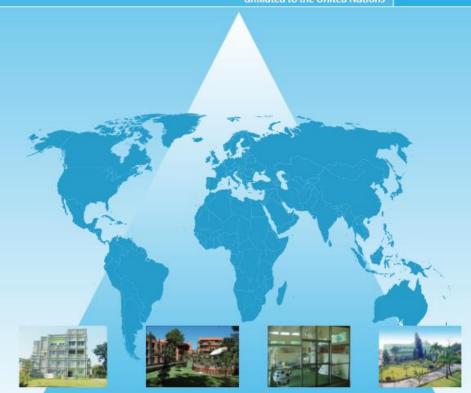
- Guest lecturers
- Responsible for a whole course

Role of the **Regional Centres** for Space Science and Technology Education affiliated to the **United Nations?** 

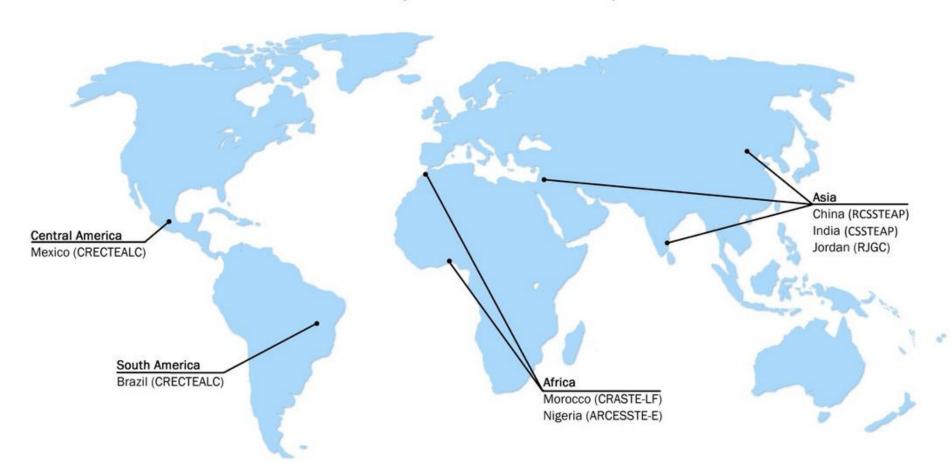
#### UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS

# Capacity-building in space science and technology

Regional Centres for Space Science and Technology Education affiliated to the United Nations



### Regional Centres for Space Science and Technology Education (affiliated to the United Nations)



## Concrete Project for UNISPACE+50



- Increase access to existing space law programmes
  - Engineering students and professional technical staff and managers
  - Scholarships?
  - Time?
- Develop programmes at Regional Centres
  - With or without partner universities?
  - What kind of material is needed?
  - Role of the UN Education Curriculum on Space Law?





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