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EU governance of natural resources: geopolitics, regions and sectors

syllabus of piloting sessions

In the frame of Jean Monnet Project GRASS - EU governance of natural resources: geopolitics, regions and sectors



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EU governance of natural resources: geopolitics, regions and sectors: syllabi of piloting sessions

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Semester 2, 2017-2018 and semester 1, 2018-2019

Coordinator	Olga Likhacheva (Pskov State University, Russia)
Credits	2 ECTS (optional course), 37 in-class hours
Lecturers	Anton Shkaruba (Erda Research, Technology, Innovation, The Netherlands) Olga Likhacheva (Pskov State University, Russia) Viktar Kireyeu (Erda Research, Technology, Innovation, The Netherlands) Kalev Sepp (Estonian University of Life Sciences, Estonia) Hanna Skryhan (Belarusian-Russian University and NGO Ekapraekt, Belarus)
Invited Lectures	Attila Katona (Central European University, Budapest, Hungary) Andrey Lappo, Larisa Danilova (Scientific and Research Institute of Maritime Spatial Planning “Ermak Northwest”, St.-Petersburg, Russia) Alexander Prishchepov (University of Copenhagen, Denmark) Dzmitry Grummo (Institute of Experimental Botany, National Academy of Sciences of Belarus, Belarus)
Level	BSc, MSc, PhD students
Host institution	Pskov State University, Pskov, Russia Russian State Hydrometeorological University, Saint-Petersburg, Russia Belarusian-Russian University, Mahilioŭ, Belarus Belarusian State University, Minsk, Belarus

Summary

The GRASS module is developed primarily in order to address the gaps in educational provision for PSU’s MSc and MA programs in environmental sciences, policy, management, economics, and in geography, as regards the EU dimension of natural resource and environmental policies, and in EU studies in general. The gaps were identified by GRASS issue groups, and included contents related to implementation of EU NATURA 2000 and WF Directives, nature-based solutions and the relevant EU R&D agenda, marine spatial planning as an EU-promoted approach to dealing with the management of marine resources and environmental protection, and relevant ICT tools.

Prerequisites

Required courses (or equivalents):

- Economic Theory,
- Ecology,
- Environmental Management,
- Environmental Law,
- Sustainable Development

Aims, objectives and participants

The overall purpose is to increase the competitiveness of PSU’s graduates and provide with useful in-hand knowledge on the EU policies and their tools, and this can be important for



pursuing carriers in the region of Pskov or nearby regions (e.g. St.-Petersburg) bordering the EU.

The sessions were developed by GRASS issue groups and piloted during the GRASS workshops at Pskov State University, Russian State Hydrometeorological University, Belarusian-Russian University and Belarusian State University. The main audience are MSc and MA students enrolled to geography, regional studies, environmental management, policy and science programs at Pskov State University, however in order to enhance the dissemination effect and to get feedback from student bodies from student bodies with different national backgrounds (mostly Belarusian one at Belarusian State University, multinational at Belarusian-Russian University and mostly Russian at Pskov State University and Russian State Hydrometeorological University), the piloting sessions will be run all over the consortium. All the sessions will be open for all interested students (including other programs) as well as academic staff.

During the academic year 2017/2018 and 2018/2019, all the sessions were replicated at PSU as course components integrated to the syllabi of relevant BSc, MSc, PhD programs: “Baltic region Geography”, “Sustainable development of the Baltic region”, “Geopolitics”, “Regional politics”, “Biodiversity governance”, “Water Governance”, “GIS in ecology”.

General learning outcomes:

By the end of the course, successful students will:

- understand concepts and instruments of biodiversity governance at international, subnational (EU), national and local levels (including objectives and principles of biodiversity conservation in CBD, EU directives and Russian legislation, role of international state-and non-state actors etc.), and multilevel nature of biodiversity governance
- be able to reflect on Russian legislation, policies and implementation practices from the perspectives of EU practices, and on options for transboundary cooperation
- be familiar with the concept of sustainable livelihood, its implications for biodiversity conservation and relevant experiences in the EU and Russia
- be aware of ecological networks, green corridors, categories of nature protected areas, and management and governance implications in the EU and Russia
- be familiar with issues and problems of adapting EU biodiversity legislation in EU accession countries, and reflect on this experience in the light of the Russian biodiversity conservation practice
- be aware of European transboundary initiatives in biodiversity conservation and their implications for Russia and Pskov Region
- be aware of the EU R&D Agenda on nature-based solutions, and of relevant tools, methods and best practices
- apply critical thinking as regards transferability of EU NBS practices to Russia
- be aware of the paradigm and methods of spatial marine planning, and be prepared to apply them in a diversity of settings.



Course workload



The table below summarizes course workload distribution:

Activities	Learning outcomes	Assessment	Estimated workload (%)
In-class activities			
Lectures	Understanding concepts and instruments	Class participation	10
Moderated in-class discussions	Understanding various policy and legislation	Class participation and preparedness for discussions	10
In-class assignments	Understanding various policy and legislation	Class participation and preparedness for assignments	30
Independent work			
Group work: <ul style="list-style-type: none"> - Contribution to group research - Contribution to the preparation and delivery of group presentation 	Ability to interpret data, use the concepts, tools and methods developed in the field, and to draw policy/management relevant conclusions	Quality of group assignments and individual presentations	30
Reading and discussion of assigned papers for seminars and preparation for lectures	Familiarity with and ability to critically and creatively discuss key concepts, tools, instruments, methods, and implementation practices as presented in the literature	Class participation, creative and active contribution to discussion	20
Total			100

Grading

The students' performance will be based on the following:

- Level of preparedness for participation in class discussions and seminars (20 %) (from 100 % for active participation and demonstrated familiarity with the course readings to 0 % for completely ignoring in-class discussions);
- Contribution to group assignments (30 %) (from 100% for clearly demonstrated input to 0 % for non-participation);
- Quality of the group assignment (50%)
 - +20% if done in comprehensible English
 - -20% if done in incomprehensible Russian



Modules and Key topics

Module 1. Baltic dimension of EU policies and relevant management tools

Lecturers	Ruben Zondervan (Lund University) Kalev Sepp (Estonian University of Life Sciences) Anton Shkaruba (Erda Research, Technology, Innovation, The Netherlands) Viktar Kireyeu (Erda Research, Technology, Innovation, The Netherlands) Olga Likhacheva (Pskov State University, Russia)
Piloted at	Pskov State University, Pskov Russia <i>Semester 2, 2017-2018</i>

Topic	Lecture/practical class	Number of hours
'Global' water governance: a multi-level challenge	Moderated lecture-discussion	2
Conflicts in the use of transboundary water bodies	Moderated lecture-discussion with in-class assignments	2
Nature conservation in remote rural area in the Baltic region (case studies from Estonia)	Moderated lecture-discussion	2
European ecological networks and their development in the Baltic countries	Moderated lecture-discussion	2
Biogeographical seminar game	Practical class	4

Module 2. Introduction to Biodiversity governance

Part 1. Introduction to Biodiversity governance

Lecturers	Anton Shkaruba (Erda Research, Technology, Innovation, The Netherlands) Viktar Kireyeu (Erda Research, Technology, Innovation, The Netherlands) Kalev Sepp (Estonian University of Life Sciences, Estonia) Hanna Skryhan (Belarusian-Russian University and NGO Ekapraekt, Belarus)
Invited Lectures	Attila Katona (Central European University, Budapest, Hungary)
Piloted at	Belarusian-Russian University, Mahilioŭ, Belarus <i>Semester 2, 2017-2018</i>

Topic	Lecture/practical class	Number of hours
Introduction to the theory, methodology and application of nature-based solutions for smart cities, governance of smart cities and nature-based solutions	Moderated lecture-discussion	4
Methodology workshops on observation techniques, repertory grid, and stakeholder interview techniques	Practical class	2
International best practices of applying urban nature-based solutions and development of smart cities (green	Moderated lecture-discussion	4



corridors, green-blue diameters, development of green infrastructure; challenges for physical planning, urban infrastructure management and landscape architecture)		
Case study research	Practical assignment	6

Part 2. Methods and tools for land-use and ecosystem spatial analysis

Invited Lectures	Alexander Prishchepov (University of Copenhagen, Denmark) Dzmitry Grummo (Institute of Experimental Botany, National Academy of Sciences of Belarus, Belarus)
Host institution	Belarusian State University, Minsk, Belarus Semester 1, 2018-2019

Topic	Lecture/practical class	Number of hours
Google Earth Engine for classification and monitoring of abandoned crops	Lecture	1
	Practical class	1
Remote sensing and GIS application for identification of High Conservation Value Areas	Moderated lecture-discussion	2

Module 3. Governance of Natural Resources in the Arctic

Lecturers	Anton Shkaruba (Erda Research, Technology, Innovation, The Netherlands) Olga Likhacheva (Pskov State University, Russia) Viktar Kireyev (Erda Research, Technology, Innovation, The Netherlands) Kalev Sepp (Estonian University of Life Sciences, Estonia)
Invited Lectures	Andrey Lappo, Larisa Danilova (Scientific and Research Institute of Maritime Spatial Planning “Ermak Northwest”, St.-Petersburg, Russia)
Host institution	Russian State Hydrometeorological University, Saint-Petersburg, Russia Semester 1, 2018-2019

Topic	Lecture/practical class	Number of hours
Marine spatial planning business game “If I was a planner” (Spatial planning in the Arctic)	Lecture/Introduction to the game	1
	Distribution of roles, familiarity with the context	1
	Game activities	2
	Summarizing	1

Literature

Module 1. Baltic dimension of EU policies and relevant management tools

On-line platforms:

EU Strategy for the Baltic Sea Region – <https://www.balticsea-region-strategy.eu/>



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Module 2. Introduction to Biodiversity governance

Part 1. Introduction to Biodiversity governance

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- Hansen, R., S. Pauleit (2014). From multifunctionality to multiple ecosystem services? A conceptual framework for multifunctionality in green infrastructure planning for urban areas. *Ambio*, 43, pp. 516–529
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Part 2. Methods and tools for land-use and ecosystem spatial analysis

On-line platforms:

<https://earthengine.google.com/>

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Course assignments

Group assignment 1 (Module 1):

- group research assignment focusing on a particular biodiversity conservation conflict/problem

Group assignment 2 (Module 2):

- case study research focusing on constraints and opportunities for implementation of NBS and smart-city development

Group assignment 3 (Module 3):

- development of spatial planning scheme in the frame of role game