Документ подписан простой электронной подписью

Информация о владельце:

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Federal State Auton omous Educational Institution for Higher Education

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Federal State Auton omous Educational Institution for Higher Education Дата подписания: 17.05.2024 PE-75.55 FRIENDSHIP UNIVERSITY OF RUSSIA (RUDN University)

named after Patrice Lumumba Уникальный программный ключ:

ca953a0120d891083f939673078ef1a989dae18 Institute of Environmental Engineering

## **COURSE SYLLABUS**

## **International Cooperation in the field of Nature Protection**

Recommended by the Didactic Council for the Education Field for the specialization: 05.04.06 "Ecology and Nature Management"

The course instruction is implemented within the professional education programme of higher education:

«Integrated Solid Waste Management» (Network program with L.N. Gumilyov Eurasian National University)

## 1. COURSE GOAL(s)

The course is designed to help students to to consider global environmental problems and the policy of international environmental cooperation aimed at solving them, to form students' knowledge and understanding of the need for international cooperation in the field of environmental protection to ensure the sustainable development of nature in conditions of all the increasing technogenic load on it, the consequences of which have no state borders.

## • 2. REQUIREMENTS FOR COURSE OUTCOMES

The course implementation is aimed at the development of the following competences:

Cipher	Competence	Competence achievement indicators
GC-3	Able to organize and manage the work of the team, developing a team strategy to achieve the goal.	(within this discipline)  GC -3.1 owns the techniques and methods of teamwork, organizes the selection of team members to achieve the goal;  GC -3.2 capable organize and adjust the work of the team, including on the basis of collegial decisions
GC-5	Able to analyze and take into account the diversity of cultures in the process of intercultural interaction.	GC -5.1. knows the main categories of philosophy, the laws of historical development, the basics of intercultural communication GC-5.2 is able to communicate in the world of cultural diversity and demonstrate mutual understanding between students - representatives of different cultures in compliance with ethical and intercultural standards
GPC-5	Able to solve the problems of professional activity in the field of ecology, nature management and nature protection using information and communication, including geoinformation technologies	GPC-5.3 Knows how to choose and apply an algorithm for solving environmental problems and implements algorithms using software
GC-4	Able to use modern methods of processing and interpreting environmental information in scientific and industrial research	GC-4.1 Knows the role and limitations of the use of statistical methods in scientific and practical research GC-4.2 Knows computer tools for processing statistical data and solving statistical problems GC-4.2 Able to formulate the problem of processing real data in terms of mathematical statistics, choose methods for processing statistical data to solve real problems

As a result of course studying, the student must:

#### Know:

• the main international legal norms in the field of environmental protection and aspects of international cooperation in the field of ecology, the fundamental international and Russian legal documents regulating relations in the field of nature management and environmental protection;

## Be able to:

 analyze the activities of international organizations in the field of environmental protection; detect international environmental offenses; to develop measures and prospects for improving ecological systems and natural-technogenic landscapes, to analyze specific situations in world environmental policy;

#### Own:

• skills of reasonable application of the principles and norms of international environmental law, assessment of actions carried out in the environmental sphere at the national and regional levels, to resolve global environmental problems and ensure the interests of national and global security.

## 3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

Discipline *International cooperation in the field of environmental protection* refers to the basic part (block 1 of the curriculum).

Within the higher education programme students also master other disciplines (modules) and / or internships that contribute to the achievement of the expected learning outcomes as results of the course.

Table 3.1

The list of the higher education programme components that contribute to the achievement of the expected learning outcomes

Compotones	· ·	Previous	Subsequent
Competence code	Competence descriptor	courses/modules,	courses/modules,
code		internships*	internships*
	Able to organize and		Foreign language
	manage the work of the		Methodology of
	team, developing a team		Scientific Creation /
	strategy to achieve the		Nature Protection and
GC-3	goal.	Foreign language	Accumulated
GC-3			Environmental Damage
			(AED) Elimination Tools
			Regional & Municipal
			MSW Management
			Systems
	Able to analyze and take	Higher School	
GC-5	into account the diversity	Pedagogy	Higher School Pedagogy
	of cultures in the process of	Foreign language	Foreign language
	intercultural interaction.		
	Able to solve the problems		IT in ecology and natural
	of professional activity in		resources management /
	the field of ecology, nature		Landscape and
	management and nature		geochemical aspects of
CDC 5	protection using		waste impact /
GPC-5	information and		Ecotoxicokinetics of
	communication, including		waste /
	geoinformation		National and
	technologies		international aspects of
			radioactive waste
			management

		Regional & Municipal MSW Management Systems Biological and sanitary safety of waste management Mapping and GIS- technologies in MSW Management
		Remote Sensing of MSW objects
GC-4	Able to use modern methods of processing and interpreting environmental information in scientific and industrial research	IT in ecology and natural resources management

## 4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the discipline is 3 credit units.

Table 4.1. Types of academic activities during the period of the HE program(me) mastering

True of a sodowie sodiwities	_	Total		Seme	ster(s)	
Types of academic activities	8	hours	1	2	3	4
Contact academic hours						
Lectures		16	16			
Lab works						
Seminars (workshops/tutorials)		32	32			
Self-study		36	36			
Evaluation and assessment (exam; pass/fa	uil grading)	24	24			
The total course workload	hours	108	108			
	credits	3	3			

## **5. COURSE CONTENT**

Table 5.1. Course Modules and Contents

Ti	itle of Course Modules	Content	Types of academic activities
1.	Doing. The concept of international cooperation in the field of environmental protection, the main stages of its formation.	Subject, objects, principles and sources of international legal regulation of environmental quality.	L, S

Title	e of Course Modules	Content	Types of academic activities	
2	Modern global environmental problems and the implementation of the principles of sustainable environmental and economic development.	Sustainable Development Goals. Criteria for sustainable development. The concept of circular economy. International experience of joint solution of global international organizations and their role in the field of environmental protection of environmental problems	L, S	
3	International conferences as a tool for solving international environmental problems.	The role of an international treaty and its features in the regulation of interstate relations in the field of environmental protection. international agreements. The contribution of international conferences to the development of international environmental law (retrospective analysis). Basic international legal documents. Contents of the most important regional agreements.	L, S	
4	Legal mechanisms of international legal regulation	General concepts of international environmental law. International legal regulation of marine environment protection; protection of atmospheric air, near-Earth space and climate. International legal protection of biological diversity in general, flora and fauna. Responsibility of states for environmental pollution	L, S	

# 6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Classroom equipment and technology support requirements

Classroom for Academic Activity Type	Classroom equipment	Specialized educational / laboratory equipment, software and materials for mastering the course (if necessary)			
Lecture	Classroom, equipped with a set of specialized furniture; whiteboard; a set of devices includes portable multimedia projector, laptop, projection screen, stable wireless	Classroom, equipped with a set of specialized furniture; whiteboard; a set of devices includes portable			
Seminars	Classroom, equipped with a set of specialized furniture; whiteboard; a set of devices includes portable multimedia projector, laptop, projection screen, stable wireless	multimedia projector, laptop, projection screen, stable wireless Internet connection. Software: Microsoft Windows, MS Office / Office 365, MS Teams, Chrome (latest stable release), Skype. Microsoft Windows 7 corporate. License No.			

Classroom for Academic Activity Type	Classroom equipment	Specialized educational / laboratory equipment, software and materials for mastering the course (if necessary)
		5190227, date of issue March 16, 2010 MS Office 2007 Prof , License # 6842818, date of issue 09/07/2009
For Self-Study	Classroom for self-study (can be used for seminars and consultations), equipped with a set of devices includes laptop, stable wireless.	No

## 7. RECOMMENDED SOURCES FOR COURSE STUDIES

## a) Main reading:

*Bogolyubov S.A.* ecological law: Textbook for academic undergraduate / S.A. Bogolyubov [and others]; Ed. S.A. Bogolyubov. - 6th ed., revised. and additional - M.: Yurayt, 2019. - 281 p. - (Bachelor. Academic course). - ISBN 978-5-534-02319-0: 689.00.

*Bulatov* A.S. World economy and international economic relations. Full course [Text / electronic resource]: Textbook / Ed. A.S. Bulatov. - 3rd ed., erased.; Electronic text data. - M.: KnoRus, 2017, 2019. - 916 p. - (Bachelor's degree). - ISBN 978-5-406-05794-0: 1432.00.

## b) Additional reading

*Nikolsky A. A.* Great ideas of great ecologists. History of key concepts in ecology. - M.: GEOS, 2014 - 189 p.

#### *Internet-based sources*

- 1. ELS of RUDN University and third-party ELS, to which university students have access on the basis of concluded agreements:
  - RUDN Electronic Library System RUDN EBS <a href="http://lib.rudn.ru/MegaPro/Web">http://lib.rudn.ru/MegaPro/Web</a>
  - ELS "University Library Online" http://www.biblioclub.ru
  - EBS Yurayt <a href="http://www.biblio-online.ru">http://www.biblio-online.ru</a>
  - ELS "Student Consultant" www.studentlibrary.ru
  - EBS "Lan" http://e.lanbook.com/
  - EBS "Trinity Bridge"
  - 2. Databases and search engines:
  - <u>www . mnr . gov . ru</u> site of the Ministry of Natural Resources and Ecology of the Russian Federation;

<u>www. unep.org is</u> the website of the United Nations Environment Programme; <u>www. wwf.ru is</u> the website of the World Wildlife Fund.

- 3. Official websites of the main international organizations and conventions in the field of environmental protection (electronic resources):
- 1. Climate Framework Convention: http://www.un.org/ru/documents/decl\_conv/conventions/climate\_framework\_conv.shtml
- 2. Convention on Biological Diversity: http://www.un.org/ru/documents/decl\_conv/conventions/biodiv.shtml
- 3. Convention on Wetlands of International Importance Principally as Habitat for Waterfowl http://www.un.org/ru/law/environmental/waterfowl.pdf

- 4. Convention Concerning the Protection of the World Cultural and Natural Heritage http://www.un.org/en/documents/decl\_conv/conventions/pdf/cultural\_heritage.pdf
- 5. Convention on International Trade in Endangered Species of Wild Fauna and Flora http://www.un.org/en/documents/decl\_conv/conventions/pdf/cites.pdf
- 6. Bonn Convention on the Conservation of Migratory Species of Wild Animals http://www.un.org/ru/documents/decl\_conv/conventions/pdf/wild\_animals.pdf
  - electronic fund of legal and normative-technical documentation <a href="http://docs.cntd.ru/">http://docs.cntd.ru/</a>
  - Yandex search engine <a href="https://www.yandex.ru/">https://www.yandex.ru/</a>
  - Google search engine https://www.google.ru/
  - abstract database SCOPUS http://www.elsevierscience.ru/products/scopus/

## 8. MID-TERM ASSESSMENT AND EVALUATION TOOLKIT

Evaluation materials and a point- rating system\* for assessing the level of competence formation (part of competences) based on the results of mastering the discipline **Basics of the Circular Economy** are presented in the Appendix to this Work Program of the discipline.

DEVELOPER:		
Professor of the ES&PQM Department	M -	Redina M.M.
Position	Signature	Name, Surname
HEAD OF DEPARTMENT:	0	
Director of ES&PQM Department	Ceeel	Savenkova E.V.
Position	Signature	Name, Surname
<b>HEAD OF PROGRAMME:</b>		
Senior Lecturer of the ES&PQM Department	Tourobo	Popkova A.V.
Position	Signature	Name, Surname

## Federal State Autonomous Educational Institution of Higher Education

## PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA RUDN University

## **Institute of Environmental Engineering**

educational division (faculty/institute/academy) as higher education programme developer

## **COURSE SYLLABUS**

International cooperation in the field of nature protection

course title

**Recommended by the Didactic Council for the Education Field of:** 

05.04.06 "Ecology and nature management"

field of studies / speciality code and title

The course instruction is implemented within the professional education programme of higher education:

«Integrated Solid Waste Management» (Network program with L.N. Gumilyov Eurasian National University)

higher education programme profile/specialisation title

## **Department of Environmental Safety and Product Quality Management**

APPROVED
Department meeting protocol No,
Dated
day, month, year
Head of Educational Department
(E.V. Savenkova)
signature
/

## **ASSESSMENT TOOLKIT**

## for the course

## **International Cooperation in the field of Nature Protection**

course title

05.04.06 "Ecology and Nature Management" field of studies / speciality code and title

<u>«Integrated Solid Waste Management»</u> (Network program with L.N. Gumilyov Eurasian National University)

higher education programme profile/specialisation title

**Master of Sciences in Ecology and Nature Management** 

graduate's qualification (degree)

## Passport to Assessment Toolkit for Course <u>International cooperation in the field of nature protection</u>

 $Course: \underbrace{\textbf{International cooperation in the field of nature protection}}_{title}$ 

			Tools to assess higher education programme mastering level							Points for topic	Points for module		
s in part ) under	Course module	Course topic under		Class	work			Sel	f-studio	es	Exam / Pass- fail assess ment		
Competences (competences in part ) under assessment	under assessment	assessment	Quiz	Test	Colloquium	Control work	Homework	Research essay/ Library research paper	Calculation and graphic work	Course work/project			
GC-3 GC-5 GPC-5	The concept of international cooperation in the	Topic 1: Introduction to the concept of international cooperation in the	+	+	-	-	-	+	-	-		22	22
GC-3 GC-5	protection, the main stages of its formation.  Module 2:	field of environmental protection Topic 1: Sustainability	+	+	-	-	-	+	-			20	20

GPC-5 GC-4	Modern global environmental problems and the implementation of the principles of sustainable environmental and economic development.	principles and their realization to solve modern environmental problems										
GC-3 GC-5 GPC-5 GC-4	Module 3: International conferences as a tool for solving international environmental problems.	Topic 1: International conferences as a tool for solving international environmental problems	+	+	-	-	-	+	-		22	22
GC-3 GC-5 GPC-5 GC-4	Module Legal mechanisms of international legal regulation	Topic 1: Legal mechanisms of international legal regulation	+	+	-	-	-	+	-		22	22
										14	86	86

## Course International cooperation in the field of nature protection

course title

## **QUESTION CARD No**

QUESTION 1 Global environmental problems: characteristics and approaches to their solution QUESTION 2 SDGs for the environmental protections and indicators of their achievements

QUESTION 3 Examples of the international cooperation for the solution of environmental problem in your region.

Developer \_\_\_\_\_\_\_(M.M. Redina)

Head of Educational Department \_\_\_\_\_\_(E.V. Savenkova)

day, month, year

The set of exam question cards is complemented by the assessment criteria developed by the teacher and approved at the department meeting.

Assessment criteria:

(in compliance with the legal regulations in force)

## **Tentative list of assessment tools**

П / П	Assessment tool	Brief features	Assessment tool representation in the kit		
Class work					
1	Survey/Quiz	A tool of control, organised as a special conversation between a teacher and students on topics related to the course under study, and designed to clarify the amount of students' knowledge in a particular section, topic, problem, etc.	Questions on the course topics /modules		
2	Test	A system of standardised tasks that allows the teacher to automate the procedure for measuring the student's level of knowledge and skills	Tests bank		
4	Control work	A tool of control organised as a classroom lesson, at which students need to independently demonstrate the acquisition and mastering of the educational material of the course topic, section, or sections.	Questions on the course topics /modules		
9.	Presentation (defence) of project/report/ Library research paper /briefs *	A tool for monitoring the students' ability to present the work results to the audience.	Themes for projects/reports/ Library research paper/ briefs		
10	Pass/Fail assessment	A tool for checking the quality of students' performance of laboratory work, acquisition and mastering of the practice training and seminar educational material, successful completion of the advanced field internship and pre-graduate internship and fulfillment of all training assignments in the course of these internships in accordance with the approved programme.	Tasks examples		
11	Exam	The evaluation of the student's work during the semester (year, the entire period of study, etc.); it is designed to identify the level, soundness and systematic nature of theoretical and practical knowledge gained by the student, formation of independent work skills, development of creative thinking, ability to synthesise the acquired knowledge and apply it to solve practice tasks.	Examples of tasks/questions/exam question cards		
	Self- studies				

	I ~	T	
1	Calculation and graphic work	A tool for checking students' skills in applying the acquired knowledge according to a predetermined methodology in task solving or fulfilling assignments for a module or discipline as a whole.	Set of tasks for calculation and graphic work
2	Course work/project	A type of independent written work aimed at the creative development of general professional and specialised professional disciplines (modules) and the development of relevant professional competences	Course assignment themes
3	Project	The final "product" that results from planning and performance of educational and research tasks set; it allows the teacher to assess the students' ability to independently shape their knowledge in the course of solving practice tasks and problems, navigate in the information environment and the students' level of analytical, research skills, skills of practical and creative thinking; it can be implemented individually or by a group of students.	Themes for teambased or individual projects
4	Research essay (Library research paper)	The student's independent work in writing that summarises the results of the theoretical analysis of a certain scientific (educational and research) topic, where the author reveals the essence of the problem under study, considers different points of view, as well as argues his/her views on the material under consideration.	Themes for research essay ( library research papers)
5	Reports, briefs	The product of the student's independent work, which is a public performance on the presentation of the results of solving a specific educational, practical, research or scientific topic.	Themes for reports, briefs
6	Essay and other creative assignments	A partially regulated assignment that has a non-standard solution and allows the teacher to diagnose students' skills in integrating knowledge from various fields and arguing their own point of view; it can be prepared individually or by a group of students.	Themes for teambased or individual creative assignments
7	Standard calculations	A tool to test skills in applying the acquired knowledge, according to a predetermined methodology, solving tasks or fulfilling assignments for a module or discipline as a whole.	Set of tasks for standard calculations
8	Homework	The tasks and assignments differ in terms of the following levels:	Set of multi-level tasks and assignments

1 1 1 1 1	1.1	•
a) reproductive level allows the teacher to	with	varying
evaluate and diagnose the students'	difficulty	
knowledge of factual material (basic		
concepts, algorithms, facts) and the students'		
ability to correctly use special terms and		
concepts, recognize objects of study within a		
certain section of the discipline,		
b) reconstructive level allows the teacher to		
evaluate and diagnose the students' abilities		
to synthesise, analyse, generalise factual and		
theoretical material and formulate specific		
conclusions, establish cause-and-effect		
relationships,		
c) creative level allows the teacher to		
evaluate and diagnose students' skills to		
integrate knowledge of various fields, argue		
their own point of view.		

## **Department of Environmental Safety and Product Quality Management**

## Set of assignments for control work

for the course International cooperation in the field of nature protection

#### Theme 1

### Variant 1

Task 1 Give a definition of the concept "Sustainable development". Explain, whether any development of a natural system is possible without crisis

Task 2 Show an example of the international cooperation in the achievement of any SDG

#### Theme 2

### Variant 1

Task 1 List global environmental problems most significant for your country. Give their brief description and solutions to their elimination

Task Give some examples of international organizations responsible for the solution of listed problems. In which of these organizations does your country participates?

#### Theme 3

#### Variant 1

- Task 1 List the most important international conferences in the field of prevention of accidents affecting environmental quality and their main resolutions.
- Task 2. Suggest and justify a list of topics to be discussed in any international conference on forest concervation.

#### Theme 3

#### Variant 1

- Task 1 Describe international legal regulation of marine environment protection
- Task 2 Characterize the mechanisms of responsibility of states for environmental pollution

#### **Assessment criteria:**

(in compliance with the legal regulations in force)

	A? —	
Developer	(M.M. Red	ina)

## **Department of Environmental Safety and Product Quality Management**

# Themes for essays (research essay/library research papers, reports, briefs)

## for the course International cooperation in the field of nature protection

- 1 Development of the concept of sustainability
- 2 International cooperation in the field of water conservation
- 3 International cooperation in the field of atmospheric protection
- 4 International cooperation in the field of greenhouse gases management
- 5 International cooperation in the field of biodiversity conservation
- 6 International cooperation in the field of forest conservation and restoration
- 7 International cooperation in the field of elimination of transboundary accidents
- 8 International cooperation in the field of soil protection
- 9 International cooperation in the field of environmental monitoring
- 10 International cooperation in the field of environmental education

#### **Assessment criteria:**

(in compliance with the legal regulations in force)

Developer	 _ (M.M. Redina)
day, month, year	 -