Federal State Autonomous Educational Institution for Higher Education PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA (RUDN University)

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 (within this discipline)
GC-3	Able to organize and manage the work of the team, developing a team strategy to achieve the goal.	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

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

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

		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	s during the period	of the HE program(n	ne) mastering
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Turner of and domin a stirition		Total	Semester(s)					
Types of academic activities	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/fail)	grading)	24	24					
The total course workload	hours	108	108					
	credits	3	3					

5. COURSE CONTENT

Table 5.1. Course Modules and Contents

Title	e 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

Titl	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

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.				

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)
		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 http://lib.rudn.ru/MegaPro/Web

- ELS "University Library Online" http://www.biblioclub.ru

- EBS Yurayt http://www.biblio-online.ru
- ELS "Student Consultant" <u>www.studentlibrary.ru</u>
- 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 http://docs.cntd.ru/

- Yandex search engine https://www.yandex.ru/

- 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 Position

Signature

Redina M.M.

Name, Surname

HEAD OF DEPARTMENT:

Director of ES&PQM Department

Position

Signature

Savenkova E.V.

Name, Surname

HEAD OF PROGRAMME:

Senior Lecturer of the ES&PQM Department

Position

Signature

Name, Surname

Popkova A.V.

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>

Field of Studies / Speciality 05.04.06 Ecology and Nature Management/ Integrated Solid Waste Management

Course: International cooperation in the field of nature protection

s in part) under			Class work Self-studies / Pas fai asso						Exam / Pass- fail assess ment	Points for topic	Points for module		
Competences (competences in part) under assessment	Course module under assessment	Course topic under 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	Module 1: The concept of international cooperation in the field of environmental protection, the main stages of its	Topic 1: Introduction to the concept of international cooperation in the field of environmental	+	+	-	-	-	+	-	_		22	22
GC-3 GC-5	formation. Module 2:	protection Topic 1: Sustainability	+	+	-	-	-	+	-			20	20

GPC-5 GC-4	e	principles and their realization to solve modern environmental problems										
GC-3 GC-5	Module 3: International	Topic 1: International	+	+	-	-	-	+	-		22	22
GC-5 GPC-5		conferences as a tool										
	conferences as a tool											
GC-4	for solving international	for solving international										
	environmental	environmental										
	problems.	problems										
GC-3	Module	Topic 1: Legal	+	+			_	+			22	22
GC-5	Legal mechanisms of	mechanisms of	1	I	_			I			22	22
GPC-5	international legal	international legal										
GC-4	-	regulation										
	10guillion	10501000										
										14	86	86

Course International cooperation in the field of nature protection $_{\rm course \ title}$

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)
SI	gnature
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	

1	Calculation and graphic work	A tool for checking students' skills in applying the acquired knowledge according	Set of tasks for calculation and	
		to a predetermined methodology in task solving or fulfilling assignments for a module or discipline as a whole.	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 team- based 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 team- based 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	

 a) reproductive level allows the teacher to evaluate and diagnose the students' 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 	with difficulty	varying
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)

Developer _____

(M.M. Redina)

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

Development of the concept of sustainability
 International cooperation in the field of water conservation
 International cooperation in the field of atmospheric protection
 International cooperation in the field of greenhouse gases management
 International cooperation in the field of biodiversity conservation
 International cooperation in the field of forest conservation and restoration
 International cooperation in the field of elimination of transboundary accidents
 International cooperation in the field of soil protection
 International cooperation in the field of environmental monitoring
 International cooperation in the field of environmental education

Assessment criteria:

(in compliance with the legal regulations in force)

Developer	 A-	_(M.M. Redina)
Signature		

day, month, year