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

Institute of Environmental Engineering

COURSE SYLLABUS

ОВОС объектов в сфере управления отходами /Environmental impact assessment (EIA) of SWM objects

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

The mastering of the course is carried out as part of the implementation of the main professional syllabus (Higher Education programme, specialization)

Integrated Solid Waste Management / Комплексное управление твердыми бытовыми отходами

2024

Электронная версия документа

1. COURSE GOAL(s)

The course is designed to The purpose of mastering the discipline of EIA of objects in the field of waste management / Environmental Impact Assessment (EIA) of SWM objects is to study the theoretical foundations and features of environmental design and conduct of the EIA procedure (including facilities for processing industrial and municipal waste), acquiring practical skills in expert work and performing tasks on the environmental justification of various types of activities related to environmental management issues, developing the ability to correctly use methods for assessing the impact of objects on the environment, drawing up the necessary environmental and economic justification for industrial activities (investment plan) using the best available technologies (BAT) using the example of small waste processing industry enterprises..

• 2. REQUIREMENTS FOR COURSE OUTCOMES

The process of studying the discipline is aimed at the formation of the following competencies:

Code	Code and name of the graduate's competence	Code and name of the indicator of achievement of competence
GC-2	Able to manage a project at all stages of its life cycle.	**GC-2.1** is able to formulate a design task based on the problem posed and a method for solving it
		GC-2.2 is able to develop a project concept, formulate a goal, objectives, justify the relevance, expected results and areas of their application
		GC-2.3 is able to develop a project implementation plan taking into account possible risks, plans the necessary resources
GPC-2	Able to use special and new sections of ecology, geoecology and environmental management when solving scientific research and applied problems of professional activity	**GPC-2.1** Has a systematic understanding of the theoretical and methodological foundations of environmental regulation
		GPC-2.2 Masters modern methods of obtaining and assessing geochemical information to solve theoretical and practical problems of environmental geochemistry in the field of ecology and environmental management for the purpose of environmental protection
		GPC-2.3 Knows basic knowledge of fundamental sections of biology to the extent necessary to master the basics of ecology and environmental management
GPC-3	Able to apply environmental research methods to solve scientific research and applied problems of professional activity.	**GPK-3.1** Knows the principles and methods of environmental monitoring of environmental components
		GPK-3.2 Possesses analytical methods for monitoring pollutants and physical impacts and processing the information received
		GPK-3.3 Able to develop environmental monitoring and control systems in production and solve applied problems in professional activities
PC-2	Able to develop and economically justify plans for the introduction of new equipment and technologies to ensure minimal impact of waste on the environment	**PC-2.1** Able to economically justify plans for introducing new equipment and technologies for waste management, using them as a secondary resource
		PC-2.2 Capable of minimizing the environmental impact of waste

PC-5	Capable of assessing the impact of business activities on the environment	**PC-5.1** Able to conduct an environmental impact assessment (EIA) of the designed enterprise and structures, predict and evaluate negative consequences
PC-10	Capable of monitoring the state of the environment using environmental technologies	**PC-10.1** Capable of monitoring compliance with environmental protection requirements
		PC-10.2 Capable of developing an action plan aimed at meeting the requirements of regulatory legal acts in the field of environmental protection, taking into account best practices
		PC-10.3 Capable of analyzing large amounts of professional information

3. COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

Discipline ***ОВОС объектов в сфере управления отходами /Environmental impact assessment (EIA) of SWM objects*** **Module** 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

Competence code	Competence descriptor	Previous courses/modules, internships*	Subsequent courses/modules, internships*
GC-2	Able to manage a project at all stages of its life cycle.	Research work in the term including projects / Исследовательская работа в семестре включая проекты	Research work in the term including projects / Исследовательская работа в семестре включая проекты State Exam / Государственный экзамен
GPC-2	Able to use special and new sections of ecology, geoecology and environmental management when solving scientific research and applied problems of professional activity	Research work in the term including projects / Исследовательская работа в семестре включая проекты	MSW Recycling and Utilization Technics / Технологии рециклинга и утилизации ТКО Engineering Ecology / Инженерная экология Monitoring of Environmental Impacts / Мониторинг воздействия на окружающую среду
GPC-3	Able to apply environmental research methods to solve scientific research and applied problems of professional activity.	Research work in the term including projects / Исследовательская работа в семестре включая проекты	MSW Recycling and Utilization Technics / Технологии рециклинга и утилизации ТКО Engineering Ecology / Инженерная экология

			Monitoring of Environmental Impacts / Мониторинг воздействия на окружающую среду
PC-2	Able to develop and economically justify plans for the introduction of new equipment and technologies to ensure minimal impact of waste on the environment	Research work in the term including projects / Исследовательская работа в семестре включая проекты	MSW Recycling and Utilization Technics / Технологии рециклинга и утилизации ТКО
PC-5	Capable of assessing the impact of business activities on the environment	Mapping And GIS-technologies in MSW Management / Методы картографирования и ГИС-технологии в управлении ТКО Mapping And GIS-technologies in MSW Management / Методы картографирования и ГИС-технологии в управлении ТКО	Management of Environmental-economic Risks / Управление эколого-экономическими рисками Государственная итоговая аттестация Research work in the term including projects / Исследовательская работа в семестре включая проекты
PC-10	Capable of monitoring the state of the environment using environmental technologies	Research work in the term including projects / Исследовательская работа в семестре включая проекты	Engineering Ecology / Инженерная экология Monitoring of Environmental Impacts / Мониторинг воздействия на окружающую среду

4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the discipline is **2** credit units.

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

Types of academic activities		**Total hours**	**Semester(s)**			
			1	**2**	**3**	**4**
Contact academic hours						
Lectures		11		11		
Lab works						
Seminars (workshops/tutorials)		11		11		
Self-study		*35*		*35*		
Evaluation and assessment (exam; pass/fail grading)		*15*		*15*		
The total course workload	hours	**72**		**72**		
	credits	**2**		**2**		

5. COURSE CONTENT

Table 5.1. The content of the discipline (module) by type of educational work

Title of Course Modules	Content	Types of academic activities
Introduction	Basic concepts of environmental impact assessment - project documentation at various stages of the project cycle - practice by country	L, S
Strategic environmental assessment – place in environmental impact assessment	Strategic environmental assessment (SEA) as the first stage of assessing the environmental impact of a project	
Assessment of the current state of the environment	Methodology and sequence of work on EIA. Preliminary desk stage. Field stage.	L, S
	Socio-economic research. The final desk stage.	L, S
Involvement of contractors at various stages of EIA - features	Aspects of attracting contractors to conduct EIA at various stages – modern practice.	L, S
Legal requirements for EIA - national and international requirements - differences and similarities	Requirements of international legislation for EIA - EU directives, IFC requirements, national acts	L, S
Composition of an environmental impact assessment report for facilities in the field of waste management	Composition of the list of environmental protection measures - modern practice of preparing project documentation for facilities in the field of waste management	L, S
EIA и ESHIA – similarities and differences	Environmental impact assessment and Environmental social health impact assessment – requirements in different countries - similarities and differences	L, S
Monitoring and environmental control - requirements in different countries	Monitoring and environmental control - monitoring program. Main aspects	L, S
Issues of calculating damage to environmental components	Issues of calculating damage to environmental components - aquatic and biological resources, plant resources, fauna..	L, S
	Red Data Book species	L, S
Section 10 Informing the public about the project	Public discussions of project documentation - modern practice of informing the public and holding public discussions in different countries	L, S
Practice of calculating fees for negative environmental impact in different countries	Practice of calculating fees for negative environmental impact in different countries	L, S
Examination and approval of project documentation for EIA	Examination and approval of EIA materials in different countries	L, S
Features of preparing an EIA report - the use of information technology	Practice of using information technology for preparing an EIA	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 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. 5190227, date of issue March 16, 2010 MS Office 2007 Prof , License # 6842818, date of issue 09/07/2009
Seminars	Classroom, equipped with a set of specialized furniture; whiteboard; a set of devices includes portable multimedia projector, laptop, projection screen, stable wireless	
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

Main reading:

1. EU Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU) Electronic resource: https://ec.europa.eu/environment/eia/pdf /EIA_guidance_EIA_report_final.pdf
2. UK Guidance Environmental Impact Assessment Explains requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. Electronic resource: https://www.gov.uk/guidance/environmental-impact-assessment
3. IFC Environmental and social impact assessment guidelines https://www.ifc.org/wps/wcm/connect/Industry_EXT_Content/IFC_External_Corporate_Site/Hydro+Advisory/Resources/Tools+and+Guidelines/
4. EBRD Environmental and social impact assessments https://www.ebrd.com/work-with-us/project-finance/environmental-and-social-impact-assessments.html
5. Ledaschcheva T.N., Pinaev V.E. Environmental impact fee calculation in Russia for EIA – modern practices Print. Textbook - M.: World of Science, 2019. - Access mode: https://izd-mn.com/PDF/20MNNPU19.pdf - Cap. from the screen. ISBN 978-5-6042807-1-3
6. Order of the State Committee for Ecology of the Russian Federation dated May 16, 2000 N 372 "On approval of the Regulations on assessing the impact of planned economic and other activities on the environment in the Russian Federation" (Electronic resource) https://base. garant.ru/12120191/
7. Decree of the Government of the Russian Federation of February 16, 2008 N 87 "On the composition of sections of project documentation and requirements for their content" (electronic resource) https://base.garant.ru/12158997/
8. Decree of the Government of the Russian Federation of September 13, 2016 N 913 "On rates of payment for negative impact on the environment and additional coefficients" (electronic resource)

https://base.garant.ru/71489914/
9. Federal Law “On Environmental Expertise” dated November 23, 1995 No. 174-FZ (as amended in 2008) Electronic resource: http://www.consultant.ru/document/cons_doc_LAW_8515/

Additional reading:

1. Niskovskaya E.V. Environmental impact assessment and environmental assessment [Electronic resource]: Educational and methodological complex / E.V. Niskovskaya, O.I. Litvinets; Under general ed. A.N. Gulkova. - Electronic text data. - M.: Prospekt, 2017. - 192 p. - ISBN 978-5-392-23236-9. RUDN Library
2. Tsyganov A.A. Ts 94 Environmental assessment and design. Book. 1. Lectures: Textbook. – 4th ed., additional. and revised – Tver: Tver. state univ., 2017. – 525 p. Electronic resource: http://texts.lib.tversu.ru/texts/12997ucheb.pdf (materials posted on the RUDN website)
3. Kudryavtseva O. V., Ledashcheva T. N., Pinaev V. E. Methodology and practice of assessing environmental impact. Project documentation: training manual. Ed. 2nd, rev. and additional - M.: Faculty of Economics of Moscow State University named after M.V. Lomonosov, 2018. - 160 p. ISBN 978-5-906783-91-2 https://www.econ.msu.ru/sys/raw.php?o=47416&p=attachment
4. Shahin D.A., Pinaev V.E., Kargashin P.E., Kargashina M.A. Assessment of the current state of the environment within the framework of environmental support of projects (monograph) Print. Scientific publication (Electronic resource) Access mode: http://izd-mn.com/PDF/08MNNPM18.pdf, free. - Cap. from the screen. - Yaz. Russian, English LLC Publishing House "World of Science" 2018
5. Kasimov D.V., Pinaev V.E. Theory and practice of calculating and minimizing damage to forest resources: rare plant species, wood and food resources, medicinal raw materials (monograph) Printed. Ed. 2nd, rev. and additional M.: World of Science, 2018. - 96 p. (Electronic resource) http://izd-mn.com/07mnnpm18.html (free access). Cap. from the screen. Language rus ISBN 978-5-9908913-1-9
6. Kasimov D.V., Pinaev V.E. Issues of reclamation of lands, freshwater and marine objects (monograph) M.: World of Science, 2017.– (Electronic resource) Access mode: http://izdmn.com/PDF/10MNNPM17.pdf – Cap. from the screen. ISBN 978-5-9908913-5-7
7. Kasimov D.V., Ledashcheva T.N., Pinaev V.E. Collection of tasks for ecologists (HSE specialists). (textbook) Printed. - M.: World of Science, 2019. - (Electronic resource) Access mode: https://izd-mn.com/PDF/19MNNPU19.pdf - Cap. from the screen. ISBN 978-5-

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" www.studentlibrary.ru
- EBS "Lan" http://e.lanbook.com/
- EBS "Trinity Bridge"

2. Databases and search engines:

- 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

The assessment toolkit and the grading system to evaluate the level of competences (competences in part) formation as results of mastering the discipline are specified in the Appendix to the syllabus.

Электронная версия документа

DEVELOPER:

Associate Professor of the ES&PQM Department		Pinaev V.E..
Position	Signature	Name, Surname

HEAD OF DEPARTMENT:

Director of ES&PQM Department		**Savenkova E.V.**
Position	Signature	Name, Surname

HEAD OF PROGRAMME:

Associate Professor of the EM Department		**Kapralova D.O.**
Position	Signature	Name, Surname

Электронная версия документа

Federal State Autonomous Educational Institution of Higher Education

PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA
RUDN University

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

COURSE SYLLABUS

ОВОС объектов в сфере управления отходами /Environmental impact assessment (EIA) of SWM objects

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 / Комплексное управление твердыми бытовыми отходами

higher education programme profile/specialisation title

Электронная версия документа

Passport to Assessment Toolkit for Course « ОВОС объектов в сфере управления отходами /Environmental impact assessment (EIA) of SWM objects»

Field of Studies / Speciality 05.04.06 "Ecology and nature management"
code title

Course ОВОС объектов в сфере управления отходами /Environmental impact assessment (EIA) of SWM objects

Type of work	Evaluation criterion	Scoring	Number of classes	Total
Seminars: reports with presentation	- Presentation design (readability), - High-quality report (the speaker talks, not reads), - Use of regulatory legal acts (LLA) - (links to current NLA + hyperlinks), - Availability of your own photos, videos (videos on the topic, pieces of no more than 60 seconds, are cut and pasted into the presentation).	1 2 1 1	**11** x 5**	**55 points**
Seminars:	- Preparation of a strategic environmental assessment report for a selected enterprise or industry		**1 x 10**	**10 points**
Homework	- Participation in the Exhibition “Inhabited Island: Earth”, - Participation in the exhibition “EHS audit on the run: photo and video evidence”,	10 10	**2 x 10**	**20 points**
Additional tasks	- Visit to a specialized and professional exhibition or forum (Report with photos) - HSE management course on ProFuture - HSE Audit course on Stepik	5 5 5	**15**	**15 points**
ИТОГО				**100 points**

Электронная версия документа

Passport to Assessment Toolkit for Course ОВОС объектов в сфере управления отходами /Environmental impact assessment (EIA) of SWM objects

The assessment of all results of mastering competencies is carried out in accordance with the scale of the international point-rating system ECTS. In accordance with the calculated grading system (*see FOS passport), the student gains the required points.

Work in class: depends on the complexity of the topic. The grade is given for attendance and active work at a seminar or lecture (lectures are held in an interactive form) - answers to current questions, notes, discussion. The student is present at the lesson, participates in the discussion, does not hesitate to answer questions with a maximum score. The student is absent or the task is not prepared - 0 points.

Tasks of independent work: - acquisition of skills of independent practical work in the recommended software and application of various research methods; - developing the ability to independently and critically approach the material being studied. The IR technology should ensure the acquisition of knowledge, the consolidation and systematization of knowledge, the formation of skills and abilities. The proven technology is characterized by an algorithm that includes the following logically related student actions: - reading a text (textbook, manual, lecture notes); - note-taking of the text; - problem solving and exercises; - answers to control questions;

Final certification: A student is considered to have successfully passed the milestone or final certification if the total score for all activities at the time of certification exceeds 50% of the maximum possible score (lecture work, practical assignment, tests).

The final grade for the semester is added up as the sum of points for all types of student activities (*see FOS passport) and can reach a maximum of 85 points,

The final test is given by the student voluntarily, if he scored the minimum possible score for certification - 51 points. In other cases, the test is mandatory and is estimated at a maximum of 15 points, as a result, the total score is derived taking into account the result of passing the test and the final grade corresponds to the international ECTS scale.

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, organized 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
3.	Colloquium	A tool for monitoring the acquisition and mastering of educational material on a topic, section or sections of a discipline, organised as a training session in the form of an interview among the teacher and students.	Questions on the course topics /modules
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
5	Lab work	The system of practice tasks aimed at the students' practical skills formation	Practice tasks bank
6.	Round table, discussion, polemic, dispute, debate, (class work)	Evaluation tools that allow the teacher to engage students in the process of discussing controversial issues, problems and assess their ability to argue their own point of view.	List of themes for round tables, discussions, polemics, disputes, debates.
7	Business game and/or role play	Joint activities of a student group under the teacher's control to solve educational and professionally oriented tasks through the simulation of a real-world problem; this activity allows the teacher to assess the students' ability to analyse and solve typical professional challenges.	Topic (problem), concept, roles and expected results for each game
8.	Essay	A tool that allows the teacher to assess the student's ability to express in writing the essence of the under study, to independently analyse this issue using the concepts and analytical tools of the relevant discipline, to draw conclusions that summarise his/her position on the issue under consideration.	Themes for essays
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	Tasks examples

		and pre-graduate internship and fulfillment of all training assignments in the course of these internships in accordance with the approved programme.	
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
12	Internship and research and development (R&D) report	A form of written work that allows the student to generalise his/her knowledge, skills and abilities acquired during the introductory and advanced field internships, scientific and industrial internships and R&D activities.	
13	Case	A problem-solving task in which the student is asked to comprehend the real work-related (occupational) situation necessary to solve the problem.	Assignments to solve the case
14	Multi-level tasks and assignments with varying difficulty	The tasks and assignments differ in terms of the following levels: 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 to evaluate and diagnose students' skills to integrate knowledge of various fields, argue their own point of view.	Set of multi-level tasks and assignments with varying difficulty
Self- studies			
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 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: 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,	Set of multi-level tasks and assignments with varying difficulty

		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.	
9	…		
n	…		

Criteria for assessing students' knowledge

Points BRS	Traditional grades in the Russian Federation	Points for transferring grades	Grades	ECTS grades
86 - 100	5	95 – 100	5+	A
		86 – 94	5	B
69 - 85	4	69 – 85	4	C
51 - 68	3	61 - 68	3+	D
		51 - 60	3	E
0 - 50	2	31 - 50	2+	FX
		0 - 30	2	F

Sections or a topic are considered mastered if the student scores more than 50% of the possible number of points for each section (topic). Students are required to submit all assignments within the deadlines established by the calendar plan (for untimely and poorly prepared assignments, the number of points is reduced).

Explanation of the rating table:

A	"Excellent" - the theoretical content of the course is mastered completely, without gaps, the necessary practical skills for working with the mastered material are formed, all the training tasks provided for by the training program are completed, the quality of their implementation is estimated by a number of points close to the maximum.
B	"Very good" - the theoretical content of the course is mastered completely, without gaps, the necessary practical skills for working with the mastered material are basically formed, all the training tasks provided for by the training program are completed, the quality of most of them is estimated by a number of points close to the maximum.
C	"Good" - the theoretical content of the course has been mastered completely, without gaps, some practical skills in working with the mastered material are not sufficiently formed, all the training tasks provided for by the training program have been completed, the quality of none of them has been assessed with a minimum number of points, some types of tasks have been completed with errors.

D	"Satisfactory" - the theoretical content of the course has been partially mastered, but the gaps are not significant, the necessary practical skills for working with the mastered material are basically formed, most of the training tasks provided for by the training program have been completed, some of the completed tasks may contain errors.
E	"Mediocre" - the theoretical content of the course is partially mastered, some practical work skills are not formed, many training tasks provided for by the training program are not completed, or the quality of some of them is estimated by a number of points close to the minimum.
FX	"Conditionally unsatisfactory" - the theoretical content of the course has been partially mastered, the necessary practical skills have not been formed, most of the training tasks provided for by the training program have not been completed, or the quality of their implementation has been assessed with a number of points close to the minimum; with additional independent work on the course material, it is possible to improve the quality of the implementation of educational tasks.
F	**"** Definitely unsatisfactory" - the theoretical content of the course has not been mastered, the necessary practical work skills have not been formed, all the completed training tasks contain gross errors, additional independent work on the course material will not lead to any significant improvement in the quality of the training tasks.

List of practical assignment topics to be completed within the framework of mastering the discipline "EIA of SWM objects":

1) Compilation of natural and climatic characteristics of the area location of the designed object.
2) Characteristics of sources of environmental impact (emissions into the atmosphere, discharges into water bodies, formation waste). Preparation of MPE, VAT, PNOLRO - basics
3) Calculation of damage to aquatic and biological resources
4) Calculation of damage to plant resources
5) Calculation of damage to wildlife
6) Calculation of damage to Red Book species of plants and animals
7) Preparation of materials for public discussions of the project documentation
8) Calculation of fees for emissions of pollutants, emissions greenhouse gases
9) Calculation of fees for the discharge of pollutants
10) Calculation of fees for waste disposal
11) Application of information technology at various stages EIA

Prepare small messages on the topics below. When preparing messages, you need to pay attention to modern books and Internet resources. The time allotted for the performance should not exceed 10 minutes 1.

- Governmental international organizations in the field of environmental protection
- Non-governmental international organizations in the field of environmental protection
- Major international conferences in the field of environmental protection

- International agreements regulating relations in the field of protection of the atmosphere, hydrosphere, biological resources, soils.

Questions to prepare for the certification test in the discipline

1. The concept of EIA, its place in the system of environmental assessments
2. EIA methodology
3. EIA regulatory framework
4. Stages and stages of EIA in foreign practice
5. EIA procedure in Russia
6. Objects and subjects of EIA
7. Relationship between the EIA procedure and investment design
8. Contents of EIA documentation in pre-project and design documentation submitted for environmental assessment.
9. Goals and objectives of EIA, their difference from environmental impact assessment
10. EIA principles
11. Contents of EIA materials
12. Possible sources of environmental impacts.
13. Possible types of environmental impacts
14. Program for monitoring and post-project analysis of the state of the environment, as an integral part of the EIA materials
15. Public hearings, their procedure, role in the EIA system
16. Use of sanitary-hygienic, environmental and technical standards when conducting EIA
17. Impact assessment methods. Types of assessments.
18. Methods for identifying and analyzing impacts. List method
19. Methods for identifying and analyzing impacts. Matrix method
20. Methods for identifying impacts. Network graph method
21. Methods for identifying and analyzing impacts. Combined map analysis. GIS.
22. Techniques and criteria used to assess the significance of environmental impacts
23. Using sustainable development criteria to assess the significance of impacts.
24. Assessment of the impact of technogenic activities on flora and fauna
25. Assessment of the impact of man-made activities on the socio-economic situation and historical and cultural values.
26. EIA of a specific economic project (using the example of implemented

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