

**KAZAKH NATIONAL UNIVERSITY
named after AL-FARABI**

FACULTY OF LAW

DEPARTMENT OF CUSTOMS, FINANCIAL AND ENVIRONMENTAL LAW

FINAL EXAM PROGRAM

DISCIPLINE 97087/ Legal regulation of nuclear energy
7M04212 Marine and energy law (BSU)

The number of credits - 5

The final exam program was compiled on the basis of educational program in the specialty 7M04212 “Marine and energy law” by Ph.D., lecturer Nakisheva M

Considered and approved at a meeting of the Department of custom, financial and environmental law

"29" 08 2024, Protocol No. 1

Head of the Department,
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"02" 09 2024, Protocol No. 1

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G.M. Atakhanova

Introduction

Studying in the master's program is carried out in accordance with the State Standard of Compulsory Education of the Republic of Kazakhstan and academic policy, the study of the discipline ends with a final exam, which consists of passing the exam. Only undergraduates who have scored the appropriate points upon completion of the educational process in the discipline in accordance with the curricula and working curricula of the master program are allowed to the examination and final control. The exam is held on the dates specified in the Academic calendar and the working curriculum.

Undergraduates who have received an unsatisfactory grade, passing the final control for this period is allowed only with the payment of the loan and re-training. An appeal is possible. A graduate student who received an unsatisfactory grade on the exam results is registered for re-training by order of the university, if he received 25 points for the exam, then FX retake. Documents for health reasons issued after receiving an unsatisfactory grade are not considered. Retaking an exam to encourage grades is not allowed.

Final exam on “Legal regulation of nuclear energy” will be held in verbal form online, in according to exam schedule.

Description of the forms of conducting final control (exam).

1. For admission to the exam, you must score at least 50 points for the current performance in the discipline (Level control 1, intermediate control, arithmetic mean, level control 2).
2. Master students studying on a paid basis for admission to the exam should not have debts in tuition fees.
3. The exam is conducted verbally. The form and schedule of the exam are indicated in the Univer system.
4. During the exam, it is strictly forbidden to use or receive cheat sheets, mobile phones, smart watches and other means for transmitting information, communicate with other students and strangers and / or make other identification records in response.
5. The use of additional information during verbal examination is strictly prohibited.
6. The undergraduate does not have the right to open a ticket in front of the examining teacher to take the exam.
7. The exam is held online via service on the corporate Microsoft Teams platform of Al-Farabi KazNU or in case of technical problems, external ZOOM resources. During the oral examination, video recording is

mandatory. The examination score can be canceled in case of violations this procedure by the undergraduate.

8. At the end of the exam, the points scored by students within 48 hours are put on the certification sheet.

Guidelines for taking the oral exam online

1. Final control (exam) will be held in the service on the corporate Microsoft Teams platform of Al-Farabi KazNU or in case of technical problems, external ZOOM resources. The process of passing an verbal exam by a student involves the automatic creation of an examination ticket, to which the student must answer verbally by the examination committee. During the verbal examination, video recording is mandatory.

2. Duration of the exam: The preparation time is decided by the examiner or the examination board. The response time is decided by the examiner or the examination committee. Recommended 15-20 to answer all ticket questions.

3. Exam tickets in IS Univer are generated automatically.

4. 30 minutes before the start of the exam, ALL students of the group enter the video conference room organized by the teacher or members of the commission according to the link specified in the rules of the final exam (sent by the teacher / members of the commission in case of disruption of the video communication service).

5. 30 minutes before the start of the exam, they check the possibility of entering the Univer.kaznu.kz system through any browser, but preferably through Google Chrome (in case of losing the login and / or password, the student must contact the curator-adviser before the start of the exam). After verification, they log out of the account pending an invitation from the commission.

6. When the start time of the exam comes, the student, who is called by the commission, shows his identity card (identity card or passport. It is forbidden to take the exam by ID-card) on the camera. Includes screen sharing. Logs into your account in IS Univer goes to the "Exam Schedule" page selects the current exam - by clicking on the "Pass oral exam" button. After clicking on the link "Pass the oral exam" a window will open where the student will see the questions of his examination card. The student shows the screen with the ticket questions, reads them aloud. Transfers the display of the videoconferencing service to the camera and prepares for the answer and after preparation for the period of time set by the teacher or the commission answers the ticket questions.

7. If for technical reasons (power outage, disconnection or low Internet speed) a student who has already opened his ticket is absent from the online exam for more than 10 minutes, then his answer will be canceled. The exam is postponed to another date in agreement with the Department of Academic Affairs.

8. The examination committee and the teacher certify the participants of the exam. They put points in the final sheet in IS Univer. Time for setting points in the attestation sheet for the oral exam is 48 hours. Exam rules: To pass the testing exam, students must first familiarize themselves with all the requirements for conducting an oral exam.

All instructions are uploaded:
https://drive.google.com/file/d/1u_TOKL2MZiJsE3EJluDNNv_68WXb4rG/view?usp=sharing With the date and time of the exam, students must

Assessment policy:

Criteria-based assessment: assessment of learning outcomes in accordance with descriptors, checking the formation of competencies (learning outcomes) at intermediate control and exams.

Examination answers are evaluated on a 100-point scale, taking into account the degree of completeness of the undergraduate's answer:

Grade	Criteria
Excellent	1. Correct and complete answers to all theoretical questions are given; 2. Completely solved practical task; 3. The material is presented correctly in a logical sequence; 4. Demonstrated creativity.
good	1. Correct but incomplete answers to all theoretical questions are given, minor errors or inaccuracies are made; 2. The practical task was completed, but a minor mistake was made; 3. The material is presented correctly in a logical sequence.
Satisfactory	1. Answers to theoretical questions are in principle correct, but incomplete, there are inaccuracies in the wording and logical errors; 2. The practical task has not been fully completed; 3. The material is presented correctly, no logical sequence
Unsatisfactory	1. Answers to theoretical questions contain gross errors; 2. The practical task has not been completed; 3. In the presentation of the answer, grammatical and terminological errors were made, no logical sequence

Letter grade	Digital equivalent	Scores in percentage (%)	Grade under traditional system
A	4	95-100	Excellent
A-	3,67	94-90	
B+	3,33	85-89	good
B	3,0	80-84	
B-	2,67	75-79	
C+	2,33	70-74	
C	2,0	65-69	

C-	1,67	60-64	satisfactory
D+	1,33	55-59	
D-	1,0	50-54	
FX	0,5	25-49	unsatisfactory
F	0	0-24	

Themes

1. The concept of nuclear energy - reveal and justify the pros and cons. Rating of countries with nuclear energy.
2. Formation of nuclear legislation. What accidents (cases) caused the formation of nuclear legislation. Name the first laws in this area and in which countries they were adopted.
3. Legislation of Azerbaijan and Kazakhstan in the field of nuclear energy. Arrange them in hierarchy. Conduct a comparative analysis, describe what issues have been resolved and what gaps there are in the legislation.
4. International legal regulation of nuclear energy. Reveal what international documents and conventions exist in the field of nuclear energy and what issues they regulate.
5. Prospects for nuclear energy in Azerbaijan (pros and cons). What strategies and measures are being taken, what risks exist? Justify your position: does Azerbaijan need nuclear energy?
6. Prospects for nuclear energy in Kazakhstan (pros and cons). What strategies and measures are being taken, what risks exist? Justify your position: does Kazakhstan need nuclear energy?
7. Reveal the process of the nuclear fuel cycle. Describe the legal regime for each process, from the uranium mining process to the disposal of radioactive waste or spent material.
8. State regulation in the field of nuclear energy. The system of government bodies in the field of nuclear energy and their competencies.
9. Licensing in the field of nuclear energy. Conditions and terms for obtaining a license, types of license. Termination of license.
10. Expand the concept of nuclear safety. Name the mechanisms for ensuring nuclear safety. Expand the concept of nuclear security and its relationship with nuclear safety.

11. Code of Conduct for the safety and security of Radioactive Sources by IAEA. The meaning and significance of this Code. Are Kazakhstan and Azerbaijan a party to this IAEA document?

12. Expand the concept of radiation safety. Mechanisms for its provision. Radiation hazard categories.

13. Legal regime for the examination of nuclear safety and radiation safety, objects of examination. Accreditation of organizations performing nuclear safety and radiation safety examination.

14. State accounting of nuclear materials and sources of ionizing radiation. Disclose the accounting procedure in accordance with the relevant orders of the Ministry of Energy of the Republic of Kazakhstan (dated February 12, 2016 No. 59 and dated February 9, 2016 No. 44

15. Disclose the procedure for exporting and importing in the field of atomic energy use. Transportation of nuclear materials, radioactive substances and radioactive waste. Management of radioactive waste and spent nuclear fuel.

16. Expand the concept of ensuring environmental safety in the field of nuclear energy. Name the legal mechanisms for ensuring environmental safety.

17. Legal responsibility for violations in the field of nuclear energy. Classification of offenses and responsibility for nuclear damage.

18. Expand the regime of international legal responsibility for transboundary damage caused as a result of an accident at a nuclear power plant. Name the conventions or any international documents regulating the issues of responsibility in this field.

19. Expand the regime of civil liability of the operator of a nuclear installation for nuclear damage caused. Terms and conditions of liability, limits of liability.

20. Expand the legal mechanism for compensation for damages under the Vienna Convention on Civil Liability. Give examples from practice when this convention was applied.

21. The legal problems of carrying out activities in the territories of former nuclear test sites and other territories contaminated as a result of nuclear tests.

22. International nuclear law regarding the peaceful use of the atom. Formation and improvement of international legislation in the field of peaceful uses of atom.

23. Reveal the correlation and interaction of Climate change and Nuclear energy. The role of nuclear energy in mitigating climate change.

24. Nuclear energy regulation: features and contradictions. Hard law and Soft law in the field of nuclear energy – give examples.

25. Case Law in the field of Nuclear energy. Analyze of one case in this field.
26. Reveal the concept and principles of international nuclear law, its relationship with national law. Reveal the implementation of international principles into national law.
27. Reveal the content of Convention on Early Notification of a Nuclear Accident (1986) and Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1986).
28. Reveal the problems of legal regulation of the management of radioactive waste and spent nuclear fuel. Give the characteristic of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.
29. Reveal the content of the Convention on Nuclear Safety (1994). The obligation of participants of Convention.
30. Expand the role of the IAEA in regulating nuclear energy. Cooperation of Kazakhstan and Azerbaijan with the IAEA.

References:

1. Russian nuclear law. Textbook / A. I. Grishchenko. M.: Publishing House "Lawyer". 2017. -150 p.
2. Romanova V. V. Problems and trends of legal regulation in the field of atomic energy use. Moscow: Yurist Publishing House. 2017 – 224 p.
3. Sarsembayev M. A. Identification and solution of problems of regulatory and legal regulation of ecology in the construction and operation of nuclear power plants in the EAEU countries // online.zakon.kz
4. Law of the Republic of Kazakhstan No. 405-IV of February 10, 2011 "On Ratification of the Vienna Convention on Civil Liability for Nuclear Damage of 1997" (Consolidated text of the Vienna Convention on Civil Liability for Nuclear Damage of May 21, 1963, as amended by the Protocol of September 12, 1997)//<https://online.zakon.kz>
5. Convention on Nuclear Safety (Vienna, 17 June 1994) // online.zakon.kz
6. Law of the Republic of Kazakhstan dated January 12, 2016 No. 442-V "On the Use of Atomic Energy" // online.zakon.kz

7. Law of the Republic of Kazakhstan dated April 23, 1998 No. 219-I "On radiation safety of the population" // online.zakon.kz

8. Resolution of the Government of the Republic of Kazakhstan dated May 11, 2016 No. 284 "On approval of the Rules for conducting nuclear, radiation and nuclear physical safety expertise" // online.zakon.kz

9. Order of the Minister of Energy of the Republic of Kazakhstan dated February 8, 2016 No. 39 " On approval of the Rules for the organization of collection, storage and disposal of radioactive waste and spent nuclear fuel " // online.zakon.kz

Rubricator of criteria-based assessment of final control
Discipline: Legal regulation of nuclear energy
Form: standard (oral). Platform: US Univer

1 question. Maximum score – 33.

No.	Score	DESCRIPTORS				
		"Great"	"Fine"	"Satisfactorily"	"Unsatisfactory"	
		27-33 points	20-26 points	14-19 points	7-13 points	0-6 points
Criterion						
1	Understanding the theories and concepts and the main issues of the discipline	The grade "excellent" is given for an answer that contains an exhaustive disclosure of the question, detailed argumentation for each conclusion and statement, is constructed logically and consistently, supported by examples from the developed topics of classroom lessons , which contains a complete vision of the main problems of the discipline, in which the causes of problematic phenomena and a complete description of	The grade "good" is given for an answer that contains a full but not exhaustive coverage of the issue, a shortened argumentation of the main provisions, and allows for a violation of the logic and sequence of presentation of the material. The answer allows for stylistic errors, inaccurate use of terms , which contains a vision of most of the problems, but allows for violations of the	The grade “satisfactory” is given for an answer that does not fully cover the questions asked in the ticket, superficially argues the main points, allows for compositional disproportions in the presentation, violations of logic and consistency in the presentation of the material, does not illustrate theoretical positions with examples from the developed notes of classroom lessons , which superficially sets out the causes of problematic	Incorrect coverage of the issues raised, erroneous argumentation, factual and written errors, admission of an incorrect conclusion . Incorrect coverage of the issues raised problems, faulty reasoning, factual and linguistic errors, making a false conclusion	Ignorance of basic concepts, theories, concepts; violation of the rules for conducting final control . Ignorance of basic concepts, theories, concepts; Violation of the Rules for conducting final control

		their solutions are visible	sequence of presentation of the material	phenomena, there are no examples and the logic in the presentation of ways to solve problematic situations is violated		
2	2 question. Maximum score - 33					
	Score	DESCRIPTORS				
		"Great"	"Fine"	"Satisfactorily"	"Unsatisfactory"	
	Criterion	27-33 points	20-26 points	14-19 points	7-13 points	0-6 points
Application of practice and use of theoretical knowledge		Complete completion of the educational task, a detailed, reasoned answer to the question posed, followed by solving practical problems of the course; A detailed, reasoned answer using all the theoretical knowledge acquired	Partial completion of the assignment, incomplete, sometimes reasoned answer to the question posed with incomplete solution of practical problems of the course; illiterate use of scientific language standards for the course Partial completion of the educational task, insufficiently clear argumentation of the completed task	The material is presented fragmentarily, with a violation of logical sequence, factual and semantic inaccuracies are allowed, theoretical knowledge of the course is used superficially The assignment was completed incompletely, fragmentarily, factual and semantic inaccuracies were allowed, theoretical knowledge of the course was used superficially	An irrational method of solving a task or an insufficiently thought-out plan for answering; inability to solve tasks, to complete tasks in general; making more mistakes and omissions than is normal The task was completed with gross errors, the answers to the questions were incomplete, the conceptual material and argumentation were poorly used.	The task was not completed, there were no answers to the questions posed, and the materials and analysis tools were not used. inability to draw conclusions and generalizations. Violation of the Rules for conducting final control Violation of the Rules for conducting final control

Question 3. Maximum score - 34					
Score	DESCRIPTORS				
	"Great"	"Fine"	"Satisfactorily"	"Unsatisfactory"	
Criterion	28-34 points	21 - 27 points	15 - 20 points	8 - 14 points	0 - 7 points
3 Problem solving . Practical recommendations	Consistent, logical and correct substantiation of scientific provisions and applied methods and technology, literacy, compliance with the norms of scientific language . Clear solution of the task, logically substantiated methods and recommendations for improving legislation	1-2 inaccuracies in the use of conceptual material, minor errors in generalizations and conclusions that do not affect the good overall level of the answer are allowed .	The conclusions on the applicability of substantiated scientific provisions are vague and unconvincing, there are stylistic and grammatical errors, as well as inaccuracies in the processing of the results of practical work.	The task was completed with gross errors, the answers to the questions were incomplete, the conceptual material and argumentation were poorly used.	The task is not completed, there are no answers to the questions posed, materials and analysis tools were not used. Violation of the Rules for conducting the final assessment

Formula for calculating the final grade:

Final grade (FG) = Score for question 1 + Score for question 2 + Score for question 3 = Score for exam