



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ
ФЕДЕРАЦИИ

Федеральное государственное автономное образовательное учреждение
высшего образования

Дальневосточный федеральный университет
(ДВФУ)

ШКОЛА БИМЕДИЦИНЫ

«СОГЛАСОВАНО»

Руководитель ОП

Каленик Т.К.
(подпись) (Ф.И.О. рук. ОП)

«12» июля 2018 г.

«УТВЕРЖДАЮ»

Директор Департамента
пищевых наук и технологий

Ю.В. Приходько
(подпись) (Ф.И.О.)

«12» июля 2018 г.

УЧЕБНО-МЕТОДИЧЕСКИЙ КОМПЛЕКС ДИСЦИПЛИНЫ

««Production activities of agro-industrial complexes / Производственная деятельность
агропромышленных комплексов »

Направление подготовки 19.04.01 «Биотехнология»

Магистерская программа «Agri-Food Biotechnology»

Форма подготовки очная

Школа биомедицины

Департамент пищевых наук и технологий

курс 1 семестр 2

лекции 18 час.

практические занятия 36 час.

лабораторные работы - час.

в том числе с использованием МАО лек. 4 /пр. 14 /лаб. - час.

всего часов аудиторной нагрузки 72 час.

в том числе с использованием МАО 18 час.

самостоятельная работа 18 час.

контроль самостоятельной работы 36 час.

в том числе на подготовку к экзамену 36 час.

контрольные работы (количество)

курсовая работа / курсовой проект - семестр

зачет - семестр

экзамен 2 семестр

Учебно-методический комплекс составлен в соответствии с требованиями образовательного стандарта, самостоятельно устанавливаемого ДВФУ, утвержденного приказом ректора ДВФУ ректора от 07.07.2015 № 12-13-1282.

УМКД обсужден на заседании Департамента пищевых наук и технологий Школы биомедицины ДВФУ протокол № 1 от «11» июля 2018 г.

Директор Департамента пищевых наук и технологий Ю.В. Приходько

Составитель: Грищенко В.В., к.т.н., доцент

ANNOTATION
of the educational complex of discipline
«Production activities of agro-industrial complexes / Производственная
деятельность агропромышленных комплексов»
Direction of preparation: 19.04.01 Biotechnology
Educational program: "Agri-Food Biotechnology"

The educational-methodical complex of the discipline «Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов » was developed for students of the _1_ course in the direction 19.04.01 "Biotechnology" master's program "Agri-Food Biotechnology" in accordance with the requirements of the educational standard in this direction , independently installed by FEFU, approved by the order of the rector of FEFU dated 07.07.2015 No. 12-13-1282 in this direction.

The discipline «Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов» is included in the basic part of block B1.B.02.03 compulsory disciplines of the curriculum.

The total complexity of mastering the discipline is __144__ hours. The curriculum provides for lectures (18 hours), practical classes (_36_ hours), student independent work (__18__ hours), control of student's independent work (_36_ hours). The discipline is implemented in the _1__ course for the _2__ semester.

The content of the discipline covers the following range of issues:

- the formation of a system of knowledge among students about the main stages of the formation and development of the agro-industrial complex in Russia and in the Western countries; its importance in the country's economy.

- study of the formation of the main stages of the agro-industrial complex in Russia, the structure and purpose of the functioning of the agro-industrial complex, as well as the current state and development trends of the agro-industrial complex; the relationship between the agro-industrial complex, the problems of the agro-industrial complex in Russia and in the Western countries and the ways of their solution.

The discipline «Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов» is logically and meaningfully connected with such courses as "Agricultural biotechnology and biotechnology of raw materials of animal and plant origin", "Safety and biosafety of agri-food raw materials and food products", "International legal framework safety and quality of agri-food raw materials and food products ”.

The discipline is aimed at the formation of general cultural and professional competencies.

Educational complex includes:

- the work program of the discipline;
- educational and methodological support of students' independent work (Appendix 1);
- appraisal fund (appendix 2).

Директор Департамента
пищевых наук и технологий



Ю.В. Приходько



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение
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Директор Департамента
пищевых наук и технологий

Ю.В. Приходько
(подпись) (Ф.И.О.)

«12» июля 2018 г.

РАБОЧАЯ ПРОГРАММА УЧЕБНОЙ ДИСЦИПЛИНЫ

«Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »

Направление подготовки 19.04.01 Биотехнология

Магистерская программа «Agri-Food Biotechnology»

Форма подготовки очная

курс 1 семестр 2
лекции 18 час.
практические занятия 36 час.
лабораторные работы - час.
в том числе с использованием МАО лек. 4 /пр. 14 /лаб. - час.
всего часов аудиторной нагрузки 72 час.
в том числе с использованием МАО 18 час.
самостоятельная работа 18 час.
контроль самостоятельной работы 36 час.
в том числе на подготовку к экзамену 36 час.
контрольные работы (количество)
курсовая работа / курсовой проект - семестр
зачет - семестр
экзамен 2 семестр

Рабочая программа составлена в соответствии с требованиями образовательного стандарта, самостоятельно устанавливаемого ДВФУ, утвержденного приказом ректора от 07.07.2015 № 12-13-1282

Рабочая программа обсуждена на заседании Департамента пищевых наук и технологий Школы биомедицины ДВФУ протокол № 1 от «11» июля 2018 г.
Директор Департамента пищевых наук и технологий Ю.В. Приходько
Составитель: Грищенко В.В, к.т.н., доцент

Оборотная сторона титульного листа РПУД

I. Рабочая программа пересмотрена на заседании ДПНиТ:

Протокол от «_____» _____ 20__ г. № _____

Директор Департамента _____ Приходько Ю.В. _____
(подпись) (И.О. Фамилия)

II. Рабочая программа пересмотрена на заседании ДПНиТ:

Протокол от «_____» _____ 20__ г. № _____

Директор Департамента _____ _____
(подпись) (И.О. Фамилия)

ABSTRACT

Master 19.04.01 «Biotechnology».

Study of the profile: «Agro-food biotechnology».

Course title: ««Production activities of agro-industrial complexes /
Производственная деятельность агропромышленных комплексов »».

The basic part of the block B1.B.02.03

At the beginning of the course the student must be able to:

- ability to search, store, process and analyze information from various sources and databases, to present it in the required format using information, computer and network technologies;

- ability to use modern methods and technologies (including information) in their professional activities.

The purpose of the discipline is to familiarize students with an important part of the country's economy – agro-industrial complex (AIC).

Objectives of the discipline: the formation of students' knowledge about the main stages of formation and development of agriculture in Russia and in the West; its importance in the economy.

As a result of the study of the discipline the student must:

Know: the main stages of formation of agriculture in Russia, the structure and purpose of functioning of agriculture, the current state and trends in the development of agriculture, the relationship of agricultural industries, the problems of agriculture in Russia and in the West and their solutions.

Be able to: identify the factors and features of formation of the agroindustrial complex in Russia and the countries of the world; to evaluate the basic characteristics of the individual areas of activities included in agriculture; to analyze the solutions to the problems of providing the population with food; theoretically predict the possible variants of development of agribusiness in Russia and in the countries of the world.

Learning outcomes:

OK-2 – willingness to show leadership qualities and organize the work of the team, to possess effective technologies for solving professional problems;

OK-3 – ability to work in project interdisciplinary teams, including as a leader;

OK-9 – willingness to act in unusual situations, to bear social and ethical responsibility for decisions ;

OK-12 –ability to use skills in the organization of research and project work and in the management of the team;

OK-13 – readiness to use legal and ethical standards in assessing the consequences of their professional activities, in the development and implementation of socially significant projects;

OPK-2 – readiness to communicate orally and in writing in the state language of the Russian Federation and a foreign language to solve the problems of professional activity;

OPK-3 – willingness to lead a team in the field of their professional activities, tolerant of social, ethnic, religious and cultural differences;

PK-7– readiness to the organization of work of collective of performers, acceptance of Executive decisions in the conditions of a range of opinions, determination of the order of performance of works.

PK-8 - to present the results of the work performed in the form of scientific and technical reports, reviews, research reports and publications using the modern capabilities of information technologies and taking into account the requirements for the protection of intellectual property.

PK-9 - skills in designing pilot, pilot industrial and industrial plants for biotechnological production.

Main course literature:

1. Management in the food industry: a textbook for universities / E. B. Gafforova, T. E. Shusharina, M. V. Tsyplenkova [and others]; Russian Academy of Natural Sciences. - Moscow: Academy of Natural Sciences, 2011. - 195 p. (5 copies.) [Http://lib.dvfu.ru:8080/lib/item?id=chamo:662163&theme=FEFU](http://lib.dvfu.ru:8080/lib/item?id=chamo:662163&theme=FEFU)

2. Systems, methods and tools of quality management: a textbook for universities / M. M. Kane, B. V. Ivanov, V. N. Koreshkov [and others]; [ed. M.M. Cane]. St. Petersburg: Peter, 2009, 559 p. (5 copies)

<http://lib.dvfu.ru:8080/lib/item?id=chamo:276431&theme=FEFU>

3. Industrial management: a workshop: a textbook for universities / [A. N. Salov]; Vladivostok State University of Economics and Service. Vladivostok: Publishing house of the Vladivostok University of Economics and Service, 2011. - 90 p. (1 copy) <http://lib.dvfu.ru:8080/lib/item?id=chamointer52747&theme=FEFU>

Form of final control of knowledge: exam.

Annotation to the work program of the discipline
"«Production activities of agro-industrial complexes / Производственная
деятельность агропромышленных комплексов »"

The course "«Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »" is included in block B1.B.02.03 and belongs to its basic part of the direction of preparation of the master's program 19.04.01 "Biotechnology". The complexity of the discipline is 3 credit units, 108 hours. The discipline is one of the integral ones in the fundamental training of masters of this profile and is closely related to such disciplines as "Agricultural biotechnology and biotechnology of raw materials of animal and vegetable origin", "Safety and biosafety of agri-food raw materials and food products" raw materials and food products ".

The educational program of the course is aimed at forming students' knowledge about the structure and purposes of the functioning of the agro-industrial complex, the main directions of its development, as well as the current state of financial potential and the peculiarities of the development of the main spheres and forms of management in the agro-industrial complex of Russia. The material is focused on the professional competence of future specialists in this area.

The purpose:

The purpose of studying the discipline is to teach students to apply knowledge about the regulation of the development of the agro-industrial complex in the conditions of modern Russia. Formation of the necessary knowledge base for analysis, identification and solution of issues related to the specifics of the development of all areas of the agro-industrial complex.

Objectives of the discipline:

For the successful study of the discipline "«Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »", students must have the following preliminary competencies: readiness to show the qualities of a leader and organize the work of the team, to

own effective technologies for solving professional problems (OK-2); the ability to work in interdisciplinary project teams, including as a leader (OK-3); willingness to act in non-standard situations, to bear social and ethical responsibility for the decisions made (OK-9); the ability to use skills in practice in the organization of research and design work and in team management (OK-12); willingness to use legal and ethical norms in assessing the consequences of their professional activities, in the development and implementation of socially significant projects (OK-13); readiness for communication in oral and written forms in the state language of the Russian Federation and in a foreign language to solve the problems of professional activity (OPK-2); willingness to lead a team in the field of their professional activities, tolerantly perceiving social, ethnic, confessional and cultural differences (OPK-3); the readiness to organize the work of a team of performers, to make executive decisions in the context of a spectrum of opinions, to determine the order of work (PC-7); present the results of the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern information technology capabilities and taking into account the requirements for the protection of intellectual property (PC-8); possession of the skills of designing pilot, pilot-industrial and industrial installations of biotechnological production (PC-9).

As a result of studying this discipline, students develop the following general cultural (OC), general professional (OPK) and professional competencies (PC).

Code and wording of competency	Competency Stages	
OK-2	Knows	legislative framework for the food industry
	Is able	organize the work of teams in all areas of the agro-industrial complex
	Owns	system of professional operation of modern equipment and scientific instruments in accordance with the direction of training
OK-3	Knows	the main problems of the agro-industrial complex in the conditions of modern Russia and ways to solve them
	Is able	independently use the research methods of the

		scientific and production profile of their professional activities
	Owns	knowledge in the field of modern problems of science, technology and technology
OK-9	Knows	the basics of using modern information technologies for the collection, processing and dissemination of scientific information; the ability to use databases, software products and Internet resources to solve professional problems
	Is able	manage programs for the development of new technologies in the food and processing industry of the agro-industrial complex of Russia
	Owns	skills in conducting marketing research and preparing business plans for the production and sale of promising and competitive products in the food and processing industry
OK-12	Knows	legislative framework for the food industry
	Is able	organize the work of teams in all areas of the agro-industrial complex
	Owns	system of professional operation of modern equipment and scientific instruments in accordance with the direction of training
OK-13	Knows	the main problems of the agro-industrial complex in the conditions of modern Russia and ways to solve them
	Is able	independently use the research methods of the scientific and production profile of their professional activities
	Owns	knowledge in the field of modern problems of science, technology and technology
OPK -2	Knows	requirements and standards for the design of pilot, pilot-industrial and industrial installations at food and processing industries
	Is able	carry out the design of pilot, pilot-industrial and industrial installations at food and processing industries
	Owns	skills in the design of pilot, pilot industrial and industrial installations at food and processing industry enterprises
OPK - 3	Knows	the basics of using modern information technologies for the collection, processing and dissemination of scientific information; the ability to use databases, software products and Internet resources to solve professional problems
	Is able	manage programs for the development of new technologies in the food and processing industry of the agro-industrial complex of Russia

	Owns	skills in conducting marketing research and preparing business plans for the production and sale of promising and competitive products in the food and processing industry
PC - 7	Knows	requirements and standards for technological design of equipment, selection of standard and design of non-standard equipment
	Is able	manage the quality of food products of animal origin using mathematical modeling methods
	Owns	methods of analysis of management systems for scientific and technical information in the field of food and processing industries for the purpose of scientific, patent and marketing support for ongoing fundamental research and technological developments
PC - 8	Knows	requirements and standards for knowledge about control systems for biotechnological processes presented results of the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern information technology capabilities and taking into account the requirements for the protection of intellectual property
	Is able	present the results of the work performed in the form of scientific technical reports, reviews, scientific reports and publications from using modern information technology capabilities and taking into account the requirements for the protection of intellectual property
	Owns	technology for presenting the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern information technology capabilities and taking into account the requirements for the protection of intellectual property
PC - 9	Knows	requirements and standards for the design of pilot, pilot-industrial and industrial plants for biotechnological production
	Is able	carry out the design of pilot, pilot industrial and industrial plants for biotechnological production
	Owns	skills in the design of pilot, pilot-industrial and industrial installations of biotechnological production

For the formation of the above competencies within the discipline "«Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »", the following methods of

active / interactive learning are used: problem lectures, the method of intelligence cards.

I STRUCTURE AND CONTENT OF THE THEORETICAL PART OF THE COURSE

Section 1 The relevance of studying the discipline (2 hours)

Introduction to the subject and objectives of the discipline. Basic concepts and definitions. Communication of the agro-industrial complex with the branches of the country's economy. Ways of formation and development of the agro-industrial complex in Russia.

Section 2 AIC structure (4 hours)

Brief description of the spheres of activity included in the agro-industrial complex: 1. Agriculture. 2. Branches and services that provide agriculture with means of production and material resources. 3. Industries that are engaged in the processing of agricultural raw materials. 4. Infrastructure block - industries that are engaged in the procurement of agricultural raw materials, transportation, storage, etc.

Section 2.1 Agro-industrial integration

Fruit and vegetable canning formations, sugar beet formations, agro-industrial formations, poultry formations, intersectoral formations, grape processing enterprises. Their characteristics. Development and advantages of agro-industrial formations. Prospects for the development of the agro-industrial complex. Key indicators of economic efficiency.

Section 3 Agriculture (4 hours)

The role of agriculture in the country's economy. Sectoral and regional features of agriculture. Structure. Environmental problems of agriculture and their solutions.

Section 3.1 General information about the food resources of the Far East

Agriculture of the Far East. Plant growing in the Far East. General information about the preparation and storage of plant raw materials. Classification of fruit and berry raw materials of the Far East.

Section 4 Crop production (2 h)

Branches of plant growing (melon growing, viticulture, forestry, meadow growing, vegetable growing, fruit growing, field growing, etc.) and their characteristics. Industrial classification of useful crops (cereals, legumes, industrial crops, root crops, tubers, oil and essential oil, spinning, fodder, narcotic crops) and their characteristics.

Section 5 Livestock (2 hours)

Historical information about animal husbandry. Branches of animal husbandry (fur farming, goat breeding, horse breeding, rabbit breeding, reindeer breeding, donkey breeding, pig breeding, dog breeding, etc.), their characteristics. The role of livestock in the agro-industrial complex. The main tasks of animal husbandry.

Section 6 Branches and services providing agriculture (2 hours)

Tractor and agricultural engineering. Branches of mechanical engineering by groups: heavy engineering, medium engineering, precision engineering, production of metal products and blanks. The largest representatives of the industry: World companies, Russian companies.

Section 6.1 Production of mineral fertilizers

Mineral fertilizers, definition, classification. Simple and complex fertilizers. Agrochemistry as a science. The main sections of agricultural chemistry. The history of the development of agrochemistry, periods of development in Russia. Agrochemical production.

Section 6.2 Organic Fertilizers

Composition of organic fertilizers. Types of organic fertilizers: manure (composition, use in construction, use as fuel - biogas, dung; industrial use, substrate for mushroom production), bird droppings, peat (peat land, peat extraction, ecological functions), silt, sawdust, etc. bark, composts (composting, composting materials, application).

Section 7 Branches that are engaged in the processing of agricultural raw materials (2 hours)

Light industry (sub-branches, history of light industry in Russia, current state). Textile industry, clothing industry (history, present), leather production (history, classification of leather, configuration of leather, modern production). Shoe industry.

Section 7.1 Food Industry

The history of the food industry in Russia. Branches of the food industry, the main classification and their characteristics. Universities of the food industry.

II STRUCTURE AND CONTENT OF THE PRACTICAL PART OF THE COURSE

List of seminars (36 hours)

- 1) "Structure of the AIC" Section 1, Section 2 (6 hours)
- 2) "Agriculture (crop, livestock)" Section 3, Section 4, Section 5 (6 h)
- 3) "General questions about the food resources of the Far East" Section 3.1 (6 hours)
- 4) "Production of mineral and organic fertilizers" Section 6.1, Section 6.2 (6 h)
- 5) "Branches and services involved in the processing of agricultural products" Section 7 (6 h)
- 6) "Food industry. Agro-industrial integration" Section 2.1, Section 7.1 (6 h)

Seminar lesson # 1 Topic: "Structure of the AIC" (6 h)

Plan:

1. Definition of the agro-industrial complex.
2. The main areas of the agro-industrial complex and their characteristics.
3. The main functions and tasks of the agro-industrial complex.
4. Factors determining the effective operation of the agro-industrial complex.
5. The spheres of the agro-industrial complex are the most significant for the country's economy.

Seminar lesson # 2 Topic: "Agriculture (crop, livestock)" (6 h).

Plan:

1. Definition of agriculture.
2. The role of agriculture in the country's economy.
3. Industry and regional features.
4. The structure of agriculture.
5. Environmental problems of agriculture.
6. Definition of crop production, livestock production.

7. Branches of plant growing.
8. Industrial classification of field crops and their characteristics.
9. Detailed characteristics of grain crops: wheat, rye, barley, rice, etc.
10. Detailed characteristics of leguminous crops: peas, soybeans, lentils, etc.
11. Branches of animal husbandry.
12. History of animal husbandry.

Seminar lesson # 3 Topic: "General questions about the food resources of the Far East" (6 h)

Plan:

1. General information about the food resources of the Far East
2. Raw materials of vegetable origin: general information during procurement, storage.
3. Classification of fruit and berry raw materials of the Far East.
4. Characteristics of root crops, tuber crops, silage crops. Growing, harvesting, storage.
5. Raw materials of animal origin.
6. Diversity and characteristics of raw materials of animal origin in the Far East region.

Seminar lesson # 4 Topic: "Production of mineral and organic fertilizers" (6 h)

Plan:

1. Agrochemistry as a science.
2. History of agrochemistry.
3. Agrochemical production.
4. Classification of fertilizers.
5. Mineral fertilizers: nitrogen fertilizers, phosphorus fertilizers, potash fertilizers, chloride fertilizers, microfertilizers, etc., their characteristics.
6. Simple and complex fertilizers.

7. The effect of fertilizers.

8. Organic fertilizers: composition, types of organic fertilizers.

Seminar lesson # 5 Topic: "Branches and services involved in the processing of agricultural products" (6 h)

Plan:

1. Light industry (sub-branches, history of light industry in Russia, current state).

2. Textile industry.

3. Garment industry (history, present).

4. Leather production (history, leather classification, leather configuration, modern production).

5. Shoe industry.

Seminar lesson # 6 Topic: "Food industry. Agro-industrial integration" (6 h)

Plan:

1. History of the food industry in Russia.

2. Branches of the food industry, the main classification and their characteristics.

3. Universities of the food industry.

4. Fruit and vegetable canning formations and their characteristics.

5. Beet sugar formations and their characteristics.

6. Agro-industrial formations and their characteristics.

7. Grape processing enterprises and their characteristics.

8. Development and advantages of agro-industrial formations.

9. Prospects for the development of the agro-industrial complex. Key indicators of economic efficiency.

III TRAINING AND METHODOLOGICAL SUPPORT OF STUDENTS'S INDEPENDENT WORK

Educational and methodological support for the independent work of students in the discipline "«Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »" is presented in Appendix 1 and includes:

- a schedule of independent work on the discipline, including approximate norms of time to complete each task;
- characteristics of tasks for independent work of students and guidelines for their implementation;
- requirements for the presentation and presentation of the results of independent work;
- criteria for evaluating the performance of independent work.

IV CONTROL OF ACHIEVING COURSE OBJECTIVES

№	Supervised sections opics of discipline	Codes and stages of formation of competencies		Evaluation Tools	
				current control	intermediate certification
1.	Section I Structure of the AIC	OK-2, OK-9, PC-7 PC -8 PC -9	Knows: methods and technologies of scientific communication in the state and foreign languages	UO-1 - interview, PR-4 - abstract	Colloquium
			Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages		
			Owens: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development		
2.	Section II. Agriculture (crop, livestock)	OK-13, OPK-3, PC -7 PC -8	Knows: methods and technologies of scientific communication in the state and foreign languages	UO-1 - interview, PR-4 - abstract	Colloquium
			Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages		
			Owens: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development		
3.	Section III. General	OK-2,	Knows: methods and	UO-1 -	Colloquium

	questions about the food resources of the Far East	OK-3, OK-12, OPK-3	technologies of scientific communication in the state and foreign languages Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages Owns: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development	interview, PR-4 - abstract	
4.	Section IV. Production of mineral and organic fertilizers	OK-12, PC -7 PC -8 PC -9	Knows: methods and technologies of scientific communication in the state and foreign languages Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages Owns: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development	UO-1 - interview, PR-4 - abstract	Colloquium
5.	Section V. Branches and services involved in the processing of agricultural products	OK-9, OK-13, OPK-2	Knows: methods and technologies of scientific communication in the state and foreign languages Is able to: follow the basic norms adopted in scientific	UO-1 - interview, PR-4 - abstract	Colloquium

			communication in the state and foreign languages		
			Owns: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development		
6.	Section VI. Food industry. Agro-industrial integration	OK-2, OPK-3, PC -7	Knows: methods and technologies of scientific communication in the state and foreign languages	UO-1 - interview, PR-4 - abstract	Testing
			Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages		
			Owns: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development		

Typical control tasks, methodological materials that determine the procedures for assessing knowledge, skills and (or) experience of activities, as well as criteria and indicators necessary for assessing knowledge, skills, skills and characterizing the stages of the formation of competencies in the process of mastering the educational program are presented in the Appendix 2.

V LIST OF TRAINING LITERATURE AND INFORMATION AND METHODOLOGICAL SUPPORT OF DISCIPLINE

Main literature:

1. Management in the food industry: a textbook for universities / EB Gafforova, TE Shusharina, MV Tsyplenkova [and others]; Russian Academy of Natural Sciences. - Moscow: Academy of Natural Sciences, 2011 .-- 195 p. (5 copies) <http://lib.dvfu.ru:8080/lib/item?id=chamo:662163&theme=FEFU>

2. Systems, methods and tools for quality management: textbook for universities / MM Kane, BV Ivanov, VN Koreshkov [and others]; [ed. M. M. Canet]. St. Petersburg: Peter, 2009, 559 p. (5 copies) <http://lib.dvfu.ru:8080/lib/item?id=chamo:276431&theme=FEFU>

3. Production management: workshop: textbook for universities / [A. N. Salov]; Vladivostok State University of Economics and Service. Vladivostok: Publishing house of the Vladivostok University of Economics and Service, 2011. - 90 p. (1 copy) <http://lib.dvfu.ru:8080/lib/item?id=chamo:552747&theme=FEFU>

Additional literature:

1. Komarov V.V. World economy. Investments and agriculture [Electronic resource]: tutorial / Komarov VV - Electron. text data.— Moscow: Russian State Agrarian Correspondence University, 2010.— 111 pp. — Access mode: <http://www.iprbookshop.ru/20647.html>. - EBS "IPRbooks"

2. Rumyantsev E.K., Ten A.V., Gerasimov B.I. Economic analysis of the quality management system of a food industry enterprise (on the example of OJSC "Confectionery firm" TAKF "): Monograph. - Tambov: Publishing house of TSTU, 2009 .-- 100 p. http://window.edu.ru/resource/384/68384/files/rumyancev_h.pdf

3. Kolomeitseva E.M., Makeeva M.N. , Peksheva T.P. Food for thought: Study guide. - Tambov: Publishing house of TSTU, 2010 .-- 168 p. <http://window.edu.ru/resource/123/73123/files/makeeva.pdf>

4. Poznyakovsky V.M. Expertise of meat and meat products. Quality and safety [Electronic resource]: study guide / V.M. Poznyakovsky. - Electronic text

data. - Saratov: University education, 2014 .-- 527 p. - 2227-8397. - Access mode:
<http://www.iprbookshop.ru/4167.html>

5. Poznyakovsky V.M. Examination of poultry meat, eggs and products of their processing. Quality and safety [Electronic resource]: study guide / V.M. Poznyakovsky, O.A. Ryazanov, K. Ya. Motovilov. - Electronic text data. - Saratov: Higher education, 2014 .-- 219 p. - 2227-8397. - Access mode:
<http://www.iprbookshop.ru/4168.html>

6. Rational processing of raw materials in the production of meat products: a textbook for universities / TK Kalenik, OV Tabakaeva, VA Lyakh, M.V. Kravchenko. - Vladivostok: Publishing house of the Far Eastern Federal University, 2013 .-- 189 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:791760&theme=FEFU>

7. Technology of processing raw materials of animal origin and hydrobionts (biotechnological aspects): textbook for universities / T. K. Kalenik, L. N. Fedyanina, T. V. Tanashkina, L. A. Tekuteva. - Vladivostok: Publishing house of the Pacific Economic University, 2009. - 215 p.
<http://lib.dvfu.ru:8080/lib/item?id=chamo:356708&theme=FEFU>

List of resources of the information and telecommunications network

"Internet"

1. <http://elibrary.ru> Scientific electronic library eLIBRARY.RU
2. Electronic library system "Lan" <http://e.lanbook.com/>
3. Electronic library system "IPRBOOK" <http://www.iprbookshop.ru>
4. Scopus database <http://www.scopus.com/home.url>
5. Web of Science database <http://apps.webofknowledge.com/>
6. Database of full-text academic journals in China <http://oversea.cnki.net/>
7. Electronic library of dissertations of the Russian State Library <http://diss.rsl.ru/>
8. Electronic databases EBSCO <http://search.ebscohost.com/>

VI LIST OF INFORMATION TECHNOLOGIES AND SOFTWARE

Licensed software installed on a PC at the School of Biomedicine and used in the course of mastering the discipline:

Name of the software package Purpose	Version	Purpose
Windows Seven Enterprise	SP3x64	operating system
Eset NOD32 Antivirus	4.2.76.1	Malware Detection Tool
Microsoft Office 2010 Professional Plus	14.0.6029.1000	Office suite
Microsoft Office Professional Plus 2013	15.0.4420.1017	Office suite
7-Zip	9.20.00.0	Educational complex of programs
AbbyyFineReader 11	11.0.460	Educational complex of programs
CoogleChrome	42.0.2311.90	Browser for working in the WWW environment

VII METHODOLOGICAL INSTRUCTIONS FOR LEARNING THE DISCIPLINE

The theoretical part of the discipline "«Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов»" is revealed in lectures, since the lecture is the main form of training, where the teacher gives the basic concepts of the discipline.

The sequence of presentation of the material in lectures is aimed at forming an orienting basis for students for the subsequent assimilation of the material during independent work.

In the course of practical training, the master student performs a set of tasks that allows him to consolidate the lecture material on the topic under study, to gain basic skills in the field of product management in the agro-industrial complex.

The active consolidation of the theoretical knowledge of the discipline is facilitated by the discussion of problematic aspects of it in the form of seminars with the preparation of reports and messages, conducting discussions and classes

using active learning methods. At the same time, the skills of independent research activities are developed in the process of working with scientific literature, periodicals, the formation of the ability to reasonably defend one's point of view, listen to others, answer questions, and lead a discussion.

When writing essays, it is recommended to independently find literature for it. The abstract reveals the content of the problem under study. Working on the abstract helps to deepen the understanding of individual issues of the course, form and defend one's point of view, acquire and improve the skills of independent creative work, and conduct active cognitive work.

The main types of independent work of graduate students are work with literary sources and methodological recommendations, Internet resources for a deeper acquaintance with individual problems of the discipline. The results of the work are drawn up in the form of abstracts or reports with subsequent discussion. The topics of the essays correspond to the main sections of the course.

To carry out current control and intermediate certification, several oral interviews, test-control works and colloquia are carried out.

VIII. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE

The material and technical support for the implementation of the discipline includes auditoriums for lectures and practical classes, equipped with multimedia support and corresponding to sanitary norms and rules.

Laboratory of technology of products of animal origin, Vladivostok, about. Russian item Ajax, 10, Building 25.1, room M 312. Classroom for conducting lecture-type classes, practical and laboratory studies, group and individual consultations, monitoring and intermediate certification.

Educational furniture for 25 workplaces, Teacher's place (table, chair).

Analytical and technological equipment (M312): Refractometer IRF-454 B2 M; Planix 5 planimeter; Magnetic stirrer PE-6110 with heating; Refrigerator "Ocean-RFD-325B"; Kitchen stove Gorenje E52102 AW (for cooking and heat

treatment of food products) 2 pcs .; Libra; Distiller made of stainless steel steel (5 l / h, power 4.5 kW); Meat grinder "Unit-ugr-452"; Dishwasher kitchen Hansa ZIM416H; Mixer Moulinex HM 550 (for grinding products) 101-277950; Blender BRAUN MX-2050; Stand PE-2710 lab. for burettes.

Multimedia equipment: Lenovo C360G-i34164G500UDK monoblock with Powercom SKP-1000A uninterruptible power supply; Screen with electric drive 236 * 147 cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000: 1 EW330U Mitsubishi; Subsystem of specialized mounts for equipment CORSA-2007 Tuarex; Video switching subsystem: Extron DXP 44 DVI Pro DVI matrix switcher; Extron DVI 201 Tx / Rx Twisted Pair Extender; Subsystem of audio switching and sound amplification; Ceiling mount speaker SI 3CT LP Extron; Sennheiser EW 122 G3 UHF lavalier microphone radio system as part of a wireless microphone and receiver; Extron DMP 44 LC digital audio processor; Extron IPL T S4 network control controller; wireless LANs for students are provided by a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.

For independent work of students, the following rooms can be used: Reading rooms of the FEFU Scientific Library with open access to the fund (building A - level 10).

Equipment for reading rooms of the FEFU Scientific Library: Monoblock HP ProOpe 400 All-in-One 19.5 (1600x900), Core i3-4150T, 4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD +/- RW, GigEth, Wi- Fi, BT, usb kbd / mse, Win7Pro (64-bit) + Win8.1Pro (64-bit), 1-1-1 Wty Internet access speed 500 Mbps. Workplaces for people with disabilities are equipped with displays and Braille printers; equipped with: portable devices for reading flat-printed texts, scanning and reading machines, video enlarger with the ability to regulate color spectra; magnifying electronic loupes and ultrasonic markers.

Computer class: Vladivostok, about. Russian item Ajax, 10, Building 25.1, room M621. An auditorium for lecture-type classes, practical exercises, group and individual consultations, monitoring and intermediate certification.

Educational furniture for 17 workplaces, Teacher's place (table, chair).

Monoblock Lenovo C360G-i34164G500UDK 19.5 "Intel Core i3-4160T 4GB DDR3-1600 SODIMM (1x4GB) 500GB Windows Seven Enterprise - 17 pieces; Wired LAN - Cisco 800 series; wireless LAN for students are provided by a system based on 802.11a / b access points / g / n 2x2 MIMO (2SS).

The following room can be used for group and individual consultations:

Laboratory of General Biotechnology of Food Products Vladivostok, Fr. Russian item Ajax, 10, Building 25.1, room M 311. Classroom for lecture-type classes, practical and laboratory classes, group and individual consultations, monitoring and intermediate certification;

Educational furniture for 25 workplaces, Teacher's place (table, chair).
Multimedia equipment: Monoblock Lenovo C360G-i34164G500UDK; Screen with electric drive 236 * 147 cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000: 1 EW330U Mitsubishi; Subsystem of specialized mounts for equipment CORSA-2007 Tuarex; Video switching subsystem: Extron DXP 44 DVI Pro DVI matrix switcher; Extron DVI 201 Tx / Rx Twisted Pair Extender; Subsystem of audio switching and sound amplification; Ceiling mount speaker SI 3CT LP Extron; Sennheiser EW 122 G3 UHF lavalier microphone radio system as part of a wireless microphone and receiver; Extron DMP 44 LC digital audio processor; Extron IPL T S4 network control controller; wireless LANs for students are provided by a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.

Analytical and technological equipment (M311): Milk centrifuge with heating TsLM 1-12; Liquid thermostat LOIP Lt-208a, volume 8l, 120x150 / 200mm; Analyzer of milk quality Laktan 1-4 mod.230; PH-meter-millivoltmeter with stand pH-150MI; Scales VSP 1.5-2-3T; Refrigerator "Ocean-RFD-325B"; Drying cabinet, stainless steel chamber steel, 58L; electric dream cooker 111Ch 101-226589; Magnetic stirrer PE-6110 with heating; viscometer VNZh-0,3-XC3 (d-1.41) capillary glass; Stand PE-2710 lab. for burettes.



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение
высшего образования
«Дальневосточный федеральный университет»
(ДФУ)

ШКОЛА БИОМЕДИЦИНЫ

**УЧЕБНО-МЕТОДИЧЕСКОЕ ОБЕСПЕЧЕНИЕ САМОСТОЯТЕЛЬНОЙ
РАБОТЫ ОБУЧАЮЩИХСЯ**
по дисциплине **««Production activities of agro-industrial complexes /
Производственная деятельность агропромышленных комплексов » »**
19.04.01 Биотехнология
магистерская программа **«Agri-Food Biotechnology»**
Форма подготовки очная

Владивосток
2021

Schedule for the implementation of independent work in the discipline

№	Date / Deadline	Type of independent work	Estimated time to complete	Form of control
1	24-27 week	Preparation of abstracts	16	Credit
2	28 week	Preparation of presentation	10	Credit
3	29-36 week	Preparation for the colloquium	5	Credit
4	37-41 week	Preparing for the simulation game	5	Credit

Independent work of students consists of preparation for practical classes, work on the recommended literature, writing reports on the topic of a seminar, preparing presentations.

The teacher offers each student individual and differentiated assignments. Some of them can be carried out in a group (for example, several students can prepare a report and presentations on one topic with the division of their duties - one prepares the scientific and theoretical part, and the second analyzes the practice).

Self-study assignments

1. On the given topic of the imitation game, an analysis of the literature on the studied discipline should be carried out. Based on the worked out material, an imitation game should be prepared and presented for discussion.

2. Writing an essay on a topic proposed by the teacher or independently selected by the student and agreed with the teacher.

3. Preparation of presentations using multimedia equipment.

Methodological instructions for the implementation of the essay

The goals and objectives of the essay

The essay (from lat. Referto - report, report) is a summary of the problems of a practical or theoretical nature with the formulation of certain conclusions on the subject. A student-selected problem is studied and analyzed based on one or more sources. In contrast to the term paper, which is a comprehensive study of the problem, the essay is aimed at analyzing one or more scientific papers.

The objectives of writing an essay are:

development of students' skills in finding relevant problems of modern legislation;

- development of skills to summarize the material with highlighting only the most significant points necessary to reveal the essence of the problem;

- development of skills to analyze the material studied and formulate their own conclusions on the selected issue in writing, in a scientific, competent language.

The tasks of writing an essay are:

- teach the student to convey the opinions of the authors as faithfully as possible, on the basis of which the student writes his essay;
- teach the student to correctly state their position on the problem analyzed in the abstract;
- prepare the student for further participation in scientific - practical conferences, seminars and competitions;
- help the student to determine the topic of interest to him, the further disclosure of which is possible when writing a term paper or diploma;
- to clarify for themselves and state the reasons for their consent (disagreement) with the opinion of one or another author on this issue.

The basic requirements for the content of the essay, course project

The student should use only those materials (scientific articles, monographs, manuals) that are directly related to their chosen topic. Remote reasoning not

related to the problem being analyzed is not allowed. The content of the essay should be specific, only one problem should be investigated (several are allowed, only if they are interconnected). The student must strictly adhere to the logic of presentation (start with the definition and analysis of concepts, go to the problem statement, analyze the ways to solve it and draw the appropriate conclusions). The essay should end with a conclusion on the topic.

The structure of the abstract consists of:

1. The title page;
2. Introduction, where the student formulates the problem to be analyzed and investigated;
3. The main text, which consistently reveals the selected topic. Unlike term paper, the main text of the essay involves a division into 2-3 paragraphs without highlighting the chapters. If necessary, the text of the abstract can be supplemented by illustrations, tables, graphs, but they should not "overload" the text;
4. Conclusions, where the student formulates conclusions made on the basis of the main text.
5. The list of used literature. This list refers to those sources that the student refers to in preparing the essay, as well as others that were studied by him during the preparation of the essay.

The essay is 10-15 pages of typewritten text, but in any case should not exceed 15 pages. Interval - 1.5, font size - 14, margins: left - 3 cm, right - 1.5 cm, upper and lower - 1.5 cm. Pages must be numbered. The indent from the beginning of the line is 1.25 cm.

The order of delivery of the essay and its assessment

Essays are written by students during the semester in the terms set by the teacher in a particular discipline, reported by the student and submitted for discussion. The printed version is given to the teacher, leading the discipline.

Based on the results of the check, the student is given a certain number of points, which is included in the total number of student points scored by him

during the semester. When evaluating the essay, the correspondence of the content to the chosen topic, the clarity of the work structure, the ability to work with scientific literature, the ability to pose a problem and analyze it, the ability to think logically, knowledge of professional terminology, and literacy are taken into account.

Recommended topics and list of essays

1. Placement of branches of the agro-industrial complex and planning of statistical data.
2. Significance, structure and level of development of agriculture, and the main forms of ownership.
3. Economic problems and the reform of modern agrarian policy.
4. Agroindustrial complex and mechanical engineering (Three links of the agro-industrial complex, agricultural land, engineering industries, distribution centers).
5. Agro-industrial complex of the Russian Federation: features of development and location (Agro-industrial complex of Russia, its concept, structure and significance.
6. Features of the development and placement of the agro-industrial complex. Promising directions for improving development. The financial situation of agriculture. Rural development problems.
7. Economic and geographical characteristics of animal husbandry in Russia.
8. Economic zoning in the Russian Federation. Geography of placement and the role of animal husbandry. Characteristics of the industry. Geographic features of its distribution.
9. Insufficient development of animal husbandry as one of the reasons for unemployment and poverty in the countryside.
10. Development of the food industry in Russia.
11. Livestock as one of the constituent parts of agriculture in the agro-

industrial complex of Russia.

12. The main groups of the food industry, depending on the degree of merger of raw materials and consumer factors.

13. Structural features of the development of industry in the Russian Federation (The share of the forestry complex in the production of industrial products in the Russian Federation. The structure of the machine-building complex).

14. Chemical industry, ferrous and non-ferrous metallurgy, electric power industry and oil refining (Characteristics of the northern economic region).

15. Grain resources of Russia.

16. Grain farming as a branch of crop production, its historical development in Russia.

17. Characteristics, features of sowing and areas of distribution of grain crops: winter and spring wheat, rye, barley, corn, buckwheat, oats, rice, legumes.

18. Determination of the branch of specialization of the region, the branch of market specialization of the Central Federal District (Determination of the branch of specialization of the region. Branches of the market specialization of the Central Federal District).

19. Exhaustible non-renewable natural resources.

20. Geography of the economy and nature management in Russia.

21. The role of the external environment in the placement of inter-branch economic complexes.

22. Characteristics of the forms of administrative-territorial division of Russia (republics, territories, regions, districts).

23. Features of economic and geographical indicators of integral macroregions.

24. Machine-building complex of Russia. The importance of the machine-building complex of the Russian Federation in the national economy. Factors affecting its placement.

25. Sectoral structure of heavy, general and medium machine building.
Features of the location of the main points of the machine-building complex.

26. Light industry of the Russian Federation. Factors of location of light industry enterprises, raw material base.

27. Development and placement of the main branches of light industry in Russia (textile, clothing, footwear).

28. Problems of further successful development of light industry in the Russian Federation.



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ
ФЕДЕРАЦИИ

Федеральное государственное автономное образовательное учреждение
высшего образования

«Дальневосточный федеральный университет»
(ДВФУ)

ШКОЛА БИОМЕДИЦИНЫ

ФОНД ОЦЕНОЧНЫХ СРЕДСТВ

по дисциплине ««Production activities of agro-industrial complexes /
Производственная деятельность агропромышленных комплексов » »

19.04.01 Биотехнология

Магистерская программа «Agri-Food Biotechnology»

Форма подготовки очная

Владивосток

2021

Passport FOS

For the discipline ««Production activities of agro-industrial complexes /
Производственная деятельность агропромышленных комплексов »»»

Code and wording of competency	Competency Stages	
OK-2	Knows	legislative framework for the food industry
	Is able	organize the work of teams in all areas of the agro-industrial complex
	Owns	system of professional operation of modern equipment and scientific instruments in accordance with the direction of training
OK-3	Knows	the main problems of the agro-industrial complex in the conditions of modern Russia and ways to solve them
	Is able	independently use the research methods of the scientific and production profile of their professional activities
	Owns	knowledge in the field of modern problems of science, technology and technology
OK-9	Knows	the basics of using modern information technologies for the collection, processing and dissemination of scientific information; the ability to use databases, software products and Internet resources to solve professional problems
	Is able	manage programs for the development of new technologies in the food and processing industry of the agro-industrial complex of Russia
	Owns	skills in conducting marketing research and preparing business plans for the production and sale of promising and competitive products in the food and processing industry
OK-12	Knows	legislative framework for the food industry
	Is able	organize the work of teams in all areas of the agro-industrial complex
	Owns	system of professional operation of modern equipment and scientific instruments in accordance with the direction of training
OK-13	Knows	the main problems of the agro-industrial complex in the conditions of modern Russia and ways to solve them
	Is able	independently use the research methods of the scientific and production profile of their professional activities
	Owns	knowledge in the field of modern problems of science,

		technology and technology
OPK -2	Knows	requirements and standards for the design of pilot, pilot-industrial and industrial installations at food and processing industries
	Is able	carry out the design of pilot, pilot-industrial and industrial installations at food and processing industries
	Owns	skills in the design of pilot, pilot industrial and industrial installations at food and processing industry enterprises
OPK - 3	Knows	the basics of using modern information technologies for the collection, processing and dissemination of scientific information; the ability to use databases, software products and Internet resources to solve professional problems
	Is able	manage programs for the development of new technologies in the food and processing industry of the agro-industrial complex of Russia
	Owns	skills in conducting marketing research and preparing business plans for the production and sale of promising and competitive products in the food and processing industry
PC - 7	Knows	requirements and standards for technological design of equipment, selection of standard and design of non-standard equipment
	Is able	manage the quality of food products of animal origin using mathematical modeling methods
	Owns	methods of analysis of management systems for scientific and technical information in the field of food and processing industries for the purpose of scientific, patent and marketing support for ongoing fundamental research and technological developments
PC - 8	Knows	requirements and standards for knowledge about control systems for biotechnological processes presented results of the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern information technology capabilities and taking into account the requirements for the protection of intellectual property
	Is able	present the results of the work performed in the form of scientific technical reports, reviews, scientific reports and publications from using modern information technology capabilities and taking into account the requirements for the protection of intellectual property
	Owns	technology for presenting the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern

		information technology capabilities and taking into account the requirements for the protection of intellectual property
PC -9	Knows	requirements and standards for the design of pilot, pilot-industrial and industrial plants for biotechnological production
	Is able	carry out the design of pilot, pilot industrial and industrial plants for biotechnological production
	Owens	skills in the design of pilot, pilot-industrial and industrial installations of biotechnological production

№	Supervised sections topics of discipline	Codes and stages of formation of competencies		Evaluation Tools	
				current control	intermediate certification
1.	Section I Structure of the AIC	OK-2, OK-9, PC-7 PC -8 PC -9	Knows: methods and technologies of scientific communication in the state and foreign languages	UO-1 - interview, PR-4 - abstract	Colloquium
			Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages		
			Owens: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development		
2.	Section II. Agriculture (crop, livestock)	OK-13, OPK-3, PC -7 PC -8	Knows: methods and technologies of scientific communication in the state and foreign languages	UO-1 - interview, PR-4 - abstract	Colloquium
			Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages		
			Owens: the skills of analyzing the main worldview and		

			methodological problems, incl. interdisciplinary character arising in science at the present stage of its development		
3.	Section III. General questions about the food resources of the Far East	OK-2, OK-3, OK-12, OPK-3	Knows: methods and technologies of scientific communication in the state and foreign languages Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages Owns: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development	UO-1 - interview, PR-4 - abstract	Colloquium
4.	Section IV. Production of mineral and organic fertilizers	OK-12, PC -7 PC -8 PC -9	Knows: methods and technologies of scientific communication in the state and foreign languages Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages Owns: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development	UO-1 - interview, PR-4 - abstract	Colloquium
5.	Section V.	OK-9,	Knows: methods and	UO-1 -	Colloquium

	Branches and services involved in the processing of agricultural products	OK-13, OPK-2	<p>technologies of scientific communication in the state and foreign languages</p> <p>Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages</p> <p>Owens: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development</p>	interview, PR-4 - abstract	
6.	Section VI. Food industry. Agro-industrial integration	OK-2, OPK-3, PC -7	<p>Knows: methods and technologies of scientific communication in the state and foreign languages</p> <p>Is able to: follow the basic norms adopted in scientific communication in the state and foreign languages</p> <p>Owens: the skills of analyzing the main worldview and methodological problems, incl. interdisciplinary character arising in science at the present stage of its development</p>	UO-1 - interview, PR-4 - abstract	Testing

Competency Level Assessment Scale
For the discipline ««Production activities of agro-industrial complexes /
Производственная деятельность агропромышленных комплексов »»

Code and wording of competency	Competency Stages		The criteria	Indicators	Points
OK-2	knows (threshold level)	Methods and technologies of scientific communication	Formed and systematic knowledge of methods and technologies of scientific communication in the state and foreign languages	Ability to define the basic concepts of the subject area of research; the ability to list and reveal the essence of the research methods that the student has studied and mastered	45-64
	able (advanced)	Follow the basic norms adopted in scientific communication in the state and foreign languages	Successful and systematic ability to follow the basic norms adopted in scientific communication in the state and foreign languages	Ability to work with normative documents, influence the formation of team goals, influence its socio-psychological climate, quality of performance results	65-84
	owns (high)	Skills of critical assessment of the effectiveness of various methods and technologies of scientific communication in the state and foreign languages	Successful and systematic application of the skills of critical assessment of the effectiveness of various methods and technologies of scientific communication in the state and foreign languages	The ability to fluently and accurately apply the terminological apparatus of the subject area of research in oral answers to questions and in written works, the ability to conduct independent research and present its results for discussion at round tables, seminars, scientific conferences.	85-100
OK-3	knows (threshold level)	Methods for critical analysis and	Successful and systematic ability to follow	Ability to reveal the essence of scientific research	45-64

		assessment of modern scientific achievements	the basic norms adopted in scientific communication in the state and foreign languages	methods; the ability to substantiate the relevance of the task or research being performed; the ability to prepare a publication or report on ongoing research	
	able (advanced)	When solving research and practical problems, generate new ideas that can be operationalized based on available resources and constraints	Carry out personal choice in various professional and moral-value situations, evaluate the consequences of the decision made and be responsible for it	Ability to substantiate and apply the results of scientific research; the ability to apply scientific research methods for non-standard solutions to assigned tasks	65-84
	owns (high)	Skills of critical analysis and assessment of modern scientific achievements and the results of activities in solving research and practical problems, including in interdisciplinary fields	Formulate the goals of personal and professional development and the conditions for their achievement, based on the development trends of the field of professional activity, stages of professional growth, individual and personal characteristics	The ability to formulate a task for scientific research; - the ability to conduct independent research and present their results for discussion at round tables, seminars, scientific conferences	85-100
OK-9	knows (threshold level)	Methods for critical analysis and assessment of modern scientific achievements	Successful and systematic ability to follow the basic norms adopted in scientific communication	Ability to reveal the essence of methods of modern versions of quality management systems to	45-64

			in the state and foreign languages	specific production conditions based on international standards	
	able (advanced)	When solving research and practical problems, generate new ideas that can be operationalized based on available resources and constraints	Carry out personal choice in various professional and moral-value situations, evaluate the consequences of the decision made and be responsible for it	Ability to substantiate and apply the results obtained in enterprises	65-84
	owns (high)	Skills of critical analysis and assessment of modern scientific achievements and the results of activities in solving research and practical problems, including in interdisciplinary fields	Formulate the goals of personal and professional development and the conditions for their achievement, based on the development trends of the field of professional activity, stages of professional growth, individual and personal characteristics	Ability to formulate a task; ability to draw up reports, present results for discussion at round tables, seminars, scientific conferences	85-100
OK-12	knows (threshold level)	Methods for critical analysis and assessment of modern scientific achievements	Successful and systematic ability to follow the basic norms adopted in scientific communication in the state and foreign languages	Ability to reveal the essence of methods of modern versions of quality management systems to specific production conditions based on international standards	45-64
	able	When	Carry out	Ability to	65-84

	(advanced)	solving research and practical problems, generate new ideas that can be operationalized based on available resources and constraints	personal choice in various professional and moral-value situations, evaluate the consequences of the decision made and be responsible for it	substantiate and apply the results obtained in enterprises	
	owns (high)	Skills of critical analysis and assessment of modern scientific achievements and the results of activities in solving research and practical problems, including in interdisciplinary fields	Formulate the goals of personal and professional development and the conditions for their achievement, based on the development trends of the field of professional activity, stages of professional growth, individual and personal characteristics	Ability to formulate a task; ability to draw up reports, present results for discussion at round tables, seminars, scientific conferences	85-100
OK-13	knows (threshold level)	Methods for critical analysis and assessment of modern scientific achievements	Successful and systematic ability to follow the basic norms adopted in scientific communication in the state and foreign languages	Ability to reveal the essence of methods of modern versions of quality management systems to specific production conditions based on international standards	45-64
	able (advanced)	When solving research and practical problems, generate new ideas that can	Carry out personal choice in various professional and moral-value situations, evaluate the	Ability to substantiate and apply the results obtained in enterprises	65-84

		be operationalized based on available resources and constraints	consequences of the decision made and be responsible for it		
	owns (high)	Skills of critical analysis and assessment of modern scientific achievements and the results of activities in solving research and practical problems, including in interdisciplinary fields	Formulate the goals of personal and professional development and the conditions for their achievement, based on the development trends of the field of professional activity, stages of professional growth, individual and personal characteristics	Ability to formulate a task; ability to draw up reports, present results for discussion at round tables, seminars, scientific conferences	85-100
ОПК-2	knows (threshold level)	Methods for critical analysis and assessment of modern scientific achievements	Successful and systematic ability to follow the basic norms adopted in scientific communication in the state and foreign languages	Ability to reveal the essence of methods of modern versions of quality management systems to specific production conditions based on international standards	45-64
	able (advanced)	When solving research and practical problems, generate new ideas that can be operationalized based on available resources and	Carry out personal choice in various professional and moral-value situations, evaluate the consequences of the decision made and be responsible for it	Ability to substantiate and apply the results obtained in enterprises	65-84

		constraints			
	owns (high)	Skills of critical analysis and assessment of modern scientific achievements and the results of activities in solving research and practical problems, including in interdisciplinary fields	Formulate the goals of personal and professional development and the conditions for their achievement, based on the development trends of the field of professional activity, stages of professional growth, individual and personal characteristics	Ability to formulate a task; ability to draw up reports, present results for discussion at round tables, seminars, scientific conferences	85-100
ОПК-3	knows (threshold level)	Methods for critical analysis and assessment of modern scientific achievements	Successful and systematic ability to follow the basic norms adopted in scientific communication in the state and foreign languages	Ability to reveal the essence of methods of modern versions of quality management systems to specific production conditions based on international standards	45-64
	able (advanced)	When solving research and practical problems, generate new ideas that can be operationalized based on available resources and constraints	Carry out personal choice in various professional and moral-value situations, evaluate the consequences of the decision made and be responsible for it	Ability to substantiate and apply the results obtained in enterprises	65-84
	owns (high)	Skills of critical analysis and assessment of modern	Formulate the goals of personal and professional development	Ability to formulate a task; ability to draw up reports, present results for	85-100

		scientific achievements and the results of activities in solving research and practical problems, including in interdisciplinary fields	and the conditions for their achievement, based on the development trends of the field of professional activity, stages of professional growth, individual and personal characteristics	discussion at round tables, seminars, scientific conferences	
ПК-7	knows (threshold level)	Methods for critical analysis and assessment of modern scientific achievements	Successful and systematic ability to follow the basic norms adopted in scientific communication in the state and foreign languages	Ability to reveal the essence of methods of modern versions of quality management systems to specific production conditions based on international standards	45-64
	able (advanced)	When solving research and practical problems, generate new ideas that can be operationalized based on available resources and constraints	Carry out personal choice in various professional and moral-value situations, evaluate the consequences of the decision made and be responsible for it	Ability to substantiate and apply the results obtained in enterprises	65-84
	owns (high)	Skills of critical analysis and assessment of modern scientific achievements and the results of activities in solving	Formulate the goals of personal and professional development and the conditions for their achievement, based on the development	Ability to formulate a task; ability to draw up reports, present results for discussion at round tables, seminars, scientific conferences	85-100

		research and practical problems, including in interdisciplinary fields	trends of the field of professional activity, stages of professional growth, individual and personal characteristics		
ПК-8	knows (threshold level)	requirements and standards for knowledge about control systems of biotechnological processes presented results of the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern information technology capabilities and taking into account the requirements for the protection of intellectual property	Successful and systematic ability to follow the basic norms adopted in scientific communication in the state and foreign languages	Ability to reveal the essence of methods of modern versions of quality management systems to specific production conditions based on international standards	45-64
	able (advanced)	present the results of the work performed in the form of scientific technical reports, reviews,	Carry out personal choice in various professional and moral-value situations, evaluate the consequences of the decision	Ability to substantiate and apply the results obtained in enterprises	65-84

		scientific reports and publications from using modern information technology capabilities and taking into account the requirements for the protection of intellectual property	made and be responsible for it		
	owns (high)	technology for presenting the work performed in the form of scientific and technical reports, reviews, scientific reports and publications using modern information technology capabilities and taking into account the requirements for the protection of intellectual property	Formulate the goals of personal and professional development and the conditions for their achievement, based on the development trends of the field of professional activity, stages of professional growth, individual and personal characteristics	Ability to formulate a task; ability to draw up reports, present results for discussion at round tables, seminars, scientific conferences	85-100
ПК-9	knows (threshold level)	requirements and standards for the design of pilot, pilot-industrial and industrial plants for	Knowledge of the main methods of monitoring compliance with the environmental and biological safety of raw	The ability to reveal the essence of the technological process of the production of products from the point of view of monitoring	45-64

		biotechnological production	materials and finished products	compliance with the environmental and biological safety of raw materials and finished products	
	able (advanced)	carry out the design of pilot, pilot industrial and industrial plants for biotechnological production	Ability to work with tables and reference materials, the ability to apply methods for processing current production information, analyze the data obtained for use in monitoring compliance with the environmental and biological safety of raw materials and finished products	Ability to substantiate and apply the results obtained in food production facilities	65-84
	owns (high)	skills in the design of pilot, pilot-industrial and industrial installations of biotechnological production	Possession of the principles and methods of monitoring compliance with the environmental and biological safety of raw materials and finished products	Ability to formulate a task; the ability to independently process current production information, analyze the data obtained for use in monitoring compliance with the environmental and biological safety of raw materials and finished products and present the results for discussion at round tables, seminars, scientific conferences	85-100

I. Evaluation tools for intermediate certification by discipline
««Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »»»

Interim certification includes the student's answer to questions and the passing of the final test.

Student Grading Criteria

Points required for the final test score	Credit score	Requirements for formalized competencies in the student's oral answer
100-61	«Credit»	Credit is given to a student who has developed knowledge of the discipline. Knows how to determine the factors and features of the formation of the agro-industrial complex in Russia and the countries of the world; to assess the main characteristics of individual spheres of activity that make up the agro-industrial complex; analyze options for solving the problems of providing the population with food; theoretically predict possible options for the development of the agro-industrial complex in Russia and in the countries of the world.
60-0	«Non-credit»	An unsatisfactory grade is given to a student who does not know a significant part of the program material, makes significant mistakes, hesitantly performs practical work with great difficulty and cannot continue his studies without additional studies in the relevant discipline.

Questions for the exam

1. Agro-industrial complex (AIC) of Russia, its concept, structure and significance.
2. Features of the development and placement of the agro-industrial complex in Russia.
3. Prospective directions for improving the agro-industrial complex in Russia.
4. Economic and geographical characteristics of animal husbandry in Russia.
5. Geography of location and the role of animal husbandry. Characteristics of the industry, geographical features of its distribution.
6. Insufficient development of animal husbandry as one of the reasons for unemployment and poverty in the countryside.
7. Development of the food industry in Russia and Western countries.
8. Food consumption in Russia in the pre-perestroika period.
9. Livestock as one of the constituent parts of agriculture in the agro-industrial complex of Russia.
10. The main groups of the food industry, depending on the degree of merger of raw materials and consumer factors.
11. Structural features of the development of industry in the Russian Federation.
12. The share of the forestry complex in the production of industrial products in the Russian Federation.
13. The structure of the machine-building complex.
14. Chemical industry, ferrous and non-ferrous metallurgy, electric power industry and oil refining.
15. Characteristics of the northern economic region.
16. Grain resources of Russia.
17. Grain farming as a branch of crop production, its historical development in Russia.

18. Characteristics, features of sowing and areas of distribution of grain crops: winter and spring wheat, rye, barley, corn, buckwheat, oats, rice, legumes.

19. General characteristics of exhaustible non-renewable natural resources.

20. The role of the external environment in the placement of inter-branch economic complexes.

21. General characteristics of the machine-building complex of the Russian Federation.

22. The value of the machine-building complex of the Russian Federation in the national economy. Factors affecting its placement.

23. Sectoral structure of heavy, general and medium mechanical engineering. Features of the location of the main points of the machine-building complex.

24. General characteristics of enterprises in the light industry of the Russian Federation.

25. Factors in the location of light industry enterprises, raw material base.

26. Development and placement of the main branches of light industry in Russia: textile, clothing and footwear.

27. Problems of further successful development of light industry in the Russian Federation.

28. Characteristics of the forms of administrative-territorial division of Russia (republics, territories, regions, districts). Features of economic and geographical indicators of integral macroregions.

Final test for the discipline ««Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »»»

Variant №1

1. There are three types of control mechanisms:
 - a) organizational, economic, social
 - b) social, economic, organizational
 - c) organizational, economic, economic
 - d) technical, economic, economic
2. A set of procedures for making management decisions - ... a management mechanism:
 - a) economic
 - b) organizational
 - c) economic
 - d) social
3. Organization of management includes actions:
 - a) formative
 - b) ordering
 - c) stimulating
 - d) regulatory
 - e) controlling
4. Tools of the organizational mechanism include methods:
 - a) dividing the whole into elements
 - b) connections of interconnected parts
 - c) combining individual elements
 - d) combining elements of the whole
 - e) all answers are correct
5. Separation methods do not include:
 - a) graphical methods
 - b) structuring methods

c) heuristic methods

d) functional cost analysis

e) optimization methods

6. The program-target method refers to the methods:

a) connections

b) combining

c) separation

d) heuristic

7. Elements of the organizational management mechanism:

a) object, factors and selection basis

b) subject, factors and methods of selection

c) object, subject and subject of selection

d) object, techniques and selection basis

8. Selection factors are divided into:

a) internal and external

b) extrasystemic and intrasystemic

c) non-systemic (internal and external) and intrasystemic

d) extrasystemic and intrasystemic (internal and external)

9. Non-systemic internal selection factors do not include:

a) the nature of the organizational and legal form of the enterprise

b) customs policy

c) the nature of the corporate scheme

d) the level of specialization, cooperation and concentration of the enterprise

e) taxation system

10. The possibility of the system's ability to operate in specific conditions determines:

a) object of selection

b) subject of selection

c) selection factors

d) selection basis

Variant №2

1. Correlate the principles of compatibility with their main purpose:
 - 1) the principle of compatibility; 2) the principle of conformity; 3) the principle of relativity:
 - a) allows you to set the necessary quantitative values of the parameters of the control system
 - b) determines, as it were, the degree of legal capacity of the US, its effectiveness
 - c) the possibility of the viability of the system in the existing conditions
2. On the basis of influence on the formation of the organizational mechanism, the set of links for management in a complex organizational system can be divided into three groups:
 - a) linear, functional, cross-functional
 - b) linear-functional, vertical, horizontal
 - c) organizational, hierarchical, linear
 - d) linear, hierarchical, cross-functional
3. The agro-industrial complex has the main purpose:
 - a) maximizing the volume of final products of the agro-industrial complex
 - b) providing the population with food and industry with the necessary raw materials
 - c) winning the maximum possible share of the world market for agricultural products
 - d) improving the welfare of producers and consumers
4. The agro-industrial complex of Russia includes ... areas:
 - a) 2
 - b) 3
 - c) 4
 - d) 5
5. The features of the agro-industrial complex does not include:
 - a) seasonality of production
 - b) variety of forms of ownership

c) the influence of natural and climatic conditions

d) the main means of production is land

e) all answers are correct

6. The main tasks of forecasting and planning the development of the agro-industrial complex are:

a) maximizing the volume of final products of the agro-industrial complex

b) minimization of production costs of agricultural products

c) approximation of the volume and structure of production to the volume and structure of needs for it

d) alignment of the development of productive forces and specific forms of production relations

7. The set of industries that ensure the production of agricultural products and raw materials, their safety, transportation, processing and delivery to consumers, is:

a) agriculture

b) agro-industrial complex

c) agricultural policy

d) food security

8. Establish a sequence for the implementation of the main goal of the AIC:

a) product processing and bringing it to the consumer

b) production of means of production and material and technical support

c) production of livestock and crop products

d) transportation and ensuring the safety of products

9. The structure of the branches of the 1st sphere of the agro-industrial complex does not include:

a) production of mineral fertilizers and plant protection products

b) rural construction, including land reclamation and road

c) light industry

d) mechanical engineering (tractor and agricultural)

10. The branches of the 2nd sphere of the agro-industrial complex include:

a) crop production

- b) food industry
- c) animal husbandry
- d) forestry

Variant №3

1. The third sphere of the agro-industrial complex does not include ... agricultural products:
 - a) transportation
 - b) production
 - c) storage
 - d) processing
 - e) implementation
2. In the management structure of the agro-industrial complex there are ... levels:
 - a) one
 - b) two
 - c) at three o'clock
 - d) four
3. The set of elements that are in quantitative and qualitative relations, interconnected and forming a certain integrity and unity, is:
 - a) management structure
 - b) control system
 - c) management functions
 - d) control method
4. The purpose of managing the agro-industrial complex as a unified system:
 - a) ensure a balanced development of all sectors of the agro-industrial complex
 - b) ensure environmentally friendly production
 - c) take a leading position in the world market
 - d) achieve a profitable, competitive and sustainable development of the agro-industrial complex in the future
5. The highest level in the management structure of the agro-industrial complex is:

- a) district level of government
- b) Ministry of Agriculture of the Russian Federation
- c) the head of the enterprise
- d) Ministry of Agriculture of the Regions

6. The system of state administration of the agro-industrial complex of Russia includes:

- a) all levels of management of the agro-industrial complex
- b) federal and regional levels
- c) federal level
- d) federal and district levels

7. RUSKH is ...

- a) district administration of agriculture
- b) regional management of agriculture
- c) municipal government
- d) state governing body

8. The system of basic laws, the strategy of agrarian reform and its priorities, mechanisms of state regulation and support of agro-industrial production are formed and implemented on:

- a) federal level
- b) regional level
- c) district level
- d) enterprise management level

9. The formation of a policy aimed at maximizing the use of the available potential in order to saturate the market with food and agricultural raw materials of local production is carried out on:

- a) federal level
- b) regional level
- c) district level
- d) enterprise management level

10. Correlate the functions of the state in managing the agro-industrial complex with the tasks of management:

1) decrees of the President of the Russian Federation; 2) subsidies; 3) anti-monopoly measures; 4) promotion of advanced experience and scientific achievements; 5) certification of employees of the management bodies of the agro-industrial complex:

- a) information
- b) personnel
- c) permissive
- d) control and prohibitive
- e) rule-making

Variant №4

1. How many areas does the agro-industrial complex include:

- a) 2
- b) 3
- c) 4

2. To arrange in the correct order the control systems of the agro-industrial complex:

- a) Ministry of Agriculture of the Regions
- b) Ministry of Agriculture of the Russian Federation
- c) district administrations of agriculture

3..... the mechanism includes a set of economic forms and methods of regulation and management of agro-industrial production.

- a) Political
- b) Social
- c) Economic
- d) Legal

4. How is the abbreviation AIC translated?

- a) Agricultural and legal complex

b) Agrarian-political complex

c) Agrofield complex

d) Agro-industrial complex

5. ... is a system (set) of interconnected industries and agriculture, the task of which is the production, processing, storage of agricultural products and bringing them to the consumer.

a) AIC

b) ATP

c) ICC

d) BTR

6. The core of the agro-industrial complex, which includes plant growing, animal husbandry, farms, personal subsidiary plots, etc. .:

a) infrastructure block

b) industry

c) agriculture

d) service sector

7. Productions that are engaged in the procurement of agricultural raw materials, transportation, storage, trade in consumer goods, training for agriculture, construction in the agro-industrial complex:

a) infrastructure block

b) industry

c) agriculture

d) service sector

8. The most important problem of the agro-industrial complex is:

a) ensuring heat conservation

b) ensuring energy saving

c) ensuring water saving

d) providing electricity savings

9. What are the two most important sectors in the structure of agriculture?

a) crop production

- b) sheep breeding
- c) animal husbandry
- d) horse breeding

10. Name the main link in the structure of the Russian agro-industrial complex:

- a) agriculture
- b) industry
- c) mechanical engineering
- d) service sector

Variant №5

1. The most important task of agriculture is:

- a) in providing the country with chemicals
- b) in providing the country with food
- c) in providing the country with machines
- d) in providing the country with materials

2. ... is a form of connections through which the economic interests of enterprises are realized in the process of production activities and in the exchange of its results.

- a) Political relations
- b) Business relations
- c) Economic relations
- d) Social relations

3. Reforming agriculture at the present stage is aimed at ...

- a) transition to a market economy
- b) the transition to a command economy
- c) transition to an administrative economy
- d) transition to a planned economy

4. The management system of the agro-industrial complex is headed by:

- a) Ministry of Agriculture of the Russian Federation
- b) Ministry of Agriculture of the Regions

- c) district administrations of agriculture
 - d) local government
5. ... is a set of enterprises and organizations characterized by a common product, production technology, fixed assets and professional training of workers.
- a) Brigade
 - b) In a row
 - c) Industry
 - d) Link
6. Industry engaged in the breeding of farm animals for the production of livestock products:
- a) crop production
 - b) animal husbandry
 - c) gardening
 - d) feed production
7. The branch engaged in the cultivation of cultivated plants to provide the population with food, livestock - feed, many industries - raw materials:
- a) crop production
 - b) animal husbandry
 - c) gardening
 - d) feed production
8. The theoretical basis of the livestock industry is the scientific discipline:
- a) zootechnics
 - b) agronomy
 - c) agriculture
 - d) field cultivation
9. What are the ways to increase the production of agricultural products?
- a) extensive
 - b) intense
 - c) productive
 - d) progressive

10. What is the way to increase the production of agricultural products provides for the expansion of cultivated areas, an increase in the number of livestock, etc. without updating the material and technical basis?

- a) extensive
- b) intense
- c) productive
- d) progressive

Variant №6

1. What way to increase agricultural production provides for an increase in output per unit area as a result of the use of more efficient means of production, use of the achievements of scientific and technological progress?

- a) extensive
- b) intense
- c) productive
- d) progressive

2. What is the main means of production in agriculture?

- a) technique
- b) livestock
- c) land
- d) products

3. Specialization is ...

- a) the form of the social division of labor and its rational organization, the concentration of activity on any occupation, specialty
- b) the unity, coordination of joint actions of individual workers, their collectives or even national economies in the process of reproduction of socially necessary goods
- c) an increase in the number of large enterprises and the concentration on them of an increasingly large part of the means of production, labor force and products available in society

d) a progressive form of organization of social production based on technological and organizational connection in one enterprise of various industries

4. Combination is ...

a) the form of the social division of labor and its rational organization, the concentration of activity on any occupation, specialty

b) the unity, coordination of joint actions of individual workers, their collectives or even national economies in the process of reproduction of socially necessary goods

c) an increase in the number of large enterprises and the concentration on them of an increasing part of the means of production, labor force and products available in society

d) a progressive form of organization of social production based on technological and organizational connection in one enterprise of various industries

5. Concentration is ...

a) the form of the social division of labor and its rational organization, the concentration of activity on any occupation, specialty

b) the unity, coordination of joint actions of individual workers, their collectives or even national economies in the process of reproduction of socially necessary goods

c) an increase in the number of large enterprises and the concentration on them of an increasing part of the means of production, labor force and products available in society

d) a progressive form of organization of social production based on technological and organizational connection in one enterprise of various industries

6. The main goal of managing the agro-industrial complex as a unified system is:

a) achieving profitable, competitive and sustainable development of the agro-industrial complex in the future

b) a decrease in the supply of raw materials to agricultural enterprises

c) an increase in the cost of production

d) decrease in gross profit

7. Means of production include:

- a) fixed assets of production
- b) additional means of production
- c) industrial means of production
- d) circulating means of production

8. ... represents the entire volume of products created over a certain period of time and received by personal or industrial consumption.

- a) Domestic product
- b) Gross profit
- c) Income
- d) End product

9. The coefficient of specialization is determined by the following formula:

- a) $K_s = 100 / U_t (2p-1)$
- b) $K_s = 1 / U_t (2p-1)$
- c) $K_s = 100 / U_t (2p-3)$
- d) $K_s = 100 / U_m (n-1)$

10. The process of price formation in an economy, which is fundamentally different for a centrally planned economy and a market economy:

- a) price regulation
- b) pricing
- c) inflation
- d) dysporization

Variant №7

1. Key areas in the field of animal husbandry:

- a) close connection between zootechnical science, commodity producers and consumers of breeding material
- b) control and certification of breeding material

- c) creation of favorable conditions for interaction of all economic entities in the livestock breeding industry
 - d) development and implementation of a quality management system
 - e) all answers are correct
2. The main tasks of the management system in the field of seed production:
- a) delegation of most of the powers from the regional level to the district level for making decisions on the formation of the seed fund and providing agricultural enterprises with high-quality seed
 - b) taking into account the soil and climatic characteristics and market needs for seed
 - c) diversification of seed companies and their cooperation with enterprises of related industries
 - d) regulation and control of the interaction of economic entities in this industry
 - e) all answers are correct
3. The result of a voluntary or compulsory merger of independent agricultural enterprises, the activities of which are coordinated by the parent company
- a) agricultural company
 - b) cooperative
 - c) SPK
 - d) holding
 - e) enterprise
4. What issues is the parent company dealing with, coordinating the activities of the association of independent agricultural enterprises?
- a) exclusively financial and investment issues
 - b) exclusively production and economic
 - c) both financial and production and economic
 - d) there can be 2 options: A and B
 - e) there is no correct answer
5. Reasons for the formation of agricultural firms:
- a) the need for its own raw material base for processing enterprises

- b) diversification of activities and increasing the sustainability of development
- c) the formation of a subsidiary farm that provides food products to the personnel of enterprises of other industries that are part of the agricultural firm

d) all answers are correct

e) there is no correct answer

6. What does not apply to the advantages of an agricultural firm as an organizational structure?

a) high concentration of resources, allowing to minimize costs per unit of production

b) an increase in transaction costs

c) obtaining a social effect by improving the standard of living of agricultural workers

d) financial condition allows the introduction of advanced technologies in production and management

e) high level of product quality and great opportunities for market saturation

7. Livestock breeding as an object of management is represented by:

a) research institutions

b) breeding farms

c) advanced livestock fattening farms

d) infrastructure services and farms that ensure the consistency and continuity of updating the breed composition

e) all answers are correct

8. The administrative apparatus of an agricultural firm includes ... level.

a) 2

b) 3

c) 4

d) 5

e) there is no correct answer

9. What is at the first level of the management apparatus of an agricultural firm?

a) management of an agricultural firm

- b) management employees of structural divisions
- c) primary labor collectives
- d) specialists
- e) there is no correct answer

10. Contractual relations in the work of an agricultural firm are built in the context of two levels:

- a) agricultural company - structural divisions
- b) structural units - primary labor collectives
- c) agricultural company - primary labor collectives
- d) a) and b) are true
- e) true a) and c)

Variant №8

1. The duration of the conclusion of the contract must be:

- a) at least 6 months
- b) at least 1 year
- c) no more than 6 months
- d) no more than 1 year
- e) for any period

2. Distribution of income between management levels should be made in proportion to:

- a) share of profit from product sales
- b) share of proceeds from product sales
- c) production costs
- d) costs of transportation of products
- e) there is no correct answer

3. The funds remaining at the disposal of the parent company must be sufficient:

- a) for cost recovery
- b) for the formation of trust funds
- c) for the payment of dividends

d) for all of the above

e) there is no correct answer

4. What inspections in the management system of the agro-industrial complex perform a control function?

a) tax

b) veterinary

c) inspection of standardization and certification

d) inspections for technical and environmental supervision

e) all answers are correct

5. The subject of labor in the management of the agro-industrial complex is:

a) information

b) land

c) capital

d) flora and fauna

e) people

6. Designing a new management structure is to define:

a) type of structure

b) the number of control levels

c) the number of managers at individual levels of management

d) the number of employees directly subordinate to individual managers

e) all answers are correct

7. The most effective way to study processes and phenomena in the management system of the agro-industrial complex is:

a) functional approach

b) economic approach

c) systematic approach

d) hierarchical approach

e) analytical approach

8. Russia has adopted ... a management system for the agro-industrial complex.

a) two-level

- b) three-level
- c) four-level
- d) five-level
- e) there is no correct answer

9. At the ... level, the functions of managing the agro-industrial complex are mainly performed by the Ministry of Agriculture of the Russian Federation.

- a) district
- b) regional
- c) federal
- d) urban
- e) there is no correct answer

10. At the ... level, the functions of managing the agro-industrial complex are assigned to the departments of agriculture.

- a) district
- b) regional
- c) federal
- d) urban
- e) there is no correct answer

Variant №9

1. At the ... level, the functions of managing the agro-industrial complex are assigned to local government bodies.

- a) district
- b) regional
- c) federal
- d) urban
- e) there is no correct answer

2. Structures participating in the formation and implementation of economic and social policy in the agro-industrial complex:

- a) President of the Russian Federation

- b) Federation Council
 - c) State Duma
 - d) the Government of the Russian Federation
 - e) all answers are correct
3. What is the enlarged function of the management body of the agro-industrial complex - the President of the Russian Federation?
- a) determining the development strategy of the agro-industrial complex
 - b) the formation of a policy for the development of the agro-industrial complex
 - c) preparation of draft legislative acts
 - d) allocation of financial resources to the agro-industrial complex
 - e) formation and implementation of state policy in the field of agro-industrial complex in the regions of the Russian Federation
4. What is the enlarged function of the management body of the agro-industrial complex - the Ministry of Agriculture of the Russian Federation?
- a) determining the development strategy of the agro-industrial complex
 - b) the formation of a policy for the development of the agro-industrial complex
 - c) preparation of draft legislative acts
 - d) allocation of financial resources to the agro-industrial complex
 - e) formation and implementation of state policy in the field of agro-industrial complex in the regions of the Russian Federation
5. In how many blocks are the departments of the Ministry of Agriculture of the Russian Federation grouped?
- a) 10
 - b) 11
 - c) 12
 - d) 13
 - e) 14
6. What is the enlarged function of the agro-industrial complex governing body - the RF Ministry of Finance?
- a) determining the development strategy of the agro-industrial complex

- b) the formation of a policy for the development of the agro-industrial complex
- c) preparation of draft legislative acts
- d) allocation of financial resources to the agro-industrial complex
- e) formation and implementation of state policy in the field of agro-industrial complex in the regions of the Russian Federation

7. The Department of Agriculture at the regional level is subordinate to:

- a) regional administration
- b) the Ministry of Agriculture of the Russian Federation
- c) the Government of the Russian Federation
- d) a) and b) are true
- e) true b) and c)

8. The main tasks of the district administration of agriculture are:

- a) participation in the formation and implementation of federal, regional and local agricultural policy in the region
- b) creating conditions for the development of agricultural production, processing industry and agricultural services
- c) development of market infrastructure, market relations and entrepreneurship based on specialization, cooperation and integration
- d) ensuring the supply of agricultural products and foodstuffs to the regional and federal funds
- e) all answers are correct

9. The main types of management structures at agricultural enterprises:

- a) linear
- b) functional
- c) divisional
- d) adaptive
- e) all answers are correct

10. The order of management in various organizational and legal forms of management in general is determined by the norms:

- a) Civil Code of the Russian Federation

- b) Labor Code of the Russian Federation
- c) the Land Code of the Russian Federation
- d) Family Code of the Russian Federation
- e) the Tax Code of the Russian Federation

Variant №10

1. How many spheres are part of the agro-industrial complex?
 - 1) 3
 - 2) 4
 - 3) 2
 - 4) 10
2. The system of organizing social production applied to the agro-industrial complex is ...
 - 1) control system
 - 2) management mechanism
 - 3) form of organization
 - 4) organizational and legal form
3. Which of the areas is not part of the agro-industrial complex?
 - 1) the sphere that provides enterprises with material and technical means and means of production
 - 2) the sphere that produces agricultural products
 - 3) the sphere of transportation, storage and processing of agricultural products
 - 4) the sphere that finances the production of agricultural products
4. What is not part of the economic mechanism of the agro-industrial complex?
 - 1) scientific and research institutions
 - 2) medical institutions
 - 3) governing bodies at all levels
 - 4) enterprises and institutions of the social sphere
5. The goal of managing the agro-industrial complex as a unified system is
 - 1) creation of fundamentally new innovative products

2) achieving a profitable, competitive and sustainable development of agricultural sectors in the future

3) the formation of a qualified and specialized workforce

4) coordination of actions of the agro-industrial complex

6. There are three types of control mechanisms:

1) organizational, economic, social

2) social, economic, organizational

3) organizational, economic, economic

4) technical, economic, economic

7. A set of procedures for making management decisions -... a management mechanism.

1) economic

2) organizational

3) economic

4) social

8. Separation methods do not include:

1) graphical methods

2) methods of structuring

3) heuristic methods

4) functional cost analysis

5) optimization methods

9. Tasks to be solved to achieve the goal of management in the agro-industrial complex:

1) organizational structure of management, strategic planning, distribution of finances

2) product sales, strategic planning, long-term forecasting

3) search for optimal options, strategic planning, long-term forecasting, organizational management structure

4) organizational structure of management, long-term planning, forecasting

10. Elements of the organizational management mechanism:

- 1) object, factors and selection basis
- 2) subject, factors and methods of selection
- 3) object, subject and subject of selection
- 4) object, techniques and basis of selection

II. Evaluation tools for current certification for the discipline
««Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »»»

Abstract evaluation criteria

- 100-86 points are given to a student if the student expressed his opinion on the formulated problem, argued it, having precisely defined its content and components. The data of domestic and foreign literature, statistical information, information of a normative legal nature are given. The student knows and has the skill of independent research work on the research topic; methods and techniques of analysis of theoretical and / or practical aspects of the studied area. There are no actual errors in understanding the problem; the work is graphically framed correctly

- 85-76 - points - the work is characterized by semantic integrity, coherence and consistency of presentation; no more than 1 mistake was made when explaining the meaning or content of the problem. For argumentation, the data of domestic and foreign authors are given. Research skills and abilities are demonstrated. There are no actual errors in understanding the problem. One or two mistakes were made in the design of the work

- 75-61 points - the student conducts a fairly independent analysis of the main stages and semantic components of the problem; understands the basic foundations and theoretical background of the chosen topic. The main sources on the topic under consideration are drawn. No more than 2 mistakes were made in the sense or content of the problem, the design of the work

- 60-50 points - if the work is a retelling or completely rewritten source text without any comments or analysis. The structure and theoretical component of the topic is not disclosed. Three or more than three mistakes were made in the semantic content of the problem being disclosed, in the design of the work.

Questions for colloquia, interviews for the discipline

««Production activities of agro-industrial complexes /

Производственная деятельность агропромышленных комплексов »»»

1. Definition of the agro-industrial complex. Communication of the agro-industrial complex with the branches of the country's economy.
2. Ways of formation and development of the agro-industrial complex in Russia.
3. Brief description of the spheres of activity included in the agro-industrial complex.
4. A brief description of the industries and services that provide agriculture with means of production and material resources.
5. A brief description of the industries that are engaged in the processing of agricultural raw materials.
6. Infrastructure block - industries that are engaged in the procurement of agricultural raw materials, transportation, storage, etc.
- 7 Characteristics of the main formations of the agro-industrial complex (Fruit and vegetable canning formations, beet-sugar formations, agro-industrial formations, poultry formations, intersectoral formations, grape processing enterprises.
- 8 Development and advantages of agro-industrial formations.
- 9 Prospects for the development of the agro-industrial complex. Key indicators of economic efficiency.
- 10 The role of agriculture in the country's economy.
- 11 Sectoral and regional features of agriculture.
- 12 Environmental problems of agriculture and their solutions.
- 13 Agriculture of the Far East.

14 General information about the procurement and storage of plant materials.
Classification of fruit and berry raw materials of the Far East.

15 Main branches of plant growing (melon growing, viticulture, forestry, meadow growing, vegetable growing, fruit growing, field growing, etc.) and their characteristics.

16 Industrial classification of useful crops (cereals, legumes, industrial crops, root crops, tubers, oil and essential oil, spinning, fodder, narcotic crops) and their characteristics.

17 Historical information about animal husbandry.

18 Branches of animal husbandry (fur farming, goat breeding, horse breeding, rabbit breeding, reindeer breeding, donkey breeding, pig breeding, dog breeding, etc.), their characteristics.

19 The role of livestock in the agro-industrial complex. The main tasks of animal husbandry.

20 Characteristics of tractor and agricultural engineering.

21 Branches of mechanical engineering by groups: heavy engineering, medium engineering, precision engineering, production of metal products and blanks.

22 The largest representatives of the industry: world companies, Russian companies.

23 Mineral fertilizers, definition, classification.

24 Simple and complex fertilizers.

25 Agrochemistry as a science. The main sections of agricultural chemistry.

26 History of the development of agrochemistry, periods of development in Russia.
Agrochemical production.

27 Composition of organic fertilizers. Types of organic fertilizers.

28 History of light industry in Russia, current state.

29 Characteristics of the textile industry, clothing industry.

30 Leather production: history, classification of leather, configuration of leather, modern production.

31 Shoe industry: history, modern production.

32 History of the food industry in Russia.

33 Branches of the food industry, the main classification and their characteristics.
Universities of the food industry.

Evaluation criteria

- 100-86 points are given to a student if the student knows and is fluent in the material, expressed his opinion on the formulated problem, argued it. For preparation, the student uses not only lecture material, but also additional domestic and foreign literature.

- 85-76 - points - the work is characterized by semantic integrity, coherence and consistency of presentation. There are no actual errors in understanding the problem.

- 75-61 points - the student understands the basic foundations and theoretical justification of the topic. The main sources on the topic under consideration are drawn.

- 60-50 points - if the answer is a retelling of the original text, without any comments or analysis. Three or more than three mistakes were made in the semantic content of the topic.

Method of drawing mind maps for the discipline ««Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »»

1. Topics: Characteristics of the spheres of activity included in the agro-industrial complex.

2. Concept: Understanding the functional meaning and role of the main structural components of the agro-industrial complex. The connection between them.

3. Expected results of the research: development of students' creativity; the formation of communicative competence in the process of group activities to draw up mind maps; the formation of general educational skills related to the perception, processing and exchange of information; accelerating the learning process.

Evaluation criteria

- 100-86 points are given to a student if he takes an active part in drawing up an intelligence map, shows deep knowledge on a given problem, actively expresses and defends his opinion, has high communication skills.

- 85-76 points are given to a student if he takes part in drawing up an intellect map, but does not show deep knowledge on a given problem, expresses his opinion and tries to argue for it.

- 75-61 points are given to the student if he does not take or takes a passive part in drawing up the mind map. Shows poor knowledge on a given problem, is unable to express his opinion.

Methods of working with text (Insert-marking method) for the discipline ««Production activities of agro-industrial complexes / Производственная деятельность агропромышленных комплексов »»

1. Topics: Agro-industrial integration.

2. Concept: Understanding the importance of agro-industrial formations for the development of the agro-industrial complex.

3. Expected results: Development of critical thinking; the ability to correctly evaluate the read text, highlight the main idea in it; accelerating the process of assimilating new materials.

Evaluation criteria:

- 100-86 points are given to a student if he takes an active part in the work with the proposed text, actively expresses his opinion on the problem set out in the text, argues and defends it.

- 85-76 points are given to a student if he takes part in the work with the proposed text, tries to express his opinion on the problem presented in the text, tries to argue for it.

- 75-61 points are given to a student if he does not take or takes a passive part in the work with the proposed text, is not capable of communicative communication, cannot express his opinion on the problem stated in the test.