

Ministry of Education and Science of Ukraine

Sumy National Agrarian University

Faculty _Engineering and Technology_

Department of __Agroengineering__

Work program (syllabus) of the educational component

OK 31 "Economics of agricultural production and accounting"

(the status of the educational component is mandatory)

Implemented within the educational program:

__Agroengineering__

(name)

by specialty_208 "Agroengineering

(code, name)

at the _first (bachelor)_ level of higher education

Developer: Mikulina M.O., Doctor of Economics, associate professor
(signature) (surname, initials) (academic degree and rank, position)

Considered, approved and approved at the meeting of the department <u>Agroengineering</u> (name of department)	protocol dated May 24, 2023 No. 11	
	Head department _____ (signature)	<u>M. L. Shulyak</u> (surname, initials)

Agreed:

Guarantor of the educational program _____ Sarzhanov B.O.____
(signature) (surname)

Dean of the faculty where the educational program is implemented _____ Zubko
V.M.____
(signature) (surname)

Review of the work program (attached) provided: _____
(signature) (surname)

(signature)(surname)

Methodist of the Education Quality Department,
licensing and accreditation _____ (_____)
(signature) (surname)

Registered in the electronic database: date: _____2023.

Information on viewing the work program (syllabus):

The academic year in which the changes are made	The number of the annex to the work program with a description of the changes	The changes were reviewed and approved		
		Date and number of the protocol of the meeting of the department	Head of Department	Guarantor of the educational program

1. GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

1.	The name is OK	Economics of agricultural production and accounting						
2.	Faculty/department	Technological engineering/Agroengineering						
3.	The status is OK	Mandatory						
4.	Program/Specialty (programs), the component of which is OK for	"Agroengineering"/ 208 "Agroengineering", the first (bachelor's) level of higher education						
5.	OK can be offered for	-						
6.	NRK level	6th level						
7.	Semester and duration of study	1 semester, 15 weeks (1 course)						
8.	Number of ECTS credits	5.0						
9.	The total number of hours and their distribution	Contact work (class)						Independent work
		Lectures		Practical		Laboratory		
		Denna		Denna		Denna		Denna
	<i>exam</i>	30		30				90
10.	Language of education	Ukrainian						
11.	Teacher/Coordinator of the educational component	Doctor of Economics, Associate Professor of the "Agroengineering" Department Mikulina Maryna Oleksandrivna						
11.1	Contact Information	auditorium 323m, faculty of engineering and technology, building 4, marinamikulina1@ukr.net						
12.	General description of the educational component	The main attention in the educational component is given to a wide range of issues related to the features of the rational organization of production and its effective management on the basis of entrepreneurial activity in agricultural enterprises of various forms of ownership and management - economic societies, agricultural production cooperatives, private enterprises, farms etc.						
13.	The purpose of the educational component	<i>The purpose of the educational component</i> isto provide future specialists with theoretical and practical knowledge and skills regarding the rational organization and management of agricultural production on the basis of economic efficiency. <i>The subject of study is the educational component</i> there is a study of the organizational foundations of the state's agrarian policy; study of the influence of the state on the development of the agrarian sector of the economy; analysis of the features and effectiveness of domestic programs of state support for the agricultural industry; determination of directions of state policy regarding the regulation of the development of agro-industrial production.						

14.	Prerequisites for studying OK, connection with other educational components of OP	<p>Competencies developed in the educational component are necessary for the formation of the future specialist's knowledge and skills of professional training in agricultural engineering. This educational component (academic discipline) is the basis for the formation and development of the following professional competencies:</p> <p>FC-12. The ability to analyze and systematize scientific and technical information for the organization of material and technical support of agricultural production.</p> <p>FC-13. The ability to organize work and provide administrative management of production units that provide technical support for agro-industrial production in accordance with the implementation of legal requirements for life safety and occupational health and safety; analyze indicators of man-made and natural hazards, as well as plan and implement appropriate protective measures.</p> <p>FC-14. The ability to carry out an economic justification of the feasibility of using technologies and technical means in agro-industrial production, engineering and technical measures to maintain the machine-tractor park, farm and other agricultural machinery in working condition.</p> <p>The educational component is the basis for the educational components: OK37 "Pre-diploma practice" and OK38 "Qualification (professional) attestation".</p>
15.	Policy of academic integrity	<p>The system of requirements that are placed before the applicant of higher education during the study of the educational component: passing the assessment stages by the students in the established terms; execution and defense of written and practical works within the established deadlines; compliance with the regulations on prevention and detection of academic plagiarism at the Sumy National University of Science and Technology (https://bit.ly/2TNvfE0); compliance by students with the code of academic integrity of the Sumy NAU (https://bit.ly/3xf92wW). Written works prepared for assessment must be original and independently completed by the student of higher education. Written works that are completed and submitted in violation of deadlines without valid reasons are evaluated one grade lower than the obtained result. Work that is performed with a low level of uniqueness or is a copy of "someone else's" work will be evaluated at "zero" with the subsequent performance of work according to another original individual task. Resubmission of written works takes place after re-execution or revision. Copying from various sources of information (including using mobile devices and gadgets) during exams is prohibited. If the fact of cancellation is discovered, the student's work is canceled and the exam is retaken.</p>

16.	Link to the course in the Moodle system	https://cdn.snau.edu.ua/moodle/course/view.php?id=3880
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2.LEARNING RESULTS UNDER THE EDUCATIONAL COMPONENT AND THEIR RELATIONSHIP WITH PROGRAM LEARNING OUTCOMES

<p>Study results for OK: <i>After studying the educational component, the student is expected to be able to...</i></p>	<p>Program learning outcomes, which are aimed at the achievement of the OK OP</p>					<p>How RND is estimated</p>
	<p>PRN-06.Formulate new ideas and concepts for the development of agro-industrial production</p>	<p>PRN-17.Choose and apply mechanized technologies in accordance with agro-climatic conditions and justify technologies according to economic and quality criteria</p>	<p>PRN-21. Determine the composition and scope of mechanized work, the need for fuel and lubricants and spare parts.</p>	<p>PRN-23.Analyze the market of products and agricultural machinery. To draw up business plans for the production of agricultural products. Perform economic justification of technological processes, technologies, material and technical support of agricultural production. Apply methods of project management for the production of plant and animal products.</p>	<p>PRN-24.To organize the production process of units for technical support of agro-industrial productions.</p>	
DRN 1. Demonstrate knowledge about the development of agro-industrial production based on the principles of economic development.	h	h	h	h	h	Implementation and protection of reports of practical work according to an individual option. Written survey (testing) assimilation of lecture material. Intermediate computer certification - multiple choice test. Preparation and defense of an essay and presentation according to an individual task.
DRN 2. Make effective decisions and apply the resource potential of enterprises based on economic criteria.		h				Implementation and protection of reports of practical work according to an individual option. Written survey (testing) assimilation of lecture material. Intermediate computer certification - multiple choice test. Preparation and defense of an essay and presentation according to an individual task.
DRN 3. Determine the economic costs of using the farm machinery and consumables for its work.			h			Implementation and protection of reports of practical work according to an individual option. Written survey (testing) assimilation of lecture material. Intermediate computer certification - multiple choice test.
DRN 4. Conduct market analysis of products and equipment and perform economic substantiation of technological processes and technologies.				h		Implementation and protection of reports of practical work according to an individual option. Written survey (testing) assimilation of lecture material. Intermediate computer certification - multiple choice test. Preparation and defense of an essay and presentation according to an individual task.
DRN 5. Develop business plans for the production of agricultural products.				h		Implementation and protection of reports of practical work according to an individual option. Written survey (testing) assimilation of lecture material. Intermediate computer certification - multiple choice test.

Study results for OK: <i>After studying the educational component, the student is expected to be able to...</i>	Program learning outcomes, which are aimed at the achievement of the OK OP					How RND is estimated
	PRN-06. Formulate new ideas and concepts for the development of agro-industrial production	PRN-17. Choose and apply mechanized technologies in accordance with agro-climatic conditions and justify technologies according to economic and quality criteria	PRN-21. Determine the composition and scope of mechanized work, the need for fuel and lubricants and spare parts.	PRN-23. Analyze the market of products and agricultural machinery. To draw up business plans for the production of agricultural products. Perform economic justification of technological processes, technologies, material and technical support of agricultural production. Apply methods of project management for the production of plant and animal products.	PRN-24. To organize the production process of units for technical support of agro-industrial productions.	
						Preparation and defense of an essay and presentation according to an individual task.
DRN 6. Manage projects for the production of agricultural products.				h		Implementation and protection of reports of practical work according to an individual option. Written survey (testing) assimilation of lecture material. Intermediate computer certification - multiple choice test. Preparation and defense of an essay and presentation according to an individual task.
DRN 7. To organize the production processes of divisions of agro-industrial enterprises.					h	Implementation and protection of reports of practical work according to an individual option. Written survey (testing) assimilation of lecture material. Intermediate computer certification - multiple choice test. Preparation and defense of an essay and presentation according to an individual task.

3. CONTENTS OF THE EDUCATIONAL COMPONENT (COURSE PROGRAM)

Topic. List of issues to be considered within the topic	Distribution within the general time budget						Recommended Books
	Auditory work				Independent work		
	Lk		P.z				
	daytime	extramural	daytime	extramural	daytime	extramural	
Topic 1. General information about the economy of agricultural production. 1. The theoretical essence of the term "economy". Economics as a science. 2. Resources, their characteristics and classification. 3. Methodology and research methods in economics. 4. The essence and structure of the agro-industrial complex of Ukraine. 5. Enterprise and entrepreneurship, their economic and legal foundations.	2	-		-	6		[1...21], [22], [23] [36-40]

Topic. List of issues to be considered within the topic	Distribution within the general time budget						Recommended Books
	Auditory work				Independent work		
	Lk		P.z				
	daytime	extramural	daytime	extramural	daytime	extramural	
Topic 2. Land resources of agricultural production and the efficiency of their use. 1. Land is the main means of production in agriculture. 2. The land fund of Ukraine and its use in agricultural production. 3. The Land Code is the main law that regulates land relations in Ukraine. 4. The level and efficiency of the use of land resources, its ecological aspects <i>software Land resources of agricultural production and efficiency of their use.</i>	2	-	2	-	6		[1...21], [22], [23 [25-36]]
Topic 3. Material and technical base and scientific and technical progress in agricultural production. 1. Concept of material and technical base. 2. Condition and availability of material and technical resources. 3. The essence of logistics and its purpose. 4. The essence of scientific and technical progress and the peculiarities of its manifestation in agricultural production. <i>software Calculation of traction balance of the car.</i> <i>software Material and technical base and scientific and technical progress in agricultural production.</i>	2	-	2	-	6		[1...21], [22], [23] [30-40]
Topic 4. Enterprise personnel, productivity and wages. 1. The concept of labor and labor resources in agricultural production. 2. Concepts and features of the labor process in agricultural production. 3. Indicators of the level and efficiency of the use of labor resources in agricultural production. 4. Labor productivity and methods of its measurement. 6. Payment of labor in agricultural production, its economic bases and forms. 7. The main factors of the level of labor productivity and ways to increase it. <i>software Enterprise personnel, productivity and wages.</i>	2	2	2		6		[1...21], [22], [23] [32-36]
Topic 5. Non-current and current assets of the enterprise, efficiency of their use. 1. Concept and classification of non-current and current assets of the enterprise. 2. Fixed assets. Indicators of security and efficiency of use of fixed assets. 3. Economic essence of current assets and their classification. 4. Working capital and indicators of the effectiveness of their use.	2	-	2	-	6		[1...21], [22], [23] [27-40]

Topic. List of issues to be considered within the topic	Distribution within the general time budget						Recommended Books
	Auditory work				Independent work		
	Lk		P.z				
	daytime	extramural	daytime	extramural	daytime	extramural	
5. Ways to improve the use of non-current and current assets of an agricultural enterprise. <i>software Non-current and current assets of the enterprise, efficiency of their use.</i>							
Topic 6. Production costs and cost of production. 1. The economic essence of costs and production costs. 2. Classification of costs and their distribution when calculating the cost of production. 3. Ways to reduce the cost of agricultural products. <i>software Production costs and cost of production.</i>	2	-	2	-	6		[1...21], [22], [23] [26-38]
Topic 7. Prices and pricing in the market environment. 1. Market environment in the agro-industrial sphere. 2. Economic content of price and pricing. 3. Market price. Demand and supply for agricultural products. 4. Prices and costs as factors of competitiveness. 5. The concept of price parity and equivalent exchange between agriculture and industries that provide it with material and technical resources. 6. Mechanism of market and state regulation of formation of prices for material and technical resources and agricultural products. 7. State influence on demand, supply and the level of market prices for agricultural products. <i>software Prices and pricing in a market environment.</i>	2	-	2	-	6		[1...21], [22], [23] [27-37]
Topic 8. Income and formation, distribution and use of enterprise profits. 1. General scheme of formation of financial results of the enterprise. 2. The concept of profit and its types. The sequence of determining the profit from all types of activities. 3. Distribution of the company's profit. 4. Functions and sources of profit formation. 5. Distribution of the company's profit. 6. Taxation of income of agricultural enterprises. <i>software Incomes and the formation, distribution and use of profits of enterprises.</i>	2	-	2	-	6		[1...21], [22], [23] [27-39]
Topic 9. Efficiency of agricultural production. 1. The concept of efficiency in economic science.	2	-	2	-	6		[1...21], [22], [23] [35-40]

Topic. List of issues to be considered within the topic	Distribution within the general time budget						Recommended Books
	Auditory work				Independent work		
	Lk		P.z				
	daytime	extramural	daytime	extramural	daytime	extramural	
2. Types and system of performance indicators. 3. Peculiarities of understanding efficiency in market conditions. 4. Environmental, economic, technological, social and other aspects of efficiency. 5. Concepts and indicators of profitability in agricultural production and the method of their calculation. 6. The main factors affecting efficiency in agricultural production. 7. Restructuring, rehabilitation, bankruptcy and liquidation of agro-industrial enterprises. <i>software Efficiency of agricultural production.</i>							
Topic 10. Investment and innovation activity in agricultural production. 1. The economic essence of investments and the main directions of their implementation in agricultural production. 2. Indicators of investment efficiency. 3. The concept of investment profit. 4. Indicators of investment efficiency. 5. The concept of "innovation" and its types and role in the development of agricultural production. 6. Business plans for the production of agricultural products. 7. Evaluation of the economic efficiency of innovations. <i>software Investment and innovation activity in agricultural production.</i>	2	-	2	-	6		[1...21], [22], [23] [33-40]
Topic 11. Peculiarities of lending to agro-industrial enterprises and agricultural leasing. 1. The essence of lending to business entities. 2. Crediting system for agricultural production. 3. State support for lending to agricultural production. 4. Economic essence, types and forms of leasing. 5. Leasing payments. 6. International leasing. <i>software Economic efficiency of the use of machines and equipment in agro-industrial production.</i>	2	-	2	-	6		[1...21], [22], [23] [25-39]
Topic 12. Economic efficiency of the use of machines and equipment in agro-industrial production. 1. Complex mechanization and automation of agricultural production industries. 2. System of machines and equipment for agro-industrial production	2	-	2	-	6		[1...21], [22], [23] [24-28]

Topic. List of issues to be considered within the topic	Distribution within the general time budget						Recommended Books
	Auditory work				Independent work		
	Lk		P.z				
	daytime	extramural	daytime	extramural	daytime	extramural	
3. Economic efficiency of mechanization and use of means of automation of agricultural production. 4. Analysis of the use of the machine-tractor park, car park and new equipment. 5. Analysis of the use of freight vehicles. 6. Indicators of the economic efficiency of the introduction of new technology. <i>software Efficiency of freight transport.</i>							
Topic 13. Theoretical foundations of accounting. Balance sheet. 1.Accounting as an economic science. 2.Accounting, its purpose, principles and tasks. 3.Subject and objects of accounting. 4.Balance sheet	2	-	4	-	6		[1...21], [22], [23] [27-39]
Topic 14. Accounting method. 1. Accounting method and its components 2. Areas of application of accounting 3. Techniques and forms of accounting 4. Classification of economic means by functional participation in the process of activity 5. Classification of economic assets according to the sources of their formation and intended use 6. Evaluation and costing. Documentation and inventory.	2	-	2	-	6		[1...21], [22], [23] [24-28]
Topic 15. Organization of accounting of business entities. 1. Accounting of enterprise activity costs 2. Accounting of income and financial results 3. Financial reporting 4. Accounting of assets, liabilities and economic processes 5. Accounting of obligations	2	-	2	-	6		[1...21], [22], [23] [35-40]
<i>In total</i>	30		30		90		

4. TEACHING AND LEARNING METHODS

DRN	Teaching methods(work to be carried out by the teacher during classroom classes, consultations)	Number of hours	Teaching methods(what types of educational activities should the student perform independently)	Number of hours
DRN 1.	Demonstrate knowledge about the development of agro-industrial production based on the principles of economic development.	6/4	Elaboration of reference abstracts of lectures and work with the book. Studying the material for independent mastery. Taking notes. Completion of tasks of practical works, the implementation of which was started at the contact lesson. Preparation of the abstract. Self-assessment of knowledge.	12
DRN 2.	Make effective decisions and apply the resource potential of	6/4	Elaboration of reference abstracts of lectures and work with the book. Studying the	14

DRN	Teaching methods (work to be carried out by the teacher during classroom classes, consultations)	Number of hours	Teaching methods (what types of educational activities should the student perform independently)	Number of hours
	enterprises based on economic criteria.		material for independent mastery. Taking notes. Completion of tasks of practical works, the implementation of which was started at the contact lesson. Preparation of an essay and presentation according to an individual task. Self-assessment of knowledge.	
DRN 3.	Determine the economic costs of using the farm's machinery and consumables for its operation.	6/4	Elaboration of reference abstracts of lectures and work with the book. Studying the material for independent mastery. Taking notes. Completion of tasks of practical work, the implementation of which began at the contact lesson. Self-assessment of knowledge.	14
DRN 4.	Conduct market analysis of products and equipment and perform economic substantiation of technological processes and technologies.	6/2	Elaboration of reference abstracts of lectures and work with the book. Studying the material for independent mastery. Taking notes. Completion of tasks of practical work, the implementation of which began at the contact lesson. Preparation of an essay and presentation according to an individual task.	14
DRN 5.	Develop business plans for the production of agricultural products.	8/2	Elaboration of reference abstracts of lectures and work with the book. Studying the material for independent mastery. Taking notes. Completion of tasks of practical works, the implementation of which was started at the contact lesson. Preparation of essay and presentation according to the individual. task. Self-assessment of knowledge.	12
DRN 6.	Manage agricultural production projects.	8/2	Elaboration of reference abstracts of lectures and work with the book. Studying the material for independent mastery. Taking notes. Completion of tasks of practical works, the implementation of which was started at the contact lesson. Preparation of essay and presentation according to the individual. task. Self-assessment of knowledge.	12
DRN 7.	Organize production processes of divisions of agro-industrial enterprises.	8/2	Elaboration of reference abstracts of lectures and work with the book. Studying the material for independent mastery. Taking notes. Completion of tasks of practical works, the implementation of which was started at the contact lesson. Preparation of essay and presentation according to the individual. task. Self-assessment of knowledge.	12
	EVERYTHING	<u>30/30</u>		<u>90</u>

5. EVALUATION BY THE EDUCATIONAL COMPONENT

5.1.Summative assessment

5.1.1. To assess the expected learning outcomes, it is provided

No	Methods of summative assessment	Points / Weight in the overall assessment	Completion date (indicate the number of the week on which the assessment will be conducted)
1.	Implementation and protection of reports of practical work according to an individual option	32 points / 32%	throughout the semester 2....15 week
2.	Written survey (testing) assimilation of lecture material	8 points / 8%	until the end of the 8th week; until the end of the 15th week
3.	Intermediate computer certification - multiple choice test	15 points / 15%	8 week
4.	Preparation of an essay and presentation according to an individual task	15 points / 15%	until the end of the 15th week
5.	Exam - a written answer to the exam ticket	30 points / 30%	the terms of the examination session

5.1.2. Evaluation criteria

Component	Unsatisfactorily	Satisfactorily	Fine	Perfectly
Implementation and protection of reports of practical work according to an individual option	<19 points	19...23 points	24...28 points	29...32 points
	Task requirements not met	Most of the requirements are met, but some components are missing or insufficiently disclosed	All the requirements of the task have been fulfilled, but there are minor remarks regarding the execution of the task	All the requirements of the task have been met, and an own version of the task has been proposed
Written survey (testing) assimilation of lecture material	<4 points	4...5 points	6...7 points	8 points
	Task requirements not met	Most of the requirements have been met, but individual components are missing or insufficiently disclosed	All the requirements of the task have been fulfilled, but there are minor remarks regarding the execution	All requirements of the task have been fulfilled
	There are less than 12 correct answers out of 20	Correct answers 12...14 out of 20	Correct answers 15...17 out of 20	Correct answers 18..20 out of 20
Intermediate computer certification is a multiple choice test	<9 points	9...11 points	12..13 points	14...15 points
	Faithful less than 9 out of 15 answers	Faithful answers 9...11 out of 15	Faithful answers 12...13 of 15	Faithful answers 14...15 of 15
Preparation of an essay and presentation according to an individual task	<9 points	9...11 points	12..13 points	14...15 points
	Task requirements not met	Most of the requirements have been met, but individual components are missing or insufficiently disclosed	All the requirements of the task have been fulfilled, but there are minor remarks regarding the execution	All requirements of the task have been fulfilled
	<18 points	18...22 points	23..26 points	27...30 points

Exam - a written answer to the exam ticket	Task requirements not met	Most of the requirements have been met, but individual components are missing or insufficiently disclosed	All the requirements of the task have been fulfilled, but there are minor remarks regarding the execution	All requirements of the task have been fulfilled
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5.2. Formative assessment:

To assess the current progress in learning and understand the directions for further improvement is provided.

No	Elements of formative assessment	Date
1.	Performance of practical work according to an individual task during practical classes with feedback from the teacher.	within 2..15 weeks
2.	Verbal feedback from the teacher while working on individual tasks during classroom classes.	within 2..15 weeks
3.	Verbal feedback from the teacher and students after a written survey (testing) of assimilation of the lecture material	within 8 and 15 weeks after assembly
4.	Verbal feedback from the teacher and students during preparation of an essay and presentation according to an individual task	within 9..15 weeks
5.	Verbal feedback from the teacher and students after the defense of essay and presentation according to an individual task	during the 15th week after protection

Self-assessment can be used as an element of summative assessment and formative assessment.

6. EDUCATIONAL RESOURCES (LITERATURE)

7. Andriychuk V.G. Efficiency of agricultural enterprises: theory, methodology, analysis: monograph. - K.: KNEU, 2017. - 292 p.

8. Andriychuk V.G. Economics of enterprises of the agro-food complex: educational method, manual. for self studied disc. - K.: KNEU, 2017. - 414 p.

9. Carrying out scientific and research work on the subject of farm contracts in accordance with the thematic plan of the department. The topic of the department on the NDR: "Information support of technologies and substantiation of technical means for mechanized technological processes in agro-industrial production". State No. registry: 0115U001338 Ukr INTEL.

10. Voskobiynyk Y.P., Shpykulyak O.H., Kaminsky I.V. [etc.]. Costs and efficiency of production in agricultural enterprises (monitoring). - K.: NNC IAE, Vol. 5. 2018. - 438 p.

11. Zbarskyi V.K., Matsybora V.I., Chalyi A.A. Economics of agriculture: education. manual [edited by V.K. Zbarskyi and V.I. Matsybora]. - K.: Karavela, 2017. — 280 p.

12. Malik M.Y., Nuzhna O.A. Competitiveness of agricultural enterprises: methodology and mechanisms: monograph. - K.: NNC IAE, 2017. - 270 p.

13. Mikulina M.O., Polyvany A. Functioning of the technical service system in the agricultural industry. "Current issues in modern science", Series "Economics" No. 3 (9), 2023 p. 97-107

14. Mikulina M.O. The effectiveness of the use of technological complexes of machines in the production of agricultural products: // Collection of theses of reports on the materials of the 25th international scientific conference "Technology of the 21st century", (September 15-20, 2019, Sumy, Odesa)/ part 1. - Sumy: SNAU, 2019. P.-16

15. Mikulina M.O., Danilov E.M. Methods of agrochemical soil survey. Materials of the All-Ukrainian Student Scientific Conference dedicated to International Student Day (November 16-20, 2020

16. M. O. Mikulina Enterprise personnel, productivity and remuneration [Electronic resource] / M. O. Mikulina, A. D. Polyvany // Trends and prospects for the development of science and education in the conditions of globalization: materials of the International Scientific and Practical Internet Conference:

coll. of science works, (Pereyaslav, 2021). - Pereyaslav, 2021. - Issue 75. - P. 41-43. r.). Sumy, 2020. P. 359

17. Mikulina M.O. Material and technical base and scientific and technical progress in agricultural production [Electronic resource] / M. O. Mikulina, A. D. Polyvany // Technical support of innovative technologies in the agro-industrial complex: materials of the 3rd International Scientific and Practical Conference, Melitopol, 2021). - Melitopol: TDATU, 2021. - P. 493-496.

18. 2 Mikulina M.O. Enterprise personnel, productivity and wages [Electronic resource] / M. O. Mikulina, A. D. Polyvany // Trends and prospects for the development of science and education in the conditions of globalization: materials of the International Scientific and Practical Internet Conference: coll. of science works, (Pereyaslav, 2021). - Pereyaslav, 2021. - Issue 75. - P. 41-43

19. Mikulina M.O. The essence of financial diagnostics of agricultural enterprises [Electronic resource]// Collection of abstracts of reports on materialsIXof the International Scientific Conference "Wayscience" magazine "Modern Movement of Science", (December 2-3, 2019), Dnipro, 2019, pp. 500-504

20. Prysiashnyuk M.V., Zubets M.V., Sabluk P.T. [etc.] Agrarian sector of the economy of Ukraine (state and development prospects). - K.: NNSCIAE, 2018. - 1008 p

21. Suprun O.M. Economic regulation of agricultural production: monograph. -K.: NNC IAE, 2017. -350 p.

22. Cherevko G.V., Gorbonos F.V., Pavlenchyk A.O., Pavlenchyk N.F. Enterprise economics: subject. -K.: Znannia, 2018.-384 p.

23. Cherevko G.V., Rusnak P.P., Andriychuk V.G., Ilyenko A.A. etc. Economics of agrarian enterprises: science. manual - K., 2018. - 197 p

24. Sobko, Mykola, Yevheniia Butenko, Gennadiy Davydenko, Oleksandr Solarov, Viacheslav Pylypenko, Viktoriia Makarova, Maryna Mikulina, Iryna Samoshkina, Oleksandr Antonovskiy, and Volodymyr Poriadynskiy. "Ecological and Economic Study of Wheat Winter Varieties by Different Geographical Origin". Ecological Engineering & Environmental Technology 24 no. 1 (2023): 12-21. doi:10.12912/27197050/154912.

25. Hryhoriv, Yaroslava, Margarita Lyshenko, Andrii Butenko, Valentyna Nechyporenko, Viktoriia Makarova, Maryna Mikulina, Mariia Bahorka, Dmytro S. Tymchuk, Iryna Samoshkina, and Inna Torianyk. "Competitiveness and Advantages of Camelina sativa on the Market of Oil Crops". Ecological Engineering & Environmental Technology 24 no. 4 (2023): 97-103. doi:10.12912/27197050/161956.

Additional sources

26. Balanyuk O. S. State support for innovative activity. URL: <http://ena.lp.edu.ua:8080/bitstream/ntb/4396/1/19.pdf>.

27. The single comprehensive strategy and action plan for the development of agriculture and rural areas in Ukraine for 2015-2020: draft. URL: <http://minagro.gov.ua>.

28. Land Code of Ukraine. No. 2768-III dated April 1, 2018. URL: <http://zakon3.rada.gov.ua/laws/show/2768-14>.

29. Infographic: average rent for agricultural land (shares) in Ukraine / State Geocadastre. URL: <http://land.gov.ua/info/infohrafika-serednia-orendna-plata-za-zemli-silskohospodarskoho-pryznachennia-pai-v-ukraini-v-2017-rotsi>.

30. Information on normative monetary valuation of lands / State Geocadastre. URL: land.gov.ua/wp-content/uploads/2016/01/NGO_SG_01_01_2017.xls.

31. 15. Mikulina M.O. Economics of agricultural production: Educational and methodological complex of the discipline of training bachelors of specialty 208 "Agroengineering" - Sumy, 2019. - P. 143. (protocol of the Educational and Methodical Council of the ITF No. 1 dated 09/02/2019).

32. Mikulina M.O. Practicum on the economics of agricultural production. Methodical recommendations for solving typical problems. Sumy, 2020, 130 p.(Protocol No. 6 dated March 30, 2020 of the Educational and Methodological Council of the Faculty of Engineering and Technology).

33. Mohylnyi O. M. State regulation of leased land relations: political economic approach. Efficient economy. 2018. No. 5. URL: Access mode: <http://www.economy.nayka.com.ua>.

34. Moskalyuk K. V. Theoretical foundations of the innovative potential of the agrarian sphere of Ukraine. Collection of scientific papers of the Kirovohrad National Technical University. Economic sciences. 2018. No. 22. URL:[http://kntu.kr.ua/doc/zb_22\(2\)_ekon/stat_20_1/69.pdf](http://kntu.kr.ua/doc/zb_22(2)_ekon/stat_20_1/69.pdf).

35. Oliynyk T. I. State support of the agrarian sector of the economy of Ukraine. Economy of agro-industrial complex. 2019. No. 7. P. 80–86.

36. Ostashko T. O. Structural and institutional analysis of the agricultural market of Ukraine. Economics and forecasting. 2014. No. 3. P. 115–126.

37. Pavlova G. E. Methods of state regulation of the agrarian sector of the economy of Ukraine. Investments: practice and experience. 2018. No. 9. P. 47–49.

38. Pylypenko V. V. Conceptual foundations of the formation of state agrarian policy in reforming the agrarian sector of the economy. Global and national economic problems. 2019. No. 11. P. 186–190.

39. Tyukhtenko N. A., Karunas S. A. Instruments and methods of state regulation of agricultural production. Bulletin of the Berdyan University of Management and Business. 2017. No. 1 (13). P. 47–50.

Methodical support

38. Mikulina M.O. Practicum on the economics of agricultural production. Methodical recommendations for solving typical problems - Sumy, 2020 - 130 p.

Other sources

39.Distance course on the discipline "Economics of agricultural production" in the Moodle environment/ [Electronic resource] — Mode of access to the resource:<https://cdn.snau.edu.ua/moodle/course/view.php?id=3880>.

Software.

40.Microsoft Office software package (Microsoft Word word processor, Microsoft Excel table processor, Microsoft PowerPoint presentation preparation program).

Review of the work program (syllabus) of the educational component

OK 31 "Economics of agricultural production" (status - mandatory)

Developer: Doctor of Economics. Associate Professor of the Department of Technology Operation
Mikulina Maryna Oleksandrivna

The parameter by which the work program (syllabus) of the educational component is evaluated by the guarantor or a member of the project group	So	No	Comment
Learning outcomes for the educational component (DRN) correspond to the NRC			
The results of the study by the educational component (DRN) correspond to the provided PRN (for mandatory OKs)			
Learning outcomes by educational component provide an opportunity to measure and evaluate the level of their achievement			

Member of the project group of OP Agroengineering _____
(name)
(surname)
(signature)

The parameter by which the work program (syllabus) of the educational component is evaluated by the teacher of the corresponding department	So	No	Comment
General information about the educational component is sufficient			
Learning outcomes for the educational component (DRN) correspond to the NRC			
The results of training according to the educational component (DRN) provide an opportunity to measure and evaluate the level of their achievement			
Learning outcomes (LRE) refer to students' competencies, not the content of the discipline (contain knowledge, skills, abilities, and not the topics of the discipline's curriculum)			
The content of the OK is formed in accordance with the structural and logical scheme			
Educational activity (teaching and learning methods) enables students to achieve the expected learning outcomes (LEIs)			
The educational component involves learning through research that is appropriate and sufficient for the relevant level of higher education			
The assessment strategy within the educational component is in accordance with University/faculty policy			
The provided assessment methods make it possible to assess the degree of achievement of learning outcomes by educational component			
The workload of students is adequate to the volume of the educational component			
The recommended learning resources are sufficient to achieve the learning outcomes (LEOs)			
The literature is relevant			
The list of educational resources contains the software products necessary to achieve the DRN			

Reviewer (teacher of the department) of Agricultural Engineering _____
