

Ministry of Education and Science of Ukraine
Sumy National Agrarian University
Faculty of Biology and Technology
Department of Fodder Technology and Animal Feeding

Work program (syllabus) of the educational component
Animal Welfare
(selective)

Implemented within the educational program
Technology of Production and Processing of Livestock Products

in the specialty H2 Livestock breeding
at the second (master's) level of higher education

Developer: _____ **O.H. Mykhalko**, associate professor of the Department of Fodder Technology and Animal Feeding

Considered, approved and ratified at the meeting of the Department of Fodder Technology and Animal Feeding	protocol dated " ____ " _____ 2025 No. ____
	Head of the department _____ (signature) <u>Viktor OPARA</u> (last name, initials)

Agreed:

Educational program guarantor _____ **Viktor OPARA**

Dean of the Faculty of Biology and Technology _____ **Viktoriiia VECHORKA**

Review of the work program (attached) provided: _____
(Full name)

Methodologist of the Department of Educational Quality,
Licensing and Accreditation _____
(Full name)

Registered in the electronic database: date: _____ 2025.

Information on reviewing the work program (syllabus):

Academic year in which changes are made	Number of the appendix to the work program with a description of the changes	Changes reviewed and approved		
		Date and number of the minutes of the department meeting	Head of the Department	Educational program guarantor

1. GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

	Name of EC	Animal Welfare							
	Faculty/department	Faculty of Biology and Technology / Department of Fodder Technology and Animal Feeding							
	Status of EC	Selective							
	Program/Specialty(s) that include EC for	H2 Livestock breeding /EP Technology of Production and Processing of Livestock Products / EP Cynology							
	EC can be offered for	H6 Veterinary Medicine							
	National Qualifications Framework Level	seventh							
	Semester and duration of study	third, 11 weeks							
	Number of credits ECTS	5							
	Total hours and their distribution	Contact work (classes)						Individual work	
		Lectures		Practical/seminar		Laboratory			
		full-time	extramur.	full-time	extramur.	full-time	extra mur.	full-time	extra mur.
		22	6	22	6	-	-	106	138
	The language of learning	Ukrainian							
	Teacher/Educational Component Coordinator	Oleksandr Hryhorovych Mykhalko							
11.1	Contact information	Associate Professor of the Department of Fodder Technology and Animal Feeding Office 322 of the Main Building email address: snau.cz@ukr.net consultations: every Tuesday 14 ⁰⁰ -15 ⁰⁰ .							
	General description of the educational component	The educational component studies the principles of ensuring the physical and mental health of farm and domestic animals. It covers the conditions of keeping, feeding, handling of animals and methods of assessing their condition in accordance with international standards. The goal is to develop the knowledge and skills necessary to increase productivity and humane treatment of animals.							
	Purpose of the educational component	The aim of the educational component is to develop in students a systematic knowledge of modern approaches to ensuring the physical and emotional well-being of animals, as well as the skills to apply this knowledge in practice. As a result of studying the course, students will acquire skills in assessing the conditions of keeping and behavior of animals, recognizing signs of stress and discomfort, developing measures to improve welfare in livestock farms. In addition, they will be able to critically analyze production systems from the perspective of humane treatment of animals and compliance with international standards.							
	Prerequisites for the study of EC, connection with other educational components of EP	The educational component is based on the educational components The discipline "Animal Welfare" can be based on the following educational components: Animal Anatomy and Physiology Ethology Zoo Hygiene							

		<p>Animal Feed Production and Feeding</p> <p>Veterinary Medicine and Disease Prevention</p> <p>Ecology and Environmental Protection</p> <p>Ethics and Bioethics</p>
	Academic Integrity Policy	<p>The academic integrity policy at SNAU is regulated by the Code of Academic Integrity.</p> <p>http://docs.snau.edu.ua/documents/education/quality/kodeks_akadem_dobrochesnosti.pdf</p> <p>In accordance with it, the requirements for a student to observe academic integrity while studying the educational component are as follows:</p> <p>to be responsible for their duties, to perform the tasks stipulated by the curriculum on time and in good faith; to be present at all classes; to perform independent work; to honestly and responsibly prepare for current, modular and final control; to submit for assessment only work completed independently.</p> <p>It is unacceptable for a student to:</p> <p>show disrespectful and incorrect attitude towards the teacher; to be late for classes and miss them without good reason; to use hints, other people's work, telephones during the educational process; to provide and receive assistance from third parties when passing current, modular and final control; to receive or offer a bribe for obtaining any advantages in educational activities.</p> <p>For violation of the rules of academic integrity, students may be held liable in the following forms:</p> <ul style="list-style-type: none"> – re-taking the assessment (test, exam, test, etc.); – retaking the course; – warning; – reprimand; – expulsion from the university (Part 5, Article 48 of the Law of Ukraine “On Education”);
	Link to the course in Moodle	https://cdn.snau.edu.ua/moodle/course/view.php?id=6217

2. LEARNING OUTCOMES BY EDUCATIONAL COMPONENT AND THEIR RELATIONSHIP WITH PROGRAM LEARNING OUTCOMES

Learning outcomes for EC:	How is MLO evaluated?
MLO 1. The student knows the history of the development of the concept of animal welfare, the ethical principles of humane treatment, national and international standards; is able to apply legal and ethical norms in professional activities; has the competence to justify the need to adhere to the principles of welfare in animal husbandry.	Oral survey
MLO 2. The student knows physiological and behavioral indicators of welfare, methods of its assessment on farms, during transportation and slaughter; is able to identify signs of stress and discomfort, use modern assessment methods; has the competence to control and ensure the appropriate level of welfare at different stages of animal life.	Solving situational problems, written testing
MLO 3. The student knows the impact of housing systems on animal health, the principles of One Health and sustainable development in animal husbandry; is able to analyze production systems and integrate environmental, economic and social aspects into ensuring welfare; has the competence to make informed decisions on improving housing technologies and introducing innovations into animal husbandry practices.	Abstract

3. CONTENT OF THE EDUCATIONAL COMPONENT (CURRICULUM PROGRAM)

Topic. List of issues to be considered within the topic	Distribution within the overall time budget <i>full-time</i>			Distribution within the overall time budget <i>extramural</i>			Recommended literature
	Classroom work		Ind. W.	Classroom work		Ind. W. Pr.	
	L.	Pr.		L.	L.		
Topic 1. The history of the concept of animal welfare: from the "five freedoms" to modern approaches. 1. 1. Background to the emergence of the concept of animal welfare 2. 2. The Brumwell Report and the formation of the concept of the “five freedoms” 3. 3. Development of the concept in the 1970s–1990s 4. 4. Modern approaches to assessing and ensuring welfare 5. 5. Significance for modern animal husbandry.	2	2	10	2	2	2	1,2,3,4,5
Topic 2. Legislative support: national regulations and international standards (OIE, EFSA, EC). 1. 1. General approaches to legal regulation of animal welfare 2. 2. National norms and their development in Ukraine 3. 3. The role of international standards: OIE, EFSA and EU 4. 4. Harmonization of Ukrainian legislation with European legislation 5. 5. The importance of legal support for the development of the industry.	2	2	10	2	2	12	1,2,3,4,5,6
Topic 3. Ethical principles of animal treatment and philosophy of humane treatment. 1.1. Historical origins of ethical treatment of animals 2.2. Basic ethical concepts in the treatment of animals 3.3. Humanity as a principle of treatment of animals 4.4. The “Five Freedoms” of animals as an ethical standard 5.5. Ethical dilemmas and modern challenges 6. The educational and upbringing role of the humane approach.	2	2	10	2	2	12	1,2,3,4,5,7
Topic 4. Key physiological and behavioral indicators of well-being.	2	2	10			12	1,2,3,4,5,8

Topic. List of issues to be considered within the topic	Distribution within the overall time budget <i>full-time</i>			Distribution within the overall time budget <i>extramural</i>			Recommended literature
	Classroom work		Ind. W.	Classroom work		Ind. W. Pr.	
	L.	Pr.		L.	L.		
1. Physiological indicators of stress 2. Indicators of pain and discomfort 3. Behavioral indicators of stress 4. Indicators related to feeding and water consumption 5. Social behavior and its impact on well-being 6. Comprehensive assessment of well-being using physiological and behavioral indicators.							
Topic 5. Methods of assessing well-being in livestock farms. 1. Conceptual foundations of well-being assessment 2. Physiological assessment methods 3. Behavioral assessment methods 4. Clinical assessment methods 5. Ecological assessment methods 6. Integrated assessment systems 7. Economic aspects of well-being assessment.	2	2	10			12	1,2,3,4,5,9
Topic 6. Animal welfare during conveyance: risks and checkpoints. 1. Main risks during conveyance 2. Loading stage: critical checkpoint 3. Conveyance conditions: space, ventilation and microclimate 4. Travel duration and the need for stops 5. Unloading and adaptation after conveyance 6. Regulatory requirements and international standards.	2	2	10			12	1,2,3,4,5,11-16
Topic 7. Humane slaughter: principles, legislation, practical methods. 1. Principles of humane slaughter 2. Legislation and international standards 3. Practical methods of humane slaughter	2	2	10			12	1,2,3,411-16

Topic. List of issues to be considered within the topic	Distribution within the overall time budget <i>full-time</i>			Distribution within the overall time budget <i>extramural</i>			Recommended literature
	Classroom work		Ind. W.	Classroom work		Ind. W. Pr.	
	L.	Pr.		L.	L.		
4. Challenges and problems of implementing humane slaughter 5. Prospects for the development of humane slaughter in Ukraine.							
Topic 8: The impact of keeping systems on well-being: from traditional to innovative technologies 1. Traditional keeping systems 2. Transition to improved systems 3. Innovative technologies in keeping 4. The impact of keeping systems on physiology and behavior 5. Regulatory requirements and international standards 6. Development prospects in Ukraine	2	2	10			12	1,2,3,4,5
Topic 9: Integrating One Health principles into animals' well-being. 1. The One Health concept and its significance 2. The relationship between animals' well-being and human health 3. The role of the environment in the One Health system 4. International organizations and regulatory framework 5. Practical application in Ukraine	2	2	10			12	1,2,3,4,5
Topic 10: Sustainable development in animal husbandry and animals' well-being: environmental, economic and social dimensions 1. The concept of sustainable development in animal husbandry 2. The environmental dimension of sustainable development in animal husbandry 3. Economic dimension of sustainable development in animal husbandry 4. Social dimension of sustainable development in animal husbandry 5. Practical implementation of sustainable development in Ukraine	2	2	10			12	1,2,3,4,5

Topic. List of issues to be considered within the topic	Distribution within the overall time budget <i>full-time</i>		Distribution within the overall time budget <i>extramural</i>		Recommended literature		
	Classroom work		Ind. W.	Classroom work			
	L.	Pr.		L.		L.	
Topic 11: Prospects for the development of science and practice in the field of animals' well-being in Ukraine and the world. 1. Current state of science on animals' well-being 2. Scientific trends and international research 3. Current state in Ukraine 4. Innovative technologies and practices	2	2	6			18	1,2,3,4,5
Total	22	22	106	6	6	138	

4. TEACHING AND LEARNING METHODS

MLOs	Teaching methods (the work that will be carried out by the instructor during lessons, consultations)	Hours	Learning methods (types of learning activities that a student should perform independently)	Hours
MLO1	Lecture (oral presentation, explanation, demonstration, illustration) Practical lesson (explanation, demonstration)	12	Working with lecture notes, working with a book, working with regulatory legal acts, generalization, systematization, deepening of the material, performing calculations	30
MLO 2	Lecture (oral presentation, explanation, demonstration, illustration) Practical lesson (explanation, demonstration)	16	Working with lecture notes, working with a book, working with regulatory legal acts, generalization, systematization, deepening of the material, performing calculations	40
MLO 3	Lecture (oral presentation, explanation, demonstration, illustration) Practical lesson (explanation, demonstration)	16	Working with lecture notes, working with a book, working with regulatory legal acts, generalization, systematization, deepening of the material, performing calculations	36

5. ASSESSMENT

5.1. Diagnostic assessment

5.2. Summative assessment

5.2.1. Intended learning outcomes methods:

No	Summative assessment methods	Grades	Deadline
1.	Oral questioning	25/25%	3 semester, 5 week
2.	Solving situational problems	30/30%	3 semester, 7 week
3.	Abstract	15/15%	3 semester, 9 week
4.	Testing	30/30%	3 semester, 10 week

5.2.2. Grading criteria

Summative assessment method	Unsatisfactory	Satisfactory	Good	Excellent
Oral questioning	<13	14	15-19	20-25
	<i>The answer is superficial, inconsistent; there is no understanding of basic concepts.</i>	<i>The answer is fragmentary, with significant inaccuracies; lack of examples and arguments; knowledge is mostly reproducible</i>	<i>The answer is logical, but with some inaccuracies; the student is familiar with the material, gives examples, but the analysis is superficial; the argumentation is partially insufficient</i>	<i>The answer is complete, logical, structured; the student is fluent in the material, demonstrates deep understanding and the ability to make generalizations and conclusions; applies knowledge with arguments using practical examples.</i>
Solving situational problems	<20	22-24	24-28	28-30
	<i>Task requirement has not been met</i>	<i>Solve basic numerical problems using appropriate methods</i>	<i>Solve a range of numerical problems using appropriate methods</i>	<i>Solve complex numerical problems using appropriate methods.</i>
Abstract	<10	11-12	12-14	14-15
	<i>Task requirement has not been met</i>	<i>Plan, conduct and present independent research with a significant level of support</i>	<i>Plan, conduct, and present independent research with minimal support</i>	<i>Plan, conduct, and present independent research with limited support</i>

Testing	<20	22-24	24-28	28-30
	<i>Less than 6 correct answers to the test questions</i>	<i>6-9 correct answers to the test questions</i>	<i>10-12 correct answers to the test questions</i>	<i>13-15 correct answers to the test questions</i>

5.3. Formative assessment:

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

No	Formative Assessment elements	Date
1.	<i>Oral questioning after studying topics 1-3</i>	At the next practical lesson after presenting the material on the topic
2.	<i>Oral feedback from the instructor and students after the presentation of the abstract</i>	Just after the presentation
3.	<i>Oral feedback from the instructor and students during practical lessons</i>	At the next practical lesson after the student submits the completed task
4.	<i>Oral feedback from the instructor after the presentation</i>	At the next practical lesson after the student submits the completed task
5.	<i>Oral feedback from the instructor after completing the calculation task</i>	At the next practical lesson after the student submits the completed task

6. LEARNING RESOURCES

6.1. Key resources

6.1. 1 Guidelines

1. Kozii V. I. Dobrobut tvaryn (istorychni, naukovi ta normatyvni aspekty): navch. posib. Animal well-being (historical, scientific and regulatory aspects): study guide. Bila Tserkva, 2012. 320 C.
2. Zakon Ukrainy «Pro zakhyst tvaryn vid zhorstokoho povodzhennia» № 3447-IV vid 21.02.2006 r. Law of Ukraine "On the Protection of Animals from Cruelty" // Vidomosti Verkhovnoi Rady Ukrainy. 2006. № 27. St. 230.
3. Zakon Ukrainy «Pro tvarynnyi svit» № 2894-III vid 13.12.2001 r. Law of Ukraine "On Wildlife" // Vidomosti Verkhovnoi Rady Ukrainy. 2002. № 14. St. 97.
4. Zakon Ukrainy «Pro veterynarnu medytsynu» № 2498-IX vid 04.06.2022 r. Law of Ukraine "On Veterinary Medicine" // Vidomosti Verkhovnoi Rady Ukrainy. 2022. № 36. St. 292.
5. Postanova Kabinetu Ministriv Ukrainy «Pro zatverdzhennia Pravyl transportuvannia tvaryn» № 1402 vid 16.11.2011 r. Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Rules for the Transportation of Animals" // Ofitsiinyi visnyk Ukrainy. 2011. № 89. St. 3249.

Methodical support

Other resources

1. Postanova Kabinetu Ministriv Ukrainy «Pro vnesennia zmin do Pravyl transportuvannia tvaryn» № 1041 vid 29.09.2023 r. Resolution of the Cabinet of Ministers of Ukraine "On Amendments to the Rules for the Transportation of Animals" // Uriadovyi kurier. – 2023. – № 187.

2. Nakaz Ministerstva aharnoi polityky ta prodovolstva Ukrainy «Pro zatverdzhennia Poriadku vykorystannia tvaryn u silskomu hospodarstvi» № 652 vid 25.10.2012 r. Order of the Ministry of Agrarian Policy and Food of Ukraine “On Approval of the Procedure for the Use of Animals in Agriculture // Ofitsiinyi visnyk Ukrainy. 2012. № 91. St. 3677.
3. Nakaz Ministerstva okhorony navkolyshnoho pryrodnoho seredovyscha Ukrainy «Pro zatverdzhennia Poriadku utrymannia ta rozvedennia dykykh tvaryn, yaki perebuvaiut u stani nevoli abo napivvilnykh umovakh» № 429 vid 30.09.2010 r. Order of the Ministry of Environmental Protection of Ukraine “On Approval of the Procedure for Keeping and Breeding Wild Animals in Captivity or Semi-Free Conditions” // Ofitsiinyi visnyk Ukrainy. 2010. № 93. St. 3298.
4. Nakaz Derzhavnoho komitetu veterynarnoi medytsyny Ukrainy «Pro veterynarno-sanitarni vymohy do utrymannia tvaryn u prytulkakh» № 438 vid 15.10.2010 r. Order of the State Committee of Veterinary Medicine of Ukraine “On veterinary and sanitary requirements for keeping animals in shelters” // Ofitsiinyi visnyk Ukrainy. 2010. № 85. St. 3014.
5. Nakaz Derzhavnoho komitetu veterynarnoi medytsyny Ukrainy «Pro zatverdzhennia Polozhennia pro prytulok dlia tvaryn» № 439 vid 15.10.2010 r. Order of the State Committee of Veterinary Medicine of Ukraine “On Approval of the Regulations on Animal Shelters” // Ofitsiinyi visnyk Ukrainy. – 2010. № 85. St. 3015.
6. Nakaz Ministerstva aharnoi polityky Ukrainy «Veterynarno-sanitarni pravyla dlia boien, zabiino-sanitarnykh punktiv hospodarstv ta podvirnoho zaboju tvaryn» № 4 vid 14.01.2004 r. – Order of the Ministry of Agrarian Policy of Ukraine “Veterinary and Sanitary Rules for Slaughterhouses, Slaughter and Sanitary Points of Farms and Yard Slaughter of Animals” K.: Minahropolityky Ukrainy, 2004. 48 s.

International acts and standards

1. World Organisation for Animal Health (WOAH/OIE). Terrestrial Animal Health Code. – Paris: OIE, 2023. – Vol. I–II.
2. European Food Safety Authority (EFSA). Scientific Opinion on the Welfare of Farm Animals. – Parma: EFSA Journal, 2022. – 145 p.
3. Council of Europe. European Convention for the Protection of Animals kept for Farming Purposes (ETS No. 087). – Strasbourg: Council of Europe, 1976.
4. Council of the European Union. Council Directive 98/58/EC concerning the protection of animals kept for farming purposes. – Official Journal of the European Communities. – 1998. – L221. – P. 23–27.
5. Council of the European Union. Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations. – Official Journal of the European Union. – 2005. – L3. – P. 1–44.
6. Council of the European Union. Council Regulation (EC) No 1099/2009 on the protection of animals at the time of killing. – Official Journal of the European Union. – 2009. – L303. – P. 1–30.

Additional resources

1. Official Internet representation of the President of Ukraine <http://www.president.gov.ua/>
2. Verkhovna Rada of Ukraine <http://www.rada.kiev.ua>
3. Cabinet of Ministers of Ukraine <http://www.kmu.gov.ua/>
4. Ministry of Education and Science, Youth and Sports of Ukraine <http://www.mon.gov.ua>, www.osvita.com.
- Ministry of Ecology and Natural Resources of Ukraine <http://www.menr.gov.ua/>.
5. State Emergency Service of Ukraine <https://www.dsns.gov.ua>
6. National Security and Defense Council of Ukraine <http://www.rainbow.gov.ua>
7. Permanent Mission of Ukraine to the UN <http://www.uamission.org>

8. Site dedicated to earthquakes and seismic zoning of the territory <http://www.scgis.ru/russian>
9. Site dedicated to natural emergencies <http://chronicl.chat.ru/>.
10. Official site of the American Volcanological Society <http://vulcan.wr.usgs.gov/> (in English)
11. Ukrainian Institute for Environmental and Resource Research under the National Security and Defense Council of Ukraine <http://www.erriu.ukrtel.net/index.htm>.
12. <https://www.fema.gov/>

Foreign textbooks

1. Fraser, D. Understanding Animal Welfare: The Science in its Cultural Context. – 2nd ed. – Oxford: Wiley-Blackwell, 2023. – 448 p.
2. Appleby, M. C., Mench, J. A., Olsson, I. A. S., Hughes, B. O. Animal Welfare. – 3rd ed. – Wallingford: CABI Publishing, 2018. – 392 p.
3. Broom, D. M., Fraser, A. F. Domestic Animal Behaviour and Welfare. – 5th ed. – Wallingford: CABI Publishing, 2015. – 472 p.
4. Yeates, J. Animal Welfare in Veterinary Practice. – Oxford: Wiley-Blackwell, 2013. – 224 p.
5. Grandin, T. (ed.) Improving Animal Welfare: A Practical Approach. – 2nd ed. – Wallingford: CABI Publishing, 2015. – 406 p.
6. Knight, A., Phillips, C., Sparks, P. (eds.) Routledge Handbook of Animal Welfare. – London: Routledge, 2023. – 534 p.
7. Webster, J. Animal Welfare: Freedoms, Dominions and “A Life Worth Living”. – Cham: Springer, 2016. – 147 p.
8. Blokhuis, H., Veissier, I., Keeling, L., Miele, M. (eds.) Improving Farm Animal Welfare: Science and Society Working Together. – Wageningen: Wageningen Academic Publishers, 2013. – 232 p.
9. Mellor, D. J., Beausoleil, N. J., Stafford, K. J. The Sciences of Animal Welfare. – Oxford: UFAW / Wiley-Blackwell, 2020. – 320 p.
10. Knierim, U., Winckler, C., Waiblinger, S. Animal Welfare in Europe: Theoretical, Practical and Legislative Aspects. – London: Routledge, 2022. – 280 p.

Software

Review of the educational program (syllabus)

Parameter by which the educational program (syllabus) of the educational component is evaluated	Yes	No	Comment
The learning outcomes for the educational component (MLO) correspond to the NQF			
The learning outcomes for the educational component (MLO) correspond to the stipulated PLOs (for mandatory EC)			
Learning outcomes for the educational component make it possible to measure and assess the level of their achievement			

Member of the project team of the EP _____
 (name) (Full name) (signature)

Parameter by which the educational program (syllabus) of the educational component is evaluated	Yes	No	Comment
General information about the educational component is sufficient			
The learning outcomes for the educational component correspond to the NQF			
The learning outcomes for the educational component correspond to the PLO (for obligatory EC)			
Learning outcomes for the educational component make it possible to measure and assess the level of their achievement			
Learning outcomes relate to student competencies, not the content of the discipline (contain knowledge, skills, abilities, not the topics of the discipline curriculum)			
Learning activity (teaching and learning methods) enables students to achieve expected learning outcomes			
The educational component involves learning through research			
The assessment strategy within the educational component is in line with the University/Faculty policy			
The provided assessment methods allow assessing the degree of achievement of learning outcomes by educational component.			
The student workload is adequate to the volume of the educational component.			
Recommended learning resources are sufficient to achieve learning outcomes			
The Literature is relevant			

Reviewers (department lecturers) _____
 (name) (position, full name) (signature)