

	Type of work (hours)							Persons responsible
Topic titles	Work in person				1			
	Lab work Lab work Practical work Other (e.g.			e.g. incy)	tudy	Forms of teaching/learning	Assessment	
		Self-study						
Topic 1: Concepts of sustainable development, sustainable agricultural production and sustainable livestock management Topic 1								
Concepts of sustainable development and sustainable agricultural production;	2					Visualisation lecture		NUBiP: PhD Hryshchenko Nataliia
1.2 Sustainable management in agricultural and livestock production	2					Oral interaction with students		NUBIP: PhD Zlamaniuk Liudmyla
1.3 Sustainable development as a paradigm of agricultural production			2				Interim colloquium, testing	NUBiP: PhD Hryshchenko Nataliia
2.The concept of sustainable livestock production			2					NUBiP: PhD Zlamaniuk Liudmyla
1.Prerequisites for the formation of a sustainable development paradigm; 2. New problems and trends in the development of the concept of sustainable development; 3.The role of stakeholders in promoting sustainable agricultural development in the world 4.Social perception of sustainable livestock development in					16		Group activity and teamwork. Discussion club.	
terms of consumers and producers; 5.Animal welfare in the context of sustainable livestock development; 6.Methods and means of livestock management; 7. Sustainable development in terms of preserving the planet;						Self- study		
8. The disappearance of indigenous animal breeds	<u> </u>			•	1 1'	4		
Theme 2. Impact of livestock production, health and welfare on biodiversity, environment, climate change and antimicrobial resistance								

SULAWE Module outline - 1 -

Sustainable Livestock Production and Animal Welfare
Project 101083023-SUI AWE-FRASMUS-FDU-2022-CBHF

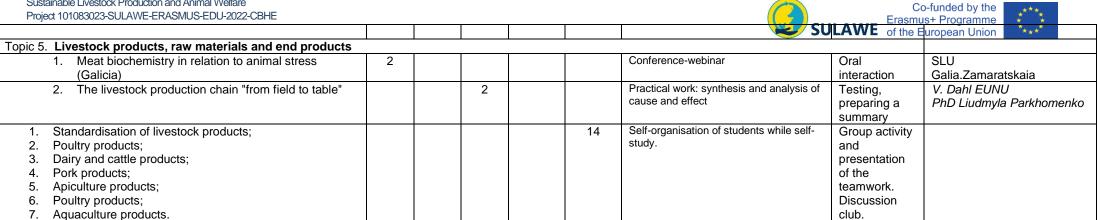
Project 101083023-SULAWE-ERASMUS-EDU-2022-CBHE					Erasmı	us+ Programme
1.Impact of livestock development on environmental biodiversity and climate change	2			Lecture with the use of multimedia equipment	with students (questions / answers)	u P\$AU: Union PhD Larysa Kuzmenko
2.Impact of livestock development on human health	2			Visualisation lecture	Oral interaction with students	PSAU: PhD Usenko Svitlana
1.Calculating the impact of livestock production on air quality and water resources		2		Practical work (calculation)	Preparation of a laboratory report	NUBIP: PhD Hryshchenko Nataliia
2.Impact of livestock products quality on consumers		2		Practical work	Testing	PSAU: Prof. Dr Shostia Anatolia
In Impact of livestock farming on the environment and biodiversity; Air quality in the livestock farming area; Water quality in the livestock area; Harmful emissions from various livestock industries; Animal welfare as an aspect of animal health in industrial production; Climate change in the period of industrial agricultural production; Occupational / professional diseases of farm workers; Biosafety in the production of livestock products.			16	Self-study	Group activity and presentation of teamwork. Discussion club.	
Topic 3: Innovative and sustainable technologies in livestock p	roduction		V.			
Innovative technologies in animal husbandry;	2			Lecture (multimedia equipment)	Interaction with students (a question answer)	PSAU: PhD Larysa Kuzmenko
Industrial technologies in animal husbandry	2			Lecture (multimedia equipment)	Oral interview	V. Dahl EUNU: PhD Tetiana Stryzhak
Resource-saving technologies in animal husbandry as a concept of sustainable development	2			Lecture (multimedia equipment)		NUBiP: Andriy Getya
Innovations in livestock production;		2		Practical work - calculation	Laboratory report	PSAU: PhD Usenko Svitlana
 Industrial production of livestock products as a component of civilisation development; 		2		Practical work - calculation	Laboratory report	V. Dahl EUNU: PhD Tetiana Stryzhak
Sustainable livestock production in industrial technology		2		Practical work - calculation	Laboratory report	NUBiP: PhD Gryshchenko Sergii

Co-funded by the

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Sustainable Livestock Production and Animal Welfare Project 101083023-SULAWE-ERASMUS-EDU-2022-CBHE						Fraemu	e-funded by the s+ Programme
 The innovation concept in agriculture; Causes and consequences of production intensification; Intensive use of animals from an economic and bioethical perspective; Sustainable production from the perspective of economics and bioethics in animal husbandry; Resource saving as a component of sustainable production; Sustainable technologies in industrial production; Waste management in livestock production; Sustainability of genetic resources; The logic of interaction between sustainable livestock production and industrial technology. 				18		Group activity of students and teamwork. Workshop (presentation - discussion).	uropean Union ****
Topic 4. Sustainability assessment and sustainability criteria for	r livesto	ck produ	ıcts	 	,	*	
1.Methodology for assessing sustainable livestock production	2				Lecture (the use of multimedia equipment)		LNUVMB: PhD Petro Bodnar
Sustainability criteria for livestock products	2						LNUVMB: PhD Petro Bodnar
1.Methodology for assessing sustainable livestock production			2				LNUVMB: Prof. PhD Yuriy Kropyvka PhD Petro Bodnar NUBiP: Andriy Getya
2.Assessment of sustainability criteria for livestock products			2				LNUVMB: Prof. PhD Yuriy Kropyvka PhD Petro Bodnar
 Global food security and the role of sustainable agricultural production in it; The phenomenon of overproduction and shortage of livestock products; Disposal of livestock products; Criteria for sustainable animal husbandry and good agricultural practices; Distance of livestock production facilities from people's homes; Animal productivity and animal stress as elements of technology; Fundamentals of livestock product quality; Sustainability of the supply of livestock products to consumers. 				16	Self-organisation of students during independent work.		

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club. Student selfassessment.

SULAWE Module diagram

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