

SYLLABUS

Name of the course (as specified in the approved curriculum) Module 5 – Sustainable Animal Husbandry		Number of ECTS credits 6	
Name of the course in Polish Moduł 5 – Zrównoważona hodowla zwierząt			
Unit providing the course Department of Zoology, Department of Genetics and Animal Breeding, Department of Animal Breeding and Product Quality Assessment			
Course coordinator Dr hab. Agnieszka Ludwiczak			
Field of study Animal Production Management	Level II – master studies	Profile Academic-general	Semester 2
TYPE OF CLASSES AND COURSE LOAD (Classes with teacher and student's own work)			
Mode of studies: full-time		Form of study: part-time	
- lectures	30	- lectures	-
- practical classes	40	- practical classes	-
- field classes	10	- field classes	-
- labs	0	- labs	-
- consultations	5	- consultations	-
- own student's work	60	- own student's work	-
- others	5	- others	-
Total number of hours		150	Total number of hours
OBJECTIVE OF THE COURSE			
<p>The student will gain comprehensive theoretical and practical knowledge of sustainable animal farming and certified ecological husbandry, with particular reference to the interactions among husbandry, welfare, and behaviour. The courses will be performed within five subjects:</p> <p>Conservation of animal genetic resources – subject 1, Genetic management of small populations – subject 2, Welfare of farmed animals – subject 3, Behaviour of animals – subject 4, Sustainable animal farming and ecological farms – subject 5. They will have the following forms: lectures with multimedia presentations, interactive classes with multimedia presentations, and a field study on farms – examples of factory farms vs. extensive systems.</p>			
TEACHING METHODS			
<p>Lectures: multimedia presentation, discussion, Classes outside the PULS premises: slaughterhouse; meat processing plant; milk processing plant. Labs: exercises aimed to learn the methodology of meat and milk quality evaluation, and a debate on the results of laboratory analysis of animal products. Classes can be held using tools and platforms that facilitate organizing remote meetings, delivering distance learning, and verifying learning outcomes. The practical courses can take place outside the PULS premises.</p>			
Course learning outcomes			The reference to the study field learning outcomes
Knowledge	<p>O1: the advanced methodology used in animal breeding and production, O2: issues related to the behaviour and welfare of domestic animals, including animal-environment interaction and its implications on the ecosystems, biodiversity, and environmental pollution, as well as EU legal regulations on ecological farming, allowing the independent management of a certified ecological farm or any other ecological agricultural activity O3: the impact of various management practices on farm animals' health, productivity, and the profitability of farming</p>		<p>AP2A_W02 AP2A_W08 AP2A_W09 AP2A_W11 AP2A_W13</p>

Skills	<p>O4: search, critically analyze, and interpret information from literature in the field of sustainable animal production, animal welfare, and behavior</p> <p>O5: plan and implement an economic evaluation of the correctness of the performed eco-certified animal husbandry task or any other ecological project associated with practical organic farming</p> <p>O6: organize the work of the animal keepers, arrange feed base for different species of animals, properly feed animals, lead production of feed mixes and premixes of high quality, and their distribution according to the requirements of the Feed Law</p>	<p>APA2_U01 APA2_U02 APA2_U05 APA2_U07 APA2_U14 APA2_U15</p>
Social competences	<p>O7: engage in lifelong learning, continuously update knowledge and skills, and support or inspire the learning of others; demonstrate creativity and initiative; act in an entrepreneurial and innovative manner.</p> <p>O8: assume ethical and social responsibility for the outcomes of activities in animal nutrition, with particular focus on the welfare of domestic animals.</p> <p>O9: assess the risk of the business impact, personal threats, and the safety of colleagues and the environment,</p> <p>O10: take ethical and social responsibility to produce safe, high-quality feed, and actively pursue creative and entrepreneurial approaches in this area.</p>	<p>APA2_K01 APA2_K03 APA2_K04 APA2_K05</p>
<p>Methods for verifying learning outcomes</p> <p>Lectures – written test. Practical classes – individual tasks (power point presentations; projects).</p>		<p>Symbols of course learning outcomes O1 – O3 O4 – O10</p>
<p>TEACHING CONTENTS</p> <p>Lectures. The differences between factory farming and extensive farming systems. The welfare issues associated with factory farming and their reduction through environmental enrichment. The definition and goals of sustainable agriculture. The problems of environmental and nature preservation are linked to certified ecological animal husbandry. Theoretical issues of animal welfare, behaviour, and conservation breeding. Extensive farming and the development of rural areas and agro-tourism. Animals in the programs of rural development. The importance of local and endangered animal populations at risk of extinction in alternative and ecological farming systems. Basic categories of behaviour. Domestication and behaviour. Animal signals and communication.</p> <p>Classes. The characteristics of factory farming and ecological farming. Evaluation of animal welfare and behaviour based on EU welfare programmes. Development of animal genetic resources preservation programs, including the management of small populations. UE regulations regarding animal production management under intensive and extensive farming conditions. Project. Prepare a phased project of a farm – extensive (ecological) vs. intensive. Point out the pros and cons of both farming systems and indicate their respective economic outputs.</p>		
<p>Forms and criteria for completing the course</p> <p>Lectures</p> <ol style="list-style-type: none"> 1. A multiple-choice test 2. Attendance – required more than 50%. <p>Classes</p> <ol style="list-style-type: none"> 1. Attendance – according to PULS Studies Regulations and detailed module regulations. 2. Individual tasks assigned by the tutors. 		<p>Percentage of a final grade</p> <p>50% exam 50% practical classes</p>
<p>Literature list</p> <p>Core literature Sustainable pig production systems: https://www.era-susan.eu/sites/default/files/SusPigSys_D5-1_Protocol.pdf Welfare measures on cattle: https://hal.inrae.fr/hal-03156407v1/document</p> <p>Additional sources Rabbit Production. 9th Edition. J.I. McNitt, S.D. Lukefahr, P.R. Cheeke, H.M. Patton. CABI Wallingford and Boston 2013 (paper version available on request) Assessment of welfare in rabbits: http://sitesv2.anses.fr/en/system/files/VF%20List%20of%20welfare%20indicators%20rabbits.pdf Bolhuis J.J., Giraldeau L.-A.(red.) (2005). The behavior of animals. Mechanisms, function, and evolution. Blackwell Publishing.(paper version available on request)</p>		