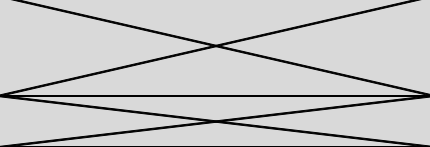
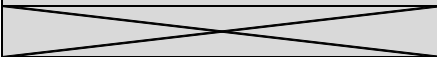
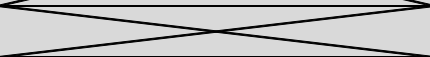


Course title:	Contemporary and future improvements in animal nutrition and feed supplies
Course title in Polish:	Obecne i nadchodzące udoskonalenia w dziedzinie żywienia zwierząt oraz dostępności pasz
Course for discipline:	Animal Science and Fisheries

Semester:	4	Status of course:	faculty	Language:	english
Academic year:	2026/27	Catalog number:	145/2025/26		

Coordinator of course:	dr hab. Marcin Taciak, prof. SGGW	
Lecturer od course:	Academic staff of the Institute of Animal Sciences and external stakeholders	
Executing unit:	Department of Animal Breeding and Nutrition	
Ordering unit:	Doctoral School SGGW	
Assumptions, goals and description of the course:	<p>The course is designed to familiarize doctoral students with innovations in animal nutrition, including new sustainable feed resources and modern technologies that enhance feeding efficiency and environmental protection.</p> <p>In light of climate change, the course will address the adaptation of feeding systems to changing environmental conditions.</p> <p>The objectives of the course are to:</p> <ul style="list-style-type: none"> develop the ability to identify and apply new feed resources; provide knowledge of the latest technologies in feed production, including automation systems, precision feeding, and advanced techniques for nutrient analysis; enhance understanding of the impact of climate change on animals and develop nutritional strategies aimed at mitigating these effects. 	
Didactic form, number of hours:	15 hours	
Teaching methods:	Lecture, discussion, analysis and interpretation of source materials, consultations	
Limit of people in the group:		
Learning outcomes		
KNOWLEDGE - the graduate knows and understands:	SKILLS - the graduate is able to:	COMPETENCES - the graduate is ready to:
To the extent enabling to revise the existing paradigms in the field/discipline - the world achievements, gathering theoretical background as well as general and selected detailed issues	Carry out critical assessment of the scientific research findings and expert activities and their contribution to the knowledge development in the field/discipline	Critically evaluate the achievements in the field/discipline represented
Major general development trends in the field/discipline		Recognise knowledge in solving cognitive and practical problems characteristic for the area of research (field/discipline) and in an interdisciplinary aspect
		Support the ethos of scientific circles and conduct independent research
The method of verification of learning outcomes:	Written examination, open-ended questions.	
Form of documentation of achieved learning outcomes:	Examination	
Elements and weights of the final grade:	A point-based grading system applies. The condition for passing the course is obtaining at least 51% of the total possible points.	
Place of the course:	Lecture room, MSTeams	
Basic and supplementary literature		
The core and supplementary literature will consist of the most recent scientific publications published in leading journals within the discipline.		
Comments:		

Estimated number of hours of work of the doctoral student necessary to achieve the assumed learning outcomes:	10h
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Learning outcomes reference to the second degree characteristics of the National Qualification Framework (level 8) covering doctoral competences:		
Symbol:	Learning outcomes:	8 level NQF
SD1_KW01	To the extent enabling to revise the existing paradigms in the field/discipline - the world achievements, gathering theoretical background as well as general and selected detailed issues	P8S_WG
SD1_KW02	Major general development trends in the field/discipline	P8S_WG
SD1_KU05	Carry out critical assessment of the scientific research findings and expert activities and their contribution to the knowledge development in the field/discipline	P8S_UW
SD1_KK01	Critically evaluate the achievements in the field/discipline represented	P8S_KK
SD1_KK03	Recognise knowledge in solving cognitive and practical problems characteristic for the area of research (field/discipline) and in an interdisciplinary aspect	P8S_KK
SD1_KK08	Support the ethos of scientific circles and conduct independent research	P8S_KR