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:	6	**Status of course:**	faculty	**Language:**	english
Academic year:		**Catalog number:**			

Coordinator of course:	dr hab. Marcin Taciak, prof. SGGW
Lecturer od course:	dr hab. Marcin Taciak, prof. SGGW
Executing unit:	Institute of Animal Sciences, Department of Animal Nutrition
Ordering unit:	Doctoral School SGGW
Assumptions, goals and description of the course:	The premise of the course will be to acquaint doctoral students with innovations in animal nutrition, including new, sustainable sources of feed materials and modern technologies that promote improved feeding efficiency and environmental protection. Considering climate change, the lectures will address the issue of adapting feeding systems to changing environmental conditions. The objectives of the course will be: to develop the ability to identify and apply new feed sources; to convey knowledge about the latest technologies in feed production, including automation systems, precision feeding, and advanced techniques for analyzing nutritional components; to understand the impact of climate change on animals, and to develop feeding strategies that mitigate this impact.
Didactic form, number of hours:	Lectures, 10 hours
Teaching methods:	Multimedia presentations, discussion.
Limit of people in the group:	No restrictions

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 pradigms in the field/discipline - the world achievments, 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 achievments 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 exam, open-ended questions
Form of documentation of achieved learning outcomes:	Exam
Elements and weights of the final grade:	A point-based grading system is applied for the course. The condition for passing the lectures is to achieve at least 51% of the possible points
Place of the course:	Lecture hall

Basic and supplementary literature

The basic and supplementary literature will consist of the latest scientific publications, published in leading journals within the discipline

Comments:	None

Estimated number of hours of work of the doctoral student necessary to achieve the assumed learning outcomes:	10

Leraning 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 pradigms in the field/discipline - the world achievments, 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 achievments 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