załącznik nr 2 do uchwały Rady Szkoły Doktorskiej UPP nr 1/P/2023

SYLLABUS – PULS Doctoral School

Name of the course (as specified in the approved program): **Animal production, part 4**	
Name of the course in Polish: **Produkcja zwierzęca, część 4**	
Unit providing the course (Department): **Department of Zoology, Laboratory of Inland Fisheries and Aquaculture Department of Animal Nutrition Department of Animal Breeding and Product Quality Assessment**	
Course leader: **dr hab. prof. PULS Jan Mazurkiewicz**	
Discipline: **Animal science and fisheries**	Semester: **5**

TYPE OF CLASSES:
(course load)

- Lectures	**4**
- Practical classes	**8**
- Self-study	**10**
Total number of hours:	**22**

OBJECTIVE OF THE COURSE:

Aquaculture systems and economics, experimental designs for sustainable fish production. Poultry production systems and economics, experimental designs for sustainable poultry production. Perception of aquaculture and poultry production and their impact on the environment. Biosecurity in aquaculture and poultry production.

TEACHING METHODS:

Multimedia presentations. Analysis of case studies. Practical classes in experimental units.

EDUCATION OUTCOMES	Reference to education outcomes of the PULS Doctoral School
In the area of knowledge (PhD students know and understand): 1. world scientific literature concerning technologies in aquaculture and poultry production, breeding programs, and genomic selectionwith the resulting implications for animal production 2. the latest theories and trends in aquaculture and poultry production 3. principles of planning and financing of research and evaluation of projects in aquaculture and poultry production	P8U_W_1 P8U_W_2 P8U_W_3
In the area of skills (PhD students know how to): 4. utilize the acquired knowledge to formulate research problems 5. solve research problems with the acquired knowledge concerning state-of-the art methods and research tools	P8U_U_1 P8U_U_2
In the area of social competencies (PhD students are capable to): 6. independent planning of research and dissemination of the existing body of scientific literature 7. maintaining and promoting the importance and role of the intellectual community in social life	P8U_K_1 P8U_K_5

Methods of evaluation of outcomes achievement:
Written test: effects no 1 – 7.

* efekty uczenia się stanowią Załącznik nr 1 do Regulaminu Szkoły Doktorskiej Uniwersytetu Przyrodniczego w Poznaniu, który stanowi załącznik do uchwały nr 44/2021 Senatu UPP

TEACHING CONTENT:

- Global aquaculture production systems and their impact on the environment and economics.
- Modern trends in experimental and sustainable aquaculture.
- The development and application of experimental designs in aquaculture.
- Knowledge and perception of aquaculture in science and society.
- Poultry production and their impact on the environment.
- Modern trends in experimental on poultry.
- The development and application of experimental designs in poultry.
- Biosecurity in poultry production.

The course completion criteria and methods:	Percent of a final grade:
Written test (lectures)	50%
Activity during practical classes	50%
Criteria: • Attendance at least 80% • Passing test from 60% • Active participation in the class (participation in the discussion, asking questions)	
☒ **pass (Z)** ☐ **course credit with a grade** ☐ **examination**	

RECOMMENDED LITERATURE:

1. Webster, C. D., & Lim, C. (Eds.). (2002). *Nutrient requirements and feeding of finfish for aquaculture*. CABI publishing.
2. Williot, P., Nonnotte, G., & Chebanov, M. (Eds.). (2018). *The Siberian Sturgeon (Acipenser baerii, Brandt, 1869) Volume 2-Farming*. Springer International Publishing.
3. Williot, P., Nonnotte, G., & Chebanov, M. (Eds.). (2018). *The Siberian Sturgeon (Acipenser baerii, Brandt, 1869) Volume 1-Biology*. Springer International Publishing.
4. Reza Hoshmand A., (2006). Design of Experiments for Agriculture and the Natural Sciences.
5. Gillespie J. R. and Flanders F.B. (2009) Modern Livestock and Poultry Production
6. Bedford M.R., Choct M., Masey O Neill H., (2016). Nutrition experiments in pigs and poultry.