University of Gdańsk

Subject card

Subject name and code	Fish diseases and welfare - laboratory exercises, PG_00075868		
Field of study	Aquaculture – Business And Technology		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
Education level	undergraduate studies	Subject group	
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish Polish
Semester of study	3	ECTS credits	1.0
Learning profile	practical	Assessment form	
Conducting unit	Pracownia Parazytologii i Zoologii Ogólnej -> Katedra Zoologii Bezkręgowców i Parazytologii -> Faculty of Biology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Leszek Rolbiecki	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	15.0	0.0	0.0	15

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	15	5.0	9.0	29

Subject objectives

This course is designed to familiarize students with the causes and effects of fish diseases of various etiologies; to familiarize with diagnostic techniques, prevention and therapy in fish aquaculture; to familiarize with fish parasitic diseases and their prevention and control.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[AKWAL3-U04] can select and use available sources of information, and understand the literature on aquaculture in a broad sense	Student can select and use available sources of information and understand the literature on fish health and welfare.	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
[AKWAL3_W06] knows and discusses techniques, research methods and tools used in aquaculture	Student knows and discusses techniques, research methods and tools used in fish disease diagnosis.	[SW1] oral statement/ conversation/discussion
[AKWAL3_W03] knows and understands the conceptual categories and terminology related to the biological basis of aquatic organisms breeding, as well as concepts directly relevant to the practical applications of this knowledge	Student knows and understands conceptual categories and terminology related to diseases fish, as well as concepts with direct reference to practical applications this knowledge in fish farming.	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[AKWAL3-U06] can apply basic techniques and technological processes related to the use of elements of the environment for practical purposes	The student is able to apply basic laboratory and analytical techniques related to fish health testing for practical purposes.	[SU6] demonstration of practical skills
[AKWAL3-K04] is ready to identify and recognize dilemmas connected with the profession and understands the need to improve professional competence	Student is ready to identify and recognize dilemmas related to performing the profession of a fish farming in the future and understands the need to improve professional competences.	[SK1] oral statement/conversation/ discussion [SK8] observation of student's independent or team work

Subject contents	Examination of infected fish - environmental diseases, viral, bacterial and fungal diseases, diseases caused by parasites (protozoa, flukes, tapeworms, nematodes, acanthocephalans, crustaceans, molluscs, annelids). Sections, preparation and macroscopic and microscopic observation.	
Prerequisites and co-requisites	-	
Assessment methods and criteria		

Subject passing criteria	Passing threshold	Percentage of the final grade
practical skills demonstration	51.0%	50.0%
written test	51.0%	50.0%
Attendance	100.0%	0.0%

Recommended reading	Basic literature	1. Antychowicz J., 2008. Choroby ryb śródlądowych. PWRiL, Warszawa. 2. Bruno D.W. Noguera P.A., Poppe T.T. 2013. A colour atlas of salmonid diseases. Springer Dordrecht Heidelberg New York London. 3. Jara Z., 1999. Chodyniecki A. Ichtiopatologia. Wydawnictwo Akademii Rolniczej we Wrocławiu, Wrocław. 4. Klimpel S., Kuhn T., Münster J., Dörge D.D., Klapper R., Kochmann J., 2019. Parasites of marine fish and cephalopods. A practical guide. Springer Nature Switzerland, Switzerland. 5. Noga E.J., Fish disease - diagnosis and treatment. A John Wiley & Sons, Inc., Publication, USA. 6. Pritchard M.H., Kruze G.,O.W., 1982. The collection and preservation of animal parasites. Lincoln, London, University of Nebraska, Technical Bulletin No. 1. 7. Prost M., 1989. Choroby ryb. PWRiL, Warszawa.
	Supplementary literature	1. Rolbiecki L., 2002. Szybka metoda wykonywania semipermanentnych glicerożelatynowych preparatów z pasożytów [A rapid method for preparing semipermanent glycerol-jelly parasite mounts]. Wiadomości Parazytologiczne 48: 87-88. 2. Rolbiecki L., 2007. Zastosowanie kwasu octowego i alkoholu benzylowego w preparatyce parazytologicznej wady i zalety [The application of acetic acid and benzyl alcohol in parasitological preparations adventages and disadvantages]. Wiadomości Parazytologiczne 53: 347-349.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	-	
Work placement	Not applicable	

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