University of Gdańsk

Subject card

Subject name and code	Marine Fishes - lecture, PG_00204921		
Field of study	Oceanography		
Date of commencement of studies	October 2027	Academic year of realisation of subject	2027/2028
Education level	Master's studies	Subject group	Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	1.0
Learning profile	academic	Assessment form	credit
Conducting unit	Laboratory of Ichthyology -> Department of Marine Ecology -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Mariusz Sapota, prof. UG	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	10.0	0.0	0.0	0.0	0.0	10

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	10	2.0	13.0	25

Subject objectives

Getting to know and identifying representatives of the main groups of marine fish

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OCEANMU2-W01] knows and understands in-depth specialized terminology used in oceanography and related sciences (in Polish and a selected foreign language)	knows and understands specialist terminology (in Polish and English) used in the taxonomy and biology of marine fishes	[SW4] test/exam - oral or written
[OCEANMU2-W03] has an in-depth understanding of research methods used in oceanography and related sciences, and interprets their mechanisms and interrelationships across different spatial and temporal scales	knows and understands advanced research methods used in taxonomic identification of marine fishes	[SW4] test/exam - oral or written

Subject contents	Description of systematic features of fishes: shape and coloration, elements of external structure and their arrangement, structure of the skeleton Biometric and meristic features Characteristics of marine and bi-environmental Agnatha and Gnathostomata Characteristics of Holocephali Characteristics of Elasmobranchii Characteristics of Actinopterygia
Prerequisites and co-requisites	Basic knowledge of zoology

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
exam	51.0%	100.0%

Recommended reading

Basic literature

Brylińska M. Ryby słodkowodne Polski. Wydawnictwo Naukowe PWN Warszawa 2000

Gerstmeier R., Romig T. Przewodnik. Słodkowodne ryby Europy. Mulico Warszawa 2002

Bieniarz K., Epler P. Zoologia Tom V, Ryby. Leksykon popularnonaukowy. Wydawnictwo Albatros, Kraków 2004

Nelson J.S. Fishes of the Word. Wiley 2006

Kottelat M., Freyhof J. Handbook of European Freshwater Fishes. 2007

Jasiński A., 1973. Zootomia kręgowców. Państwowe Wydawnictwo Naukowe

Klimaj A., Rutkowicz S., 1970. Atlas ryb Północnego Atlantyku. Wydawnictwo Morskie. Gdańsk

Rutkowicz S., 1982. Encyklopedia ryb morskich. Wydawnictwo Morskie. Gdańsk

	Supplementary literature	Bone Q.M.A., Marshall N.B., 1982. Biology of fishes. Blackie. Glasgow and London Cailliet G.M., Love M.S., Ebeling A.W., 1986. Fishes. Wadsworth Publishing Company, Belmont, California Lagler K.F., Bardach J.E., Miller R.R., May Passino D.R., 1977. Ichthyology. John Willey & Sons. New York, Chichester, Brisbane, Toronto Gąsowska M., 1962. Krągłouste i ryby. Państwowe Wydawnictwo Naukowe. Warszawa Grodziński Z., 1981. Anatomia i embriologia ryb. Państwowe Wydawnictwo Rolnicze i Leśne. Warszawa Opuszyński K., 1979. Podstawy biologii ryb. Państwowe Wydawnictwa Rolnicze i Leśne. Warszawa Pliszka F., 1964. Biologia ryb. Państwowe Wydawnictwa Rolnicze i Leśne. Warszawa Suworow E., 1954. Podstawy ichtiologii. Państwowe Wydawnictwo Naukowe. Warszawa
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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