University of Gdańsk

Subject card

Subject name and code	Socio-economic value of marine ecosystems, PG_00117898						
Field of study	Oceanography						
Date of commencement of studies	October 2025		Academic year of realisation of subject	2026/2027			
Education level	Master's studies		Subject group	Obligatory subject group in the field of study Humanistic-social subject group			
Mode of study	full-time studies		Mode of delivery	at the university			
Year of study	2		Language of instruction	Polish			
Semester of study	3		ECTS credits	2.0			
Learning profile	academic		Assessment form	credit			
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Ilona Kamińska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	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	30		5.0		15.0	50
Subject objectives	Familiarizing students with the systems of marine ecosystem values on the socio-cultural and economic levels. Familiarizing students with methods of estimating economic and socio-cultural value. Preparing students for practical use of the methods of estimating the value of marine ecosystems when making decisions at the local and state administration level as part of integrated management of the marine environment as well as within their own activities in households, businesses or non-governmental organizations.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OCEANMU2-W04] knows and understands the latest research trends in the field of oceanography as well as the possibilities of practical application of scientific achievements	knows and understands in depth the latest trends in research on the relationships between marine ecosystems and society expressed in the stream of benefits (economic and social) generated by ecosystem services	[SW3] text preparation/written work
[OCEANMU2-U12] can independently expand and update oceanographic knowledge when planning and developing a professional career, as well as motivates others to deepen their knowledge	is able to independently expand and update oceanographic knowledge, in particular its social and economic aspects, planning and developing his/her own professional career and, through group work, motivates others to deepen their acquired knowledge	[SU1] oral statement/conversation/ discussion [SU3] text preparation/written work
[OCEANMU2-K04] is ready to critically evaluate his/her knowledge and received content in the field of natural sciences in in particular in the field of the studied specialty, a in problematic situations, supports oneself with knowledge experts	is ready to critically evaluate the knowledge held and the content received in the field of determining the socio-economic value of marine ecosystems, and in problematic situations, support themselves with the knowledge of experts in this field published in scientific literature and reports for public administration, non-governmental organizations and business	[SK1] oral statement/conversation/ discussion [SK3] text preparation/written work
[OCEANMU2-U07] is able to communicate using various communication channels and techniques with specialists and non-specialists in the field of oceanographic issues	is able to communicate using various communication channels and techniques with specialists and non-specialists in the field of defining and valuing the streams of benefits flowing from marine ecosystems for human well-being	[SU1] oral statement/conversation/ discussion
[OCEANMU2-U09] can take part in a discussion/debate using substantive arguments, has the ability to formulate opinions based on scientific knowledge and experience and creating synthetic summaries	is able to take part in a discussion using substantive arguments, has the ability to formulate opinions based on scientific knowledge and experience in the field of the economic value of the environment	[SU1] oral statement/conversation/ discussion
[OCEANMU2-W07] knows and understands legal regulations, principles of sustainable development of the marine environment, its protection and management of the marine environment and its resources	knows and understands the principles of sustainable development and the resulting principles of managing the marine environment and its resources, expressed through ecosystem services	[SW3] text preparation/written work
[OCEANMU2-W03] knows and understands research methods used in oceanography and related sciences	knows and understands in depth the research methods used to estimate the monetary and non-monetary value of marine ecosystems	[SW3] text preparation/written work

Subject contents

Marine ecosystem value systems monetary, non-monetary value. Total Economic Value (TEV) concept. Ecosystem services and methods for estimating their economic value. Socio-cultural value and methods for estimating it. Economic value direct valuation methods based on declared preferences. Economic value indirect valuation methods based on revealed preferences. Socio-cultural value application of the Q-sort method, basics of stakeholder analysis, social participation.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
determining the grade based on partial grades received during the semester	51.0%	100.0%

Recommended reading	Basic literature	Wrześniewska, I., Ciołek, D., Zarzycki, T., Modelowanie ekonomicznej wartości denitryfikacji jako jednej z usług ekosystemowych Zatoki Gdańskiej z wykorzystaniem WTP. Zarządzanie i Finanse = Journal of Management and Finance. - 2015, R. 13, nr 4, cz. 2, s. 317-336 Kamińska, I., Zarzycki, T., Zaucha, J., Ciołek, D., How to measure the economic value of ecosystem functions and processes and link such value to the MSP? SHS Web of Conferences. - 2018, Vol. 58, art. no. 01015, s. 1-10 Żylicz, T., 1989. Ekonomia Wobec Problemów Środowiska Przyrodniczego, PWN, Warszawa. Żylicz, T., 2004. Ekonomia Środowiska i Zasobów Naturalnych, PWE, Warszawa. Winpenny James T., 1995. Wartość Środowiska, Metody wyceny ekonomicznej, PWE, Warszawa. Anderson G., Śleszyński J., 1996. Ekonomiczna Wycena Środowiska Przyrodniczego, Wyd. Ekonomia i Środ., Białystok Śleszyński J., 2000. Ekonomiczne Problemy Ochrony Środowiska, Wyd. Aries, Warszawa Pearce D., Atkinson G., Mourato S, 2006. Cost-Benefit Analysis and the Environment, OECD.
	Supplementary literature	Zarzycki, T., Janas, U., Łądkowska. H., 2007. Values of, and threats to, marine and coastal habitats in the southern Baltic Redłowo area casestudy, MarBEF Newsletter, Nr 6, s. 17-18. Węsławski, J.M., Urbański, J., Kryla-Staszewska, L., Andrulewicz, E., Linkowski, T., Kuzebski, E., Meissner, W., Otremba, Z., Piwowarczyk, J., 2010. The different uses of sea space in Polish Marine Areas: is conflict inevitable? Oceanologia, 52 (3), pp. 513530. Węsławski, J.M., Andrulewicz, E., Kotwicki, L., Kuzebski, E., Lewandowski, A., Linkowski, T., Massel, S.R., Musielak, S., Olańczuk-Neyman, K., Pempkowiak, J., Piekarek-Jankowska, H., Radziejewska, T., Różynski, G., Sagan, I., Skóra, K.E., Szefer, K., Urbański, J., Witek, Z., Wołowicz, M., Zachowicz, J., Zarzycki, T., 2006. Basis for a valuation of the Polish Exclusive Economic Zone of the Baltic Sea: Rationale and quest for tools. Oceanologia 48 (1), 145167.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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