

## 表 GDAŃSK UNIVERSITY OF TECHNOLOGY

## Subject card

Subject name and code	Thesis Seminar , PG_00041398								
Field of study	Civil Engineering								
Date of commencement of studies	February 2023		Academic year of realisation of subject			2023/2024			
Education level	second-cycle studies		Subject group			Optio	Optional subject group		
Mode of study	Full-time studies		Mode of de	livery		at the	at the university		
Year of study	2		Language of instruction			Polish	Polish		
Semester of study	3		ECTS credits			3.0			
Learning profile	general academic profile		Assessment form			assessment			
Conducting unit	Department of Geotechnics, Geology and Marine Civil Engineering -> Faculty of Civil and Environmental Engineering						vironmental		
Name and surname	Subject supervisor	dr inż. Witold Sterpejkowicz-Wersocki							
of lecturer (lecturers)	Teachers		dr inż. Witold Sterpejkowicz-Wersocki						
			dr hab. inż. Waldemar Magda						
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM	
of instruction	Number of study hours	0.0	0.0	0.0	0.0		45.0	45	
	E-learning hours inclu	uded: 0.0							
Learning activity and number of study hours	Learning activity	Participation i classes includ plan			Self-study SU		SUM		
	Number of study hours	45		5.0		25.0		75	
Subject objectives	<ol> <li>The student :</li> <li>acquires skills of concise performance of the executed work and attained results as well as the public discussion and the defence of introduced theses together with proposed solutions,</li> <li>transfers elaborated contents, defends and specifies foundations and the methodology of the thesis execution,</li> <li>extends the gained knowledge for topics chosen from the scientific activity of the Department and current design practice and executive projects.</li> <li>After public presentation the chosen work can be shown on the page of seminar.</li> </ol>								
Learning outcomes	Course outcome		Subject outcome		Method of verification				
<b>3</b>	[K7_K02] Rocognizes the significance of knowledge in solving cognitive and practical problems; reliably evaluates results of his own and team research		Formulates conclusions and describes the results of his own and team work and the results of important reports on seminars.		[SK4] Assessment of communication skills, including language correctness				
	[K7_W15] has deep and adequate knowlege of civil engineering, within offered specialization and profile		Has structured and in-depth knowledge from civil engineering, within the framework of the offered specialties and diploma profiles			[SW2] Assessment of knowledge contained in presentation			
	[K7_U15] has advanced skills in civil engineering within offered specialization/profile		Has advanced skills from civil engineering, within the framework of the offered specialties and diploma profiles			[SU3] Assessment of ability to use knowledge gained from the subject			

Subject contents	<ol> <li>Information on the form and contents of the thesis, the choice of the literature and sources is presented.</li> <li>Presentation of the conducted and current works delivered by guests invited from design offices, contractors and scientific workers.</li> <li>Performance of the chosen current problems of the hydro- and marine civil engineering.</li> <li>Student performs the monographic elaboration on the chosen theme from the range of diploma profiles on the basis of domestic and foreign literature. Student performs the multimedia presentation containing main highlights of the theses and accepted methodology of thesis realization.</li> </ol>					
Prerequisites and co-requisites	The thesis supervisor and the thesis subject.					
Assessment methods and criteria Recommended reading	Subject passing criteria	Passing threshold	Percentage of the final grade			
	The thematic presentation of the selected topic	60.0%	60.0%			
	Presentation of the contents of the thesis.	60.0%	40.0%			
	Basic literature	<ol> <li>Science, and Maritime Institute</li> <li>National and international maga manuals from the scope of hyd</li> <li>Source materials on specific to</li> </ol>	Engineering of Polish Academy of azines, recommendations and ro- and marine civil engineering. pics available in archives of the Boards, and Marshall's Offices.			
	Supplementary literature	<ol> <li>Mazurkiewicz B.: Encyklopedia inżynierii morskiej. Wydawnictwo Morskie, Gdańsk 1986.</li> <li>Handbook Quay Walls. CUR: Centre the odds Civil Engineering Research and Codes, Public Works Rotterdam, Portes of Rotterdam. Taylor &amp; Francis, Gouda, The Netherlands, September 2005.</li> <li>Recommendations to the designing and the exercise Z1-Z45. The group work under the ed. B. Mazurkiewicz. The foundation of the Promotion Of The Shipbuilding Industry and The Naval Economy, Gdańsk 2006.</li> <li>Kulczyk J., Winter J.: The inland shipping. 2005.</li> <li>Selim Yalin M., Ferreira da Silva A.M.: Fluvial processes. IAHR, 2001.</li> <li>Szymkiewicz R.: Numerical methods in the water engineering. Gdańsk University of Technology, Gdańsk 2003.</li> <li>Depczyński W., Szamowski A.: Buildings and water reservoirs. Varsovian Technical University, 1999.</li> </ol>				
	eResources addresses	Adresy na platformie eNauczanie:				

Example issues/ example questions/ tasks being completed	Profile: Marine Civil Engineering 1. Types of loadings acting on marine structures.					
	<ol> <li>Breakwaters.</li> <li>Quay walls, wharfs, piers.</li> <li>Offshore structures.</li> <li>Design of shore protection structures.</li> <li>Mooring and fendering structures.</li> <li>Mooring and fendering structures.</li> <li>Shipyard structures.</li> <li>Marine navigational-sign structures.</li> <li>Sea locks.</li> <li>Submarine tunnels.</li> <li>Submarine pipelines.</li> <li>Protection of the marine environment.</li> <li>Exploration and exploitation of submarine oil and gas resources.</li> <li>Underwater structures related to exploitation of oil and gas resources.</li> </ol>					
	Profile: Hydro Civil Engineering					
	<ol> <li>Types of hydraulic engineering structures and their functions.</li> <li>Principles of determining the reliable flow of large water (spillway design flood) and dimensioning of relief devices</li> <li>Main elements of the weir and their tasks.</li> </ol>					
	<ol> <li>General characteristics of gates.</li> <li>Buoyancy under the damming structure and ways of its reduction.</li> <li>The criteria for the overall stability of the damming structure.</li> <li>The general principles for building a barrage (execution stages).</li> <li>Applied materials and methods of construction of earth dams.</li> </ol>					
	<ol> <li>Dimensioning of earth dams - selection of the crown width, slope slopes and safe elevation of the crown above the damming level.</li> <li>Construction of earth dam seals, strengthening of slopes.</li> <li>The role of the drainage and reverse filters in the construction of damming structures.</li> <li>Principles of waterproofing the ground under damming structures.</li> <li>General principles of designing gravity-type concrete dams.</li> </ol>					
	<ol> <li>Buttress and arch dams - construction conditions and principles of construction.</li> <li>Control and measurement equipment installed on damming structures, safety condition assessment.</li> </ol>					
Work placement	Not applicable					