



## Subject card

Subject name and code	Wood Technology, PG_00045109						
Field of study	Ocean Engineering, Ocean Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2022/2023		
Education level	first-cycle studies		Subject group				
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	6		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. inż. Janusz Kozak				
	Teachers		prof. dr hab. inż. Janusz Kozak  mgr inż. Alicja Bera				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	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		4.0		16.0	50
Subject objectives	Goal of classes is delivery of knowledge on application and processing of wood for manufacturing of water crafts. In frame of subject problems of wooden materials, basic manufacturing processes in this metrology, as well as prolems of joining and protection of wood will be presented						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_K03] understands non-technical aspects and effects of operation as an engineer, its influence on the environment and is aware of the responsibilities for the decisions taken		Student is able to asses of the environmental impact of technical activities		[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_W05] has an organized knowledge on design, construction and operation of ocean technology objects and systems		Student recognizes and knows issues and physical processes in relations to deigned object		[SW1] Assessment of factual knowledge		
	[K6_W06] has an organized knowledge on engineering methods and design tools allowing the conducting of projects within the construction and operation of ocean technology objects and systems		Student apply known methods and tools to solving the problem		[SW1] Assessment of factual knowledge		
	[K6_U05] can formulate a simple engineering task and its specification within the range of design, construction and operation of ocean technology objects and systems		Student in proper way select problems for solving problem, decide on range of particular problems in whole project area		[SU2] Assessment of ability to analyse information		

Subject contents	Scope of classes::			
	Lecture:			
	Historical background on role of wood in floating objects			
	Structure of wooden craft: ancient versus contemporary			
	Wood - materials properties			
	Processing of wood			
	Tools and equipment for wood processing			
	Carpenters joints			
	Manufacturing processes of wooden yacht			
	Protection of wooden craft hull			
	Equipment and its fixing on wooden craft			
	Laboratory:			
	Recognition of basic kinds of domestic wood, knowledge of its application in boatbuilding,			
	Recognition of basic kinds of exotic wood, assessment of quality,			
	Assessment of material properties of given kind of wood, classification by usability for boat building,			
	Preparation of specimen for tensile test, performing of test for two kinds of wood,			
	Design of procedure of repairing of broken specimen, performing of joint			
	Performing of test for two repaired specimen.			
	Prerequisites and co-requisites			
	Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
laboratory		80.0%	50.0%	
lecture		50.0%	50.0%	
Recommended reading	Basic literature	1. Introduction to steel shipbuilding, McGraw-Hill Book Comp. 1953		
	Supplementary literature	Miesięczniki typu: Ship & Boat International, Superyacht Business, itp.		
	eResources addresses	Adresy na platformie eNauczanie: Technologia drewna , W/L, Oceanotechnika, sem.6, lato 23, (O: 098640) - Moodle ID: 29203 <a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=29203">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=29203</a>		
Example issues/ example questions/ tasks being completed				
Work placement	Not applicable			