GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Fluid Mechanics, PG_00056244		
Field of study	Design and Construction of Yachts		
Date of commencement of studies	October 2022	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	1	Language of instruction	Polish
Semester of study	2	ECTS credits	2.0
Learning profile	practical profile	Assessment form	assessment
Conducting unit	Department of Hydromechanics and Hydroacoustics -> Faculty of Mechanical Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Michał Krężelewski	
	Teachers	dr inż. Michał Krężelewski	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	15.0	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	2.0	18.0	50

Subject objectives

Formulates the basic problems flow and solve them on the basis of law and methods of fluid mechanics. Apply law and methods of fluid mechanics in the design and operation of ocean facilities .

Learning outcomes

Course outcome	Subject outcome	Method of verification
K6_U02	Formulates basic flow problems and solves them in based on laws and methods of fluid mechanics.	[SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject
K6_W02	Applies the laws and methods of Fluid Mechanics in design and operation of ocean engineering objects.	[SW1] Assessment of factual knowledge

Subject contents

Fluid as a part of continuum mechanics. Physical properties of fluids. Models of fluids. Forces acting in fluifds. Continuity equation. Navier-Stokes and Euler equations. Bernoulli's principle - applications for solving practicsl questions. Main problems of hydrostatics and one-dimensional flows.

Prerequisites and co-requisites

knowledge of the subject Mathematics and Physics.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
tutorials: midterm colloqiums	60.0%	50.0%
lectcture: end colloquium	60.0%	50.0%

Recommended reading

Basic literature	1. Gryboś R.: Podstawy mechaniki płynów, t.1,2, PWN W-a 1998r.; 2. Gryboś R.: Zbiór zadań z technicznej mechaniki płynów, PWN W-wa 2002r.
Supplementary literature	1. Krężelewski M.: Hydromechanika ogólna i okrętowa, cz. I, strypt PG 1982r.,
eResources addresses	Adresy na platformie eNauczanie:

Example issues/ example questions/ tasks being completed

Work placement

Not applicable