GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Group project, PG_00052039		
Field of study	Nanotechnology		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2023/2024
Education level	second-cycle studies	Subject group	Optional subject group
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	English
Semester of study	3	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Solid State Physics -> Faculty of Applied Physics and Mathematics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Agnieszka Witkowska	
	Teachers	dr hab. inż. Agnieszka Witkowska	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	0.0	60.0	0.0	60

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	60	5.0	35.0	100

Subject objectives

Preparing to work in a group by carrying out a project consisting of a team analysis of the problem, presenting a proposal of a solution of the problem, perfoming tests/measurements and preparing a report and presentation on the team's work results.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K7_W06	The student has an extended knowledge needed to work in a physical laboratory, to carry out research, measurements and engineering work related to the project tasks.	[SW2] Assessment of knowledge contained in presentation
K7_U07	The student can apply the acquired specialist knowledge to the implementation of multidisciplinary project tasks.	[SU3] Assessment of ability to use knowledge gained from the subject
K7_K03	The student, working in a 2-, 3-person team, acquires the ability to cooperate in a team, is able to cowork, to develop and prepare in a group a report and presentation of the results obtained during the project realization. The multi-stage and complexity of project tasks allows students to assume different roles in the team.	[SK1] Assessment of group work skills [SK4] Assessment of communication skills, including language correctness [SK3] Assessment of ability to organize work
K7_U01	The student is able to analyze the problem define in the project and is able to prepare proposals for its solution/realization, based on self-obtained and compiled information from literature, databases and other available sources (available mainly in English).	[SU2] Assessment of ability to analyse information

Subject contents

The realized group projects concern issues in the field of experimental and computational nanotechnology and material engineering.

Prerequisites and co-requisites

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project realization and preparation of the report	100.0%	80.0%
	Preparation of the slideshow and oral presentation of the project results	100.0%	20.0%
Recommended reading	Basic literature	Scientific literature and specialist reports related to the group project.	
	Supplementary literature	Scientific literature and specialist reports related to the group project.	
	eResources addresses	Adresy na platformie eNauczanie: Group project (NT2-eng. sem.3) - 2023 - Moodle ID: 30984 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=30984	
Example issues/ example questions/ tasks being completed	1. Fabrication of metal nanostructures using AFM lithography. 2. A computer program for generating initial structure of penta-graphene nanotubes. 3. Resorbability study of calcium phosphate based bioglasses and bioceramics. 4. Macroscopic mechanical models of molecular auxetics. 5. The microscopic beauty of air pollution. 6. Baltic amber (succinite) and other fossil resins. 7. Design, construction and testing of free-standing structures for electroanalytical applications, made with the use of 3D printing. 8. Characteristics of thin CVD-grown films on RVC electrodes for the use in an electrolyzer.		
Work placement	Not applicable		