GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Cognitive-behavioral psychology, PG_00065013		
Field of study	Mechanical and Medical Engineering		
Date of commencement of studies	February 2026	Academic year of realisation of subject	2025/2026
Education level	second-cycle 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	1	Language of instruction	Polish
Semester of study	1	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Division of Manufacturing and Production Engineering -> Institute of Manufacturing and Materials Technology -> Faculty of Mechanical Engineering and Ship Technology -> Wydziały Politechniki Gdańskiej		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Dominika Zakrzewska	
	Teachers		

Lesson types and methods of instruction

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	6.0	14.0	50

Subject objectives

The aim of the course is to convey the basic issues of psychology and psychotherapy in the cognitive-behavioral approach.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_K12] is ready for fullfiling social commitement and initation of actions for public interest including entrepreneurial thinking and acting	The student understands the mechanisms of the influence of cognition and behavior on social and entrepreneurial decisions and is ready to take action for the public interest based on the principles of critical and scientific thinking.	[SK5] Assessment of ability to solve problems that arise in practice [SK3] Assessment of ability to organize work
[K7_W11] interprets social, economic, legal (including industrial and intellectual property laws), and other non-technical aspects of engineering activities, and includes them into engineering practice	The student understands the impact of social, economic and legal conditions on decision-making and action in an engineering context, is able to analyse cognitive and behavioural behaviours in relation to compliance with legal, ethical and intellectual property protection standards, and apply this knowledge in professional practice.	[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation [SW1] Assessment of factual knowledge
[K7_K71] is able to explain the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	The student understands the importance of the humanities, social, economic and legal sciences for effective functioning in a social environment, is able to explain how knowledge of cognitive-behavioral psychology supports effective decision-making, building relationships and solving problems in a professional and social context.	[SK5] Assessment of ability to solve problems that arise in practice [SK4] Assessment of communication skills, including language correctness [SK1] Assessment of group work skills

Subject contents	1. Fundamentals of cognitive-behavioral psychology. 2. Behavioral theories and their application in the social and entrepreneurial context and psychology in business. 3. Psychology of critical thinking and decision-making. 4. Social aspects of engineering activity. Psychology of pro-social actions in engineering practice. 5. Cognitive and behavioral processes in making legal and economic decisions. The influence of emotions and motivation on compliance with legal norms. 6. Integration of knowledge from psychology and social sciences in the professional environment. 7. Cognitive-behavioral psychology in solving social problems. 8. Development of social competences based on cognitive-behavioral psychology.
Prerequisites and co-requisites	

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Tasks to be completed during the lecture	80.0%	20.0%
Test	51.0%	70.0%
Attendance and activity at lectures	90.0%	10.0%

Recommended reading

Basic literature

1. "Emotional Intelligence: Why It Can Matter More Than IQ" Daniel Goleman, 1952.

2. "Thinking, Fast and Slow" Daniel Kahneman, 20113. "Behavioral Law and Economics" Cass R. Sunstein, 2004.

3. "Critical Thinking: A Student's Introduction" Gregory Bassham, William Irwin, Henry Nardone, James Wallace, 2024

4. "Social Psychology" David Myers, Jean Twenge, 2021

Supplementary literature

1. "Psychology Applied to Modern Life: Adjustment in the 21st Century" Wayne Weiten, Dana Dunn, Elizabeth Yost Hammer, 2020

2. "The Psychology of Decision Making: People in Organizations" Lee Roy Beach, Terry Connolly, 20053. "Human Factors in Engineering and Design" Mark S. Sanders, Ernest J. McCormick, 2013

	eResources addresses	
Example issues/ example questions/ tasks being completed	Psychological foundations of taking action for the public interest. The role of motivation and reinforcement in initiating social activities .Psychological mechanisms related to the protection of intellectual property.Behavioral mechanisms related to compliance with legal and ethical norms. The role of emotional intelligence in effective social action.The role of emotional intelligence and empathy in building professional relationships. Ethical dilemmas in engineering practice - behavioral analysis. The importance of psychology in resolving interpersonal conflicts in the professional environment. The psychology of group behavior and its impact on functioning in the engineering environment.	
Work placement	Not applicable	

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