



Subject card

Subject name and code	Introduction to cognitive science, PG_00045307						
Field of study	Data Engineering						
Date of commencement of studies	October 2025	Academic year of realisation of subject			2026/2027		
Education level	first-cycle studies	Subject group			Optional subject group Humanistic-social 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	4	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Philosophy and Science Methodology -> Faculty of Management and Economics -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Jakub Gużyński				
	Teachers		dr Jakub Gużyński				
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	30.0	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		43.0	75	
Subject objectives	During the classes students will learn how the interdisciplinary project of the cognitive sciences was created and what are its basic paradigms. Fundamental problems within this field of inquiry will be discussed along with the most typical attempts at solving them.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W07] analyzes business processes in an advanced way in the technical, legal, economic, financial and social context	Knows the basic theories of cognitive science and uses them in advanced analysis of business processes in technical, legal, economic, financial and social contexts			[SW1] Assessment of factual knowledge		
	[K6_K01] demonstrates awareness of legal, ethical and cultural diversity issues, making socially responsible decisions	Is able to present own position in discussions, demonstrating awareness of legal, ethical and cultural diversity issues, and making socially responsible decisions			[SK4] Assessment of communication skills, including language correctness		
	[K6_K02] makes competent and ethical decisions to create and maintain economic, social and environmental values	Is able to work in a team, making competent and ethical decisions to create and maintain economic, social and environmental values			[SK1] Assessment of group work skills		

Subject contents	<p>Course content – exercises</p> <p>A Brief History of Cognitive Science - Behaviorism, Computational Theory, Formal Linguistics, Generative Grammar, Marr's Levels of Explanation The Brain Turn - Fundamentals of Nervous System Anatomy, Neural Networks Computational Theory of Mind - Is the Mind a Computer? The Chinese Room and Intentionality Probabilistic Models in Cognitive Science - Bayesianism Dynamic Systems Theory in Cognitive Science - The Mind as a Steam Engine Brain Modularity, Evolutionary Cognitive Science Affective Science - Basic Theories of Emotion Artificial Intelligence and Robotics Cognitive Linguistics Theory of Mind and the Role of Imitation in Cognition Extended Cognition</p>														
Prerequisites and co-requisites															
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="456 618 794 645">Subject passing criteria</th> <th data-bbox="799 618 1137 645">Passing threshold</th> <th data-bbox="1142 618 1469 645">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="456 651 794 678">Group presentation</td> <td data-bbox="799 651 1137 678">50.0%</td> <td data-bbox="1142 651 1469 678">30.0%</td> </tr> <tr> <td data-bbox="456 685 794 712">Active participation in discussion</td> <td data-bbox="799 685 1137 712">50.0%</td> <td data-bbox="1142 685 1469 712">30.0%</td> </tr> <tr> <td data-bbox="456 719 794 745">Final test</td> <td data-bbox="799 719 1137 745">50.0%</td> <td data-bbox="1142 719 1469 745">40.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Group presentation	50.0%	30.0%	Active participation in discussion	50.0%	30.0%	Final test	50.0%	40.0%
Subject passing criteria	Passing threshold	Percentage of the final grade													
Group presentation	50.0%	30.0%													
Active participation in discussion	50.0%	30.0%													
Final test	50.0%	40.0%													
Recommended reading	Basic literature	<ol style="list-style-type: none"> 1. JOHNSON-LAIRD, P., 1999, Komputer a umysł. Wstęp do nauk poznawczych, przeł. P. Jaśkowski, Protex, Poznań. 2. PINKER, S., 2002, Jak działa umysł, przeł. M. Koraszewska, KiW, Warszawa. 3. URCHS, M., 2009, O procesorach i procesach myślowych. Elementy kognitywistyki, Wydawnictwo UMK, Toruń. 4. CLARK, A., 2001, Mindware: An Introduction to the Philosophy of Cognitive Science, Oxford University Press, Oxford. 													
	Supplementary literature	<ol style="list-style-type: none"> 1. E. Feigenbaum i J. Feldman, Maszyny matematyczne a myślenie, PWN, Warszawa. 2. John Searle, Umysły, mózgi i programy, w: B. Chwedeńczuk (red.), Filozofia umysłu, Warszawa 1995. 3. R. Piłat, Czym jest świadomość, Warszawa 1993. 													
	eResources addresses														
Example issues/ example questions/ tasks being completed	<p>Enumerate and discuss basic theories of mind</p> <p>Discuss the problem of representation in cognitive sciences</p> <p>What is the embodied cognition?</p> <p>Discuss the probabilistic model of cognition.</p>														
Practical activities within the subject	Not applicable														

Document generated electronically. Does not require a seal or signature.