Subject card

Subject name and code	Effective Learning and Development, PG_00059643
Field of study	Civil Engineering

Date of commencement of studies	October 2023	Academic year of realisation of subject	2023/2024
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	1	ECTS credits	1.0
Learning profile	general academic profile	Assessment form	assessment

Conducting unit	Center for Innovative Education -> Prorektor ds. studenckich

Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Joanna Mytnik
	Teachers	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	0.0	0.0	15
	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	15	0.0	0.0	15

Subject objectives	Understanding the neuroscientific basis of learning: memory trace, types of memory, role of hippocampus, effective and ineffective learning strategies, tools for effective learning, deep work, two modes of the brain, motivation, reward system, habits, procrastination, growth mindset, role of sleep, physical activity, meditation in creating memory traces. A neuroscientific perspective on mental well-being, managing stress levels, developing good habits.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_W71] has general knowledge in humanistic, social, economic or legal sciences	has a general knowledge of neuroscience	[SW1] Assessment of factual knowledge
	[K6_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems in a social environment	Is able to apply knowledge of neuroscience in orgaqnizing his learning process	[SU4] Assessment of ability to use methods and tools
	[K6_K71] is conscious of the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	Is aware of the need to use knowledge of neuroscience to improve one's learning competence	[SK5] Assessment of ability to solve problems that arise in practice

Subject contents	
	Module 1. Effective learning. 1. The illusion of competence. 2. The process of creating memory traces (remembering). 3. Short-term and long-term memory. 4. Two learning modes (concentrated and distracted) 5. Conditions for effective learning: • Attitude (power of the words "not yet", research by Dr. Carol Dweck) • Model of "spaced repetition" work, the curve of forgetting • Sleep: role in learning and wellbeing, the chronometer of the 18-teenager's brain. • Physical activity: role in the process of creating memory • Breaks: role in the process of remembering • The reward system in the brain: motivation, habits, the Pomodoro technique, self-gamification. 6. Learning tools: • Flashcards • Mind maps **Module 2. What should you know about the brain? The greatest myths and facts of neuroscience.** 1. Motivation: Goal Perception (Dr. Emily Balcatis research) 2. Multitasking and concentrated work. 3. FOMO, addiction to being online. 4. Why school grades destroy motivation. 5. Handwriting and typing. 6. Reading printed books and listening to audiobooks. 7. How do books change our brain?8. How does stress work in the body? 11. Meditation and the brain. 12. Practicing gratitude and motivation. 13. A list of 100 things that can improve your life. 14. Learning addiction.15. The influence of alcohol on brain development. **Module 3. Getting to know oneself and managing tasks and oneself in time.** 1. Procrastination: what is it, how to counteract it. 2. Self-management in time. 3. To-do lists, prioritization, time-blocking, deep learning, "goodbye to work". 4. Reflective development diary. 5. Tools for recognizing natural talents. 6. Introvertism, extrovertism, highly sensitive people - what is worth knowing? 7. Ability to navigate in the world of fake news, critical thinking. 8. 7 things you need to do in college. 9. How the business world sees you: CV, LinkedIn. 10. Featured books, TED (x) speeches and online courses.

Prerequisites and co-requisites	Motivation for active work during classes.

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Mindmap Project "Conditions for Effective Learning"	80.0%	50.0%
	4 quizes	80.0%	50.0%

Recommended reading	Basic literature	Peter C. Brown, Mark A. McDaniel, Henry L. Roediger III "Harvard Guide to Effective Learning" 2020 PAX Publishing Institute.
	Supplementary literature	Duhigg Charles. 2013 The Power of Habit. Why we do what we do and how to change it in life and business. PWN. https://www.coursera.org/learn/learning-how-to-learn

	eResources addresses	Adresy na platformie eNauczanie: Efektywne uczenie się i rozwój (2023/24) - Moodle ID: 34191 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=34191
Example issues/ example questions/ tasks being completed	The role of the Hippocampus in the formation of memory traces. Examples of the illusion of competence. The role of sleep in memory formation.	
Work placement	Not applicable	

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