

#### Field of study:

# **Psychology**

Subject: Biological bases of mental disorders

Level of study: graduate studies

System of study: Full-time

Profile of studies: general academic

Subject: Biological bases of mental disorders

# Form of classes and the ECTS points

	Number of hours	ECTS points	Credit
lectures	30		exam
Total	30	5	

# Aims of teaching

The aim of the lectures is to present selected issues in the field of neuroanatomy and neurophysiology of the central nervous system and the necessary information in the field of neurobiology and neuropsychology to understand brain functioning and the causes of various mental disorders.

KNOWLEDGE			
SYMBOL	DESCRIPTION	REFERENCE TO THE PROFILE OUTCOME	
P_W1	• the student knows what issues make up the discipline of the biological basis of behavior and how it developed; • identifies biological causes of mental processes • analyzes scientific texts • presents and explains selected issues • understand the occurrence of pathologies	Ps_WG10_Mgr Ps_WG11_Mgr	
SKILLS			
SYMBOL	DESCRIPTION	REFERENCE TO THE PROFILE OUTCOME	
P_U1	• the student understands and interprets biological processes occurring in the human body, can connect them with mental processes and use their knowledge for other people • critically refers to scientific papers in neurobiology and related fields • recognizes the biological causes of psychological pathologies • assesses the cognitive and practical value of the biological basis of mental life competence • the student accepts the multi-factorial background of a mental life and is aware of its importance • recognizes the need to supplement knowledge in biological sciences	Ps_UW02_Mgr Ps_UW04_Mgr Ps_UW05_Mgr Ps_UW10_Mgr Ps_UK03_Mgr	
SOCIAL COMPETENCES			
SYMBOL	DESCRIPTION	REFERENCE TO THE PROFILE OUTCOME	
P_K1	$\bullet$ work in team or individually to have a critical view on brain disorders	Ps_KK01_Mgr	

# **Course content**

NUMBER	DESCRIPTION	FORM OF CLASSES	NUMBER OF HOURS
1	Introduction - general issues. Base of the central nervous system.	lectures	3 / 3
2	Microscopic structure of nervous and glial tissues and the basis of neuroanatomy.	lectures	3 / 3
3	Nervous system - its structure and principle of operation.	lectures	3 / 3

NUMBER	DESCRIPTION	FORM OF CLASSES	NUMBER OF HOURS
4	Outline of anatomy and vascularization of the brain and spinal cord.	lectures	3 / 3
5	The structure of the brain and the issue of the mind. Chemical senses and mechanisms of physical control.	lectures	3 / 3
6	Neurodegenerative diseases	lectures	3 / 3
7	Stroke and brain damages	lectures	3 / 3
8	Mental disorders and addiction	lectures	3 / 3
9	The neuroplasticity of an adult brain. Healthy and pathological aging of the brain. Methods of visualization of brain structures: CT, MRI and others.	lectures	3 / 3
10	Genetics and behavior: research methods of behavioral genetics, determinants of individual differences - genes and environment, temperament as the biological dimension of personality, biological and evolutionary basis of intelligence, intelligence and genes.	lectures	3 / 3

# **Conditions of completion**

#### LECTURES

TYPE OF CREDIT	CREDIT INFLUENCE (IN %)
Exam (for the lecturers only)	100

# **Teaching methods**

- multimedia presentations
- lectures with discussion
- Case studies

# Reading (compulsory)

- - Michael Gazzaniga, Richard Ivry, George Mangun. Cognitive Neuroscience. The Biology of the Mind 2014
- - Eric R. Kandel, James H. Schwartz, Thomas M. Jessell, Steven A. Siegelbaum, A. J. Hudspeth . Principles of Neural Science 2013

# **Reading (additional)**

• Lack of literature

# Odniesienie efektów przedmiotowych do efektów kierunkowych, treści kształcenia, metod weryfikacji

SYMBOL	REFERENCE OF A GIVEN OUTCOME TO THE PROFILE OUTCOME	REFERENCE OF A GIVEN OUTCOME TO THE COURSE CONTENT	REFERENCE OF A GIVEN OUTCOME TO THE VERIFICATION METHODS	
	KNOW	LEDGE		
P_W1	Ps_WG10_Mgr Ps_WG11_Mgr	1 2 3 4 5 6 7 8 9		
SYMBOL	REFERENCE OF A GIVEN OUTCOME TO THE PROFILE OUTCOME	REFERENCE OF A GIVEN OUTCOME TO THE COURSE CONTENT	REFERENCE OF A GIVEN OUTCOME TO THE VERIFICATION METHODS	
	SKI	LLS		
P_U1	Ps_UW02_Mgr Ps_UW04_Mgr Ps_UW05_Mgr Ps_UW10_Mgr Ps_UK03_Mgr	1 2 3 4 5 6 7 8 9		
SYMBOL	REFERENCE OF A GIVEN OUTCOME TO THE PROFILE OUTCOME	REFERENCE OF A GIVEN OUTCOME TO THE COURSE CONTENT	REFERENCE OF A GIVEN OUTCOME TO THE VERIFICATION METHODS	
SOCIAL COMPETENCES				
P_K1	Ps_KK01_Mgr	1 2 3 4 5 6 7 8 9		