SOKENDAI CampusPlan Web Service

Syllabus Reference

Course title	Brain science e-learning		
Term	前期 1st Half		
Credit(s)	1		
The main day		The main period	
Program/Department	48 Physiological Sciences		
Lecturers	Masaki Isoda		
成績評価区分 Grading Scale	A,B,C,Dの4段階評価 Four-grade evaluation		
レベル Level	Level 2		
力量 Competence	専門力 Academic expertise、独創性 Creativity		

Instructor

Full name
* ISODA MASAKI

Outline	Basic knowledge necessary for brain science can be learned through an e-learning system with lecture and small tests.
Learning objectives	To obtain the foundation of the brain science and understand the fundamental subjects correctly.
Grading policy	Students are required to view all the lectures one by one and complete Challenge Quizzes set at the end of respective topics as well as Mini Tests. And students will be assigned to take the Assessment in the designated period. The grades will be determined by the progression status of Mini Tests and the scores of the Assessment. Students can take the Assessment only once following period 1st semester: from June 1 to August 4, 2023.
Lecture Plan	Schedule: At any time within an academic year URL: https://sakura.nips.ac.jp/moodle/ Lecture plan : 1.BASIC Understanding of brain as a system 1.Clues to understand the brain 2.Development of brain and its shape 3.Functional elements supporting brain functions 4.Mechanisms for brain functions 5.Information signals and their managements in brain 2.Functions (Sensation) External recognition systems 1.Informatization of various sensory signals 2.Sensors placed throughout the body ” Somatic sensation” 3.The mechanism of visual sensation 4.The mechanism of auditory sensation 5.The mechanism of olfactory sensation 6.The mechanism of gustatory sensation 3.Motor Function Transmitting motor command and its regulation 1.Mechanism by which nerve signals cause movement 2.Regulation of skeletal muscle movement by the spinal cord 3.Planning of movements and mechanism controlling smooth movements 4.Motor control by the cerebellum 4.Integrated Auto-regulator 1.Hypothalamus 2.Autonomic nervous system 3.Wide area regulation of brain by neurotransmitter 4.Diffuse modulatory system composed by astrocyte 5.Higher brain functions 1.Emotion

	2.Linguistic abilities 3.Memory ability
Location	https://sakura.nips.ac.jp/moodle/ Login ID will be given to each registrant. Students may login with the ID to the web page and conduct a self-study.
Language	English
Textbooks and references	工藤佳久『もっとよくわかる! 脳神経科学～やっぱり脳はスゴイのだ! (実験医学別冊 もっとよくわかる! シリーズ)』羊土社、2013年、255p. (ISBN:978-4758122016)
Notes for students of other programs	Nothing particular.
Keyword	E-learning

Close window

SOKENDAI CampusPlan Web Service

Syllabus Reference

Course title	Brain science e-learning		
Term	後期 2nd Half		
Credit(s)	1		
The main day		The main period	
Program/Department	48 Physiological Sciences		
Lecturers	Masaki Isoda		
成績評価区分 Grading Scale	A,B,C,Dの4段階評価 Four-grade evaluation		
レベル Level	Level 2		
力量 Competence	専門力 Academic expertise、独創性 Creativity		

Instructor

Full name
* ISODA MASAKI

Outline	Basic knowledge necessary for brain science can be learned through an e-learning system with lecture and small tests.
Learning objectives	To obtain the foundation of the brain science and understand the fundamental subjects correctly.
Grading policy	Students are required to view all the lectures one by one and complete Challenge Quizzes set at the end of respective topics as well as Mini Tests. And students will be assigned to take the Assessment in the designated period. The grades will be determined by the progression status of Mini Tests and the scores of the Assessment. Students can take the Assessment only once following period 2nd semester: from November 1, 2023 to January 31, 2024.
Lecture Plan	Schedule: At any time within an academic year URL: https://sakura.nips.ac.jp/moodle/ Lecture plan : 1.BASIC Understanding of brain as a system 1.Clues to understand the brain 2.Development of brain and its shape 3.Functional elements supporting brain functions 4.Mechanisms for brain functions 5.Information signals and their managements in brain 2.Functions (Sensation) External recognition systems 1.Informatization of various sensory signals 2.Sensors placed throughout the body " Somatic sensation" 3.The mechanism of visual sensation 4.The mechanism of auditory sensation 5.The mechanism of olfactory sensation 6.The mechanism of gustatory sensation 3.Motor Function Transmitting motor command and its regulation 1.Mechanism by which nerve signals cause movement 2.Regulation of skeletal muscle movement by the spinal cord 3.Planning of movements and mechanism controlling smooth movements 4.Motor control by the cerebellum 4.Integrated Auto-regulator 1.Hypothalamus 2.Autonomic nervous system 3.Wide area regulation of brain by neurotransmitter 4.Diffuse modulatory system composed by astrocyte 5.Higher brain functions 1.Emotion

	2.Linguistic abilities 3.Memory ability
Location	https://sakura.nips.ac.jp/moodle/ Login ID will be given to each registrant. Students may login with the ID to the web page and conduct a self-study.
Language	English
Textbooks and references	工藤佳久『もっとよくわかる! 脳神経科学～やっぱり脳はスゴイのだ!（実験医学別冊 もっとよくわかる! シリーズ）』羊土社、2013年、255p. （ISBN:978-4758122016）
Notes for students of other programs	Nothing particular
Keyword	E-learning

Close window