Course title	Basic physiological and anatomical brain science		
Term	前期 1st Half		
Credit(s)	1		
The main day		The main period	
School/Program	School of Life Science		
Department/Program	Department of Physiological Sciences		
Category	Physiological Sciences		
Lecturers	Yoshihiro Kubo, Masaki Fukata, and others		

Instructor

Full name
* NAMBU ATSUSHI

Outline	Basic physiology and anatomy on brains can be learned through 10 lectures.
Goal	・Can discuss with others on basic neuroscience. ・Can write a summary of a research paper.

Grading system

01:Four-grade evaluation (A,B,C,D)

Grading policy	・Students must attend at least half of the lectures to get credit. ・They must also attend the journal club (9th,10th lecture). ・Write a summary of designated research papers(50% each). The paper will be graded by the lecturer, and it will be used to determine pass/fail.
Lecture Plan	Schedule : May 12 - July 14, 2021, 10:00-11:30 on Wednesdays Contents: 1.Chapter 2, 3, 4 (May 12, Kubo) 2. Neurons and Glia 3. The Neuronal Membrane at Rest 4. The Action Potential 2.Chapter 5, 6, 7 (May 19, Fukata) 5.Synaptic Transmission 6.Neurotransmitter Systems 7.The Structure of the Nervous System 3. Chapter 8, 9, 10 (May 26, Yoshimura) 8. The Chemical Senses 9. The Eye 10.The Central Visual System 4. Chapter 11, 12, 13 (June 2, Tominaga) 11.The Auditory and Vestibular Systems 12.The Somatic Sensory System 13.Spinal Control of Movement 5.Chapter 14, 15, 16 (June 9, Nambu) 14.Brain Control of Movement 15.Chemical Control of the Brain and Behavior 16.Motivation 6.Chapter 17, 18, 19 (June 16, Minokoshi) 17. Sex and the Brain 18. Brain Mechanisms of Emotion 19. Brain Rhythms and Sleep

	7. Chapter 20, 21, 22 (June 23, Sadato) 20. Language 21. The Resting Brain, Attention, and Consciousness 22. Mental Illness 8. Chapter 23, 24, 25 (June 30, Isoda) 23. Wiring the Brain 24. Memory Systems 25. Molecular Mechanisms of Learning and Memory 9. Journal club 1 (July 7, Furuse) 10. Journal club 2 (July 14, Nemoto)
Location	Zoom online
Language	English
Textbooks and references	Neuroscience: Exploring the Brain (4th ed.) Bear, Connors & Paradiso. Students are strongly recommended to purchase the textbook. However it is not mandatory to bring it to class. Paper info for lecture #9,#10, will be presented before lecture.
Related URL	http://sbsjp.nips.ac.jp/schedule/
Explanatory note on above URL	Please keep be updated on the latest schedule from " Schedule of the classes" on the program website.
Others	Assignment: 1. Read the textbook before coming to class. 2. Those who are attending the journal club must read the designated paper so that they may explain it to others. (It might be a good idea to summarize it in slides.)
Keyword	SOKENDAI Integrative Brain Science Course