

Course Coding(科目ナンバー)	Year/Semester/Term(年度・学期)	Faculty Offering Course(時間割所属・時間割コード)	Eligible Student Year(開講年次)	Credits(単位数)	Weekday and Period(曜日・時限)
RDM7-022-79-2	2025whole year	Graduate School of Medical Sciences (26040)	1, 2, 3, 4	2	others
Course Title(Theme)(科目名(講義題目))			Instructor(s)(担当教員)		
Neuroscience (For students admitted in 2023 and later)(B5)			IWAMOTO Kazuya, MIZUNO Hidenobu, TODA Chitoku, SHIODA Norifumi, SHIMAMURA Kenji, BUNDO Miki, Sou Bunketsu, ERA Takumi, TAKEBAYASHI Minoru, HATAKEYAMA Jun, ESUMI Shigeyuki, UEDA Mitsuharu, TAKEMOTO Makoto, CHUJYO Takeshi, NAKACHI Yutaka		
Goals with their ratio(学修成果とその割合)					
1.Advanced expert knowledge, skill and research capability ……60% 2.Profound inter-disciplinary knowledge ……30% 3.Global perspective and ability to take initiative action ……5% 4.Social leadership drive ……5%					
Type of Class(授業の形態)	Lecture				
Teaching Method(授業の方法)	Mainly by e-learning				
Course Goals(授業の目的)	Understand the sturcture and function of brain, higher functions, neuropsychiatric disorders and the methods for treatment.				
Course Learning goals(学修目標)	【A level (A水準)】 Students can explain and understand the sturcture and function of brain, higher functions, neuropsychiatric disorders and the methods for treatment. 【C level (C水準)】 Students can understand the sturcture and function of brain, higher functions, neuropsychiatric disorders and the methods for treatment.				
Course Outline(授業の概要)	The lecturers will teach about general introductions to the sturcture and function of brain, neurocircuit, higher functions, neuropsychiatric disorders and the methods for treatment.				
Details for Individual Classes(各回の授業内容)					
No.(回)	Date(月日)	Class Theme(授業テーマ)	Brief Outline of Class(内容概略)		
1		Shigeyuki Esumi (eEJ-0)	Neuronal diversity contributes to establishing neuronal circuit		
2		Jun Hatakeyama (eEJ-0)	Human brain development: How is brain development in humans and mice different?		
3		Kenji Shimamura (eE-0)	Regionalization and histogenesis of the brain primordium		
4		Hidenobu Mizuno (eEJ-0)	Postnatal development of the somatosensory cortex		
5		Bunketsu Sou (eEJ-0)	Hearing and hearing loss		
6		Makoto Takemoto (eEJ-0)	Neuroscience of emotions		
7		Chitoku Toda (eE-0)	Neuronal circuit to regulate feeding behavior		
8		Takeshi Chujo (eEJ-0)	RNA in neurons: molecular functions and related diseases		
9		Minoru Takebayashi (eJ-0)	Molecular basis of mood disorders		
10		Kazuya Iwamoto (eE-0)	Genetics and epigenetics of psychiatric disorders		
11		Miki Bundo (eE-0)	Somatic mutations and psychiatric disorders		
12		Mitsuharu Ueda (eEJ-0)	Pathogenesis of intractable neurological diseases and disease-modifying therapies		
13		Yutaka Nakachi (eEJ-0)	Sexual differentiation of the brain		
14		Takumi Era (eJ-0, eE-0)	New medical application to diseases of the nervous system using stem cell		
15		Norifumi Shioda (eE-0)	The potential of nucleic acid structures as a therapeutic target for neurological diseases		
Estimated out-of-class study time		This course consists of content that requires 90 hours of study. Since class is 30 hours (2 hours X 15 times), 60 hours of pre- and post-study is necessary.			
Required Textbook(テキスト)		Not specified.			
Reading List(参考文献)		Not specified.			
Enrollment Conditions(履修条件)		none			
Assessment Methods and Criteria(評価方法・基準)		Based on the scores of quizzes reated to the topics. Final grades will be made by averaging the 10 highest scores out of 15 quizzes.			
Language Used in Instruction(使用言語)		Japanese and English			
Textbook/Material Language(教科書・資料の言語)		Combination of Japanese and English			
Course Based on Practical Work Experience(実務経験)		Not applicable			