## **Course Syllabus**

#### **MBNS 653 Clinical Neuroscience**

#### Academic Year 2021

Course ID and Name: MBNS 653 Clinical Neuroscience

**Course coordinator:** Assoc. Prof. Vorasith Siripornpanich, M.D., Ph.D. (Neurosciences)

Dip. Thai Board of Pediatrics

Dip. Thai Board of Pediatric Neurology

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Lecturer Jiraporn Panmanee, Ph.D.

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#### **Instructors:**

1. Assoc. Prof. Naiphinich Kotchabhakdi, Ph.D.

- 2. Assoc. Prof. Wipawan Thangnipon, Ph.D.
- Assoc. Prof. Vorasith Siripornpanich, M.D., Ph.D.
   Dip. Thai Board of Pediatrics, Dip. Thai Board of Pediatric Neurology
- 4. Assoc. Prof. Lunliya Thampratankul, M.D., Dip. Thai Board of Pediatrics, Dip. Thai Board of Pediatric Neurology
- 5. Asst. Prof. Kittikun Viwatpinyo, Ph.D.
- 6. Lecturer Kittiphong Paiboonsukwong, M.D., Ph.D.
- 7. Lecturer Jiraporn Panmanee, Ph.D.
- 8. Guest lecturer from Prasat Neurological Institute
- 9. Guest lecturer from Somdet Chaopraya Institute of Psychiatry
- 10. Guest lecturer from Srithanya Hospital

### **Supporting Staff:**

- 1. Ms. Kanda Putthaphongpheuk
- 2. Ms. Somsong Phengsukdaeng

**Credits:** 3 (3-0-6)

**Curriculum:** Doctor of Philosophy Program in Neuroscience

**Semester offering:** First semester

**Pre-requisites:** None

## **Course learning outcomes (CLOs)**

Upon completion of this course, students are able to:

- 1. Explain the fundamental concepts on the clinical characteristics, diagnostic criteria, theories, and treatment of common neurological and psychiatric disorders. (PLO1)
- 2. Integrate theoretical knowledge in basic neuroscience and clinical information for understanding the brain and mental health disorders. (PLO1)
- 3. Demonstrate information technology and interpersonal communication skills through discussion of interesting topics in clinical fields. (PLO6)

## Alignment of teaching and assessment methods to course learning outcome:

Course learning outcome	<b>Teaching method</b>	Assessment method	
1. Explain the fundamental	(1) Lecture	(1) Written examination	
concepts on the clinical	(2) Case-based approach	(2) Oral examination	
characteristics, diagnostic criteria,	(3) In-class discussion	(3) Reports	
theories, and treatment		(4) Class participation	
of neurological and psychiatric disorders.			
2. Integrate theoretical	(1) Lecture	(1) Written examination	
knowledge in basic neuroscience and clinical	(2) Hospital visiting	(2) Oral examination	
information for understanding the brain	(3) Case-based approach and Case discussion	(3) Class participation	
and mental health disorders.	(4) In-class discussion		
Demonstrate information technology and interpersonal	(1) Individual assignment	<ul><li>(1) Presentation of assigned topic</li><li>(2) Oral examination</li></ul>	
communication skills		(2) Orai Chaimhanon	
through discussion of interesting topics in			
clinical field.			

## **Course description:**

Classification of neurological and psychiatric diseases, symptomatology of neurological diseases, headache and migraine headache, common neurological diseases in children and adult, brain developmental disorders, common psychiatric diseases, schizophrenia, mood disorders, neurological examination, investigation for neurological diseases, electroencephalography, psychiatric interview and mental status examination, neuropsychological tests, consciousness and sleep test, principle of treatment in neurological and psychiatric diseases, medical ethics

#### **Course schedule:**

Date: Monday to Friday

Time: 9.00 am - 4.00 pm

Rooms: A409, Building A, Institute of Molecular Biosciences

\* For this academic year, only online lecture is available \*

# TIME SCHEDULE FOR MBNS 653 CLINICAL NEUROSCIENCE 1st SEMESTER 2021

Course Coordinator: Dr. Vorasith Siripornpanich / Dr. Jiraporn Panmanee

**Lecture room: Online Teaching** 

Date & Time	Topic	Class activity	Instructor	
6 Sep 2021	Course orientation	Lecture	Vorasith	
(Mon)				
13.30-14.00				
14.00-15.30	L1: Overview of Clinical Neuroscience	Introductory		
	L1.1: Concept of Neuropsychiatry	lecture	Vorasith	
	L1.2: Disease categories: ICD and DSM		Vorasith	
8 Sep 2021	L3: Neurobiology of common psychiatric	Lecture		
(Wed)	symptoms	Class discussion		
9.00-12.00	L3.1: Neurobiology of mood disorders		Vorasith	
	L3.2: Neurobiology of hallucinations		Kittikun	
13.00-16.00	Self study	-	-	
10 Sep 2021	L4: Psychiatric Assessment	Lecture	Weerapon	
(Fri)		Class discussion		
9.00-12.00				
13.00-16.00	L8: Dementia and Alzheimer's disease	Lecture	Wipawan	
		Class discussion		
13 Sep 2021	L5: Neuropsychological tests and	Lecture	Somchai	
(Mon)	assessment	Class discussion		

9.00-12.00			
13.00-14.30	L1.3: Neurological examination	Short lecture	Vorasith
		Demonstration	
15 Sep 2021	Self study	-	-
(Wed)			
9.00-12.00			
13.00-16.00	L6: Case studies in Neurology	Case observation	Metha
		Demonstration	
17 Sep 2021	L7: Consciousness and its disorder	Lecture	Naiphinich
(Fri)		Class discussion	
9.00-12.00			
13.00-16.00	Self study	-	-
20 Sep 2021	L11: Common problems in Child	Lecture	Vorasith
(Mon)	Neurology (Childhood headache /	Class discussion	
9.00-12.00	Epilepsy / Cerebral palsy)		
13.00-16.00	Self study	-	-
22 Sep 2021	L9: Headache and Migraine	Lecture	Kittiphong
(Wed)		Class discussion	
9.00-12.00			
13.00-16.00	L2: Neuroanatomical correlation of	Lecture	
	neurological signs and symptoms	Class discussion	
	L2.1: Abnormal movement – basal		Vorasith
	ganglia lesion		
	L2.2: Cortical lesions		Vorasith

27 Sep 2021	L14: Electrodiagnostic in clinical setting	Lecture	Vorasith
(Mon)		Class discussion	
9.00-12.00			
13.00-16.00	L15: Drug design for precision medicine	Lecture	Jiraporn
		Class discussion	
28 Sep 2021	L10: Neurological aspect of sleep	Lecture	Lunliya
(Tue)	medicine and visiting 24-hour EEG	Class discussion	
9.00-12.00	monitoring unit		
1 Oct 2021	L12: Psychosis and Schizophrenia	Lecture	Apichart
(Fri)		Class discussion	
9.00-12.00			
13.00-16.00	L13: Case studies in Psychiatry	Case observation	Apichart
		Demonstration	
5 Oct 2021	Written examination (case-based	-	Somsong
(Tue)	approach)		
9.00-12.00			
13.00-16.00	Written examination (essay questions)	-	Somsong
8 Oct 2021	Student presentation	Class discussion	Vorasith
(Fri)	(1) Personality disorders		
9.00-12.00	(2) Anxiety disorders		
	(3) Eating and Gender disorders		

# **Assessment criteria:**

Assessment criteria	Assessment method	Scoring rubrics
Written examination	(1) Case-based	Scoring directly from
(60%)	approach	true/false answer
	(2) Essay questions	
Student Reports (20%)	(1) Reports	Scoring directly from
		quality of report
Presentation of assigned	(1) Short presentation	(1) Information quality and
topic (10%)		organization of topic
		presented
		(2) Verbal communication
		and English proficiency
		(3) Non-verbal
		communication
		(4) Visual tools
Class attendance and	(1) Numbers of classes	Scoring directly from times
participation in in-class	signed in	of signing in
discussion (10%)	(2) Direct observation	

Student's achievement will be graded using symbols: A, B+, B, C+, C, D+, D and F based on the criteria as follows:

Percentage	Grade
85 -100	A
80 - 84	B+
70 - 79	В
60 - 69	C+
50 - 59	С
45 - 49	D+
40 - 44	D
< 40	F

Presentation performance evaluation rubric (10% of total score)					
Criteria	Excellent	Very good	Adequate	Limited	Poor
	(score = 5)	(score = 4)	(score = 3)	(score = 2)	(score = 1)
Information	Main points are	Main points are	Main points are	Main points are	Main points are
quality and	explicitly	presented with	somewhat clear	not clear and	missed and have
organization of	presented with	good amount of	but could add	lack detail.	no detail.
topic presented	impressive	detail.	some more	Information is	Information is
(including	detail and	Information is	detail.	loosely	disorganized
answering the	organization.	well-organized	Information is	organized and	and off-topic.
questions)	Information is	and linked to the	organized and	some are off-	
(2.5%)	directly linked	topic given.	linked to the	topic.	
	to the topic of		topic given.		
Vanhal	presentation.	Carantan's artis	Caralan's as	Carantan's and	Cmanlan C. H. C.
Verbal communication	Speaker's voice	Speaker's voice	Speaker's voice	Speaker's voice	Speaker fails to
	is very steady, clear and	is steady and confident.	is moderately confident but	is unsteady and lacks confident.	deliver proper
and English	confident.		could be		presentation orally. Unable
proficiency (2.5%)		Spoken language is		Use of spoken language needs	to deliver
(2.5%)	Spoken language is very	fluent and	developed. Spoken	to be improved,	presentation via
	fluent and	mostly	language is	and many errors	spoken English
	grammatically	grammatically	mediocre and	can be	language.
	corrected.	corrected.	has some	recognized.	language.
	corrected.	corrected.	grammatical	recognized.	
			errors.		
Non-verbal	Speaker appears	Speaker appears	Speaker appears	Speaker appears	Speaker is
communication	to be	to be fairly	to be generally	uneasy, insecure	obviously
(2.5%)	comfortable and	confident. Eye	at ease.	or panicked.	uncomfortable
,	confident.	contacts and	Moderate use of	Eye contact and	for presentation.
	Effective uses of	gestures are	eye contact and	gesture are	No eye contact
	eye contacts and	generally used.	gesture but not	rarely used.	or gesture is
	gestures are		very effective.	-	presented.
	presented to		-		
	support the				
	presentation.				
Visual tools	Visual aids are	Visual aids are	Visual aids are	Limited visual	No visual aids
(2.5%)	very creative,	typically clear	good in terms of	aids are used or	are used, and
	easy to read and	and easy to	quality, but	difficult to help	presentation is
	greatly enhance	follow.	some points can	audiences	not interested by
	presentation.		be improved.	follow the topic.	audiences.

Date revised: September 20, 2021