Course Syllabus

MBNS603 Neuropsychopharmacology Academic year 2019

Course ID and Name: MBNS603 Neuropsychopharmacology

Course coordinator: Prof. Piyarat Govitrapong and Dr. Chutikorn Nopparat

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Instructors:

1. Prof. Piyarat Govitrapong
2. Prof. Banthit Chetsawang
3. Assoc. Prof. Wipawan Thangnipon
4. Asst. Prof. Vorasith Siripornpanich
5. Asst. Prof. Sujira Mukda
6. Lect. Chutikorn Nopparat

Credits: 2 (2-0-4)

Curriculum: Master of Science Program in Neuroscience
(required course)
Doctor of Philosophy Program in Neuroscience
(required course for student from other fields or B.Sc.)

Semester offering: Second semester

Pre-requisites: (none)

Expected learning outcomes:

1. Explain the principle concept of pharmacology and pharmacology relation with psychiatric disorders in the nervous system (PLO1)
2. Explain the possible causes of neurological disorders integrating with psychological effect and the treatment (PLO1)
3. Analyze and compare pharmacological processes of drug to treatment in neurological and psychiatric disorders (PLO1)
4. Assess and translate scientific evidence from clinical symptom and pathology of disease to the mechanism of disease and drug approach (PLO1) (PLO6)

Alignment of teaching and assessment methods to course learning outcome:

Course learning outcome	Teaching method	Assessment methods
1 Explain the principle concept of pharmacology and pharmacology relation with psychiatric disorder in the nervous system	(1)Lecture	(1)Written examination
2. Explain the possible causes of neurological disorders integrating with psychological effect and the treatment	(1)Lecture	(1)Written examination
3. Analyze and compare pharmacological processes of drug to treatment in neurological and psychiatric disorders	(1)Lecture (2)class discussion	(1)Written examination (2) In-class discussion
4. Assess and translate scientific evidence from clinical symptom and pathology of disease to the mechanism of disease and drug approach	(1)Lecture (2)class discussion (3) Individual assignment	(1)Written examination (2) In-class discussion (3) Presentation of assigned topic

Course description:

Drug actions on the nervous system comprises areas of investigation of critical importance to science and medicine; the mechanisms by which drugs alter brain functions; medications used to treat a wide range of neurological and psychiatric disorders as well as drugs of abuse

Course schedule:

Date: Monday – Wednesday and Friday

Time: 09:00 – 11:00

Room A107

Date/Time	Topic/Details	Number of Hours	Lecturer
Mon, Jan 6 09:00-11:00 (1)	Basic principles of neuropsychopharmacology	2	Piyarat
Tue, Jan 7 09:00-11:00 (2)	ANS: cholinergic drugs	2	Piyarat
Wed, Jan 8 09:00-11:00 (3)	ANS: adrenergic drugs	2	Piyarat
Fri, Jan 10 09:00-11:00 (4)	Drugs for the treatment of movement disorders	2	Sujira
Mon, Jan 13 09:00-11:00 (5)	Antipsychotics	2	Piyarat
Tue, Jan 14 09:00-11:00 (6)	Antidepressants and anxiolytics	2	Piyarat
Wed, Jan 15 09:00-11:00 (7)	Drugs for the treatment of sleep disorders	2	Sujira
Mon, Jan 20 09:00-16:00	**Examination (L1-L7)**		Somsong
Tue, Jan 21 09.30-11.30 (8)	Drugs for cognitive disorders and Alzheimer's disease	2	Wipawan

Wed, Jan 22 09.30-11.30 (9)	Drugs for brain hyperexcitation: Epilepsy and migraine	2	Vorasith
Fri, Jan 24 09.30-11.30 (10)	Drugs for brain development disorders: ADHD and autism	2	Vorasith
Mon, Jan 27 09.30-11.30 (11)	Drugs treatment for childhood neurological and psychiatric disorders	2	Vorasith
Tue, Jan 28 09.30-11.30 (12)	Narcotic & non-narcotic analgesics	2	Chutikorn
Date/Time	**Topic/Details**	**Number of Hours**	**Lecturer**
Wed, Jan 29 09.30-11.30 (13)	Reinforcement and addictive disorders	2	Piyarat
Fri, Jan 31 09.30-11.30 (14)	Molecular strategies in neuropsychopharmacology, gene therapy and pharmacogenomics	2	Banthit
Tue, Feb 4 9:00-16:00	**Examination (L8-L14)**		Somsong
Fri, Feb 7 09:00-16:00 (15)	Student presentation: Recent concepts on CNS drugs		Piyarat

Assessment Criteria:

Assessment criteria	Assessment method	Scoring rubrics
Written examination (80%)	(1) Multiple choices questions (2) Short essay questions	Scoring directly from true/false answer
Presentation of assigned topic (10%)	(1) Short presentation	(1) Information quality and organization of topic presented (2) Verbal and non-verbal communication and English proficiency (3) Critical thinking (4) Visual tools

Class attendance and participation in in-class discussion (10%)	(1) Numbers of classes signed in (2) Direct observation	Scoring directly from times of signing in

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	B
60 - 69	C+
50 - 59	C
45 - 49	D+
40 – 44	D
< 40	F