

**Course Syllabus**  
**MBNS 755 Advanced Neuroscience**  
**Academic Year 2-2022**

**Course ID and Name:** MBNS 755 Advanced Neuroscience

**Course Coordinator:** Asst. Prof. Sukonthar Ngampramuan, Ph.D.

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**Instructors:**

1. Prof. Banthit Chetsawang, Ph.D.
2. Assoc. Prof. Nuanchan Chutabhakdikul, Ph.D.
3. Assoc. Prof. Doctor. Vorasith Siripornpanich, M.D., Ph.D.
4. Asst. Prof. Sujira Mukda, Ph.D.
5. Asst. Prof. Sukonthar Ngampramuan, Ph.D.
6. Dr. Jiraporn Panmanee, Ph.D.

**Supporting Staff:**

1. Mrs. Somsong Phengsukdaeng
2. Mrs. Sasithorn Prommet

**Credits:** 2 (2-0-4)

**Curriculum:** Doctor of Philosophy Program in Neuroscience  
Ph.D. plan 2.1, 2.2 (required course)

**Semester offering:** Second semester

**Pre-requisites:** None

**Course learning outcomes (CLOs):**

Upon completion of this course, students are able to:

1. Possess broad, profound advanced knowledge and cutting-field for neuroscience research (R) (PLO 1, PLO 2)
2. Capable of tracking advancements and shifting trends in neuroscience knowledge (R) (PLO 2, PLO 3)
3. Present and discuss the novel research ideas (R) (PLO1,PLO4,PLO5)

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

Course learning outcome	Teaching method	Assessment method
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<b>CLO1:</b> Possess broad, profound advanced knowledge and cutting-edge tools for neuroscience research (PLO 1, PLO 2)	(1) Lecture (2) Class discussion (3) student active learning	(1) assignment (2) In-class discussion
<b>CLO2:</b> Capable of tracking advancements and shifting trends in neuroscience knowledge (PLO 2, PLO 3)	(1) Lecture (2) Class discussion (3) student active learning	(1) assignment (2) In-class discussion
<b>CLO3:</b> . Present and discuss the novel research ideas (PLO1,PLO4,PLO5)	Presentation and discussions	(1) Student presentation (2) In-class discussion (3) Oral presentation score sheet

### Course Description:

Advanced knowledge and cutting-edge tools for neuroscience research; tracking advancements and shifting trends knowledge in neuroscience; present and discuss the novel research ideas.

### Course schedule:

**Date:** Monday, Wednesday, Friday

**Time:** 09.30 – 11.30, 13.00-15.00

**Venue:** Classroom and Online teaching by zoom meeting

No	Date/	Time	Topic/Details	Lecturer
1	30 Jan 2023	09.30-11.30	<b>L1:</b> Introduction to Advance Neuroscience The Next 50 Years of Neuroscience	Sukonthar
2	30 Jan 2023	13.00-15.00	<b>L2:</b> Neuroimmunology	Banthit
3	1 Feb 2023	09.30-11.30	<b>L3:</b> To be announced	Nuanchan
4	1 Feb 2023	13.00-15.00	<b>L4:</b> To be announced	Vorasith
5	3 Feb 2023	09.30-11.30	<b>L5:</b> To be announced	Sujira
6	3 Feb 2023	13.00-15.00	<b>L6:</b> Proteomics in neuroscience	Jiraporn
7	6 Feb 2023	09.30-11.30	<b>L7:</b> From systems to behaviors	Sukonthar
8	6 Feb 2023	13.00-15.00	<b>L8:</b> To be announced	Anuck

No	Date/	Time	Topic/Details	Lecturer
9	7-10 Feb 2023		Assignment workout	
10	13 Feb 2023	09.30-11.30	L9: To be announced	Sukonthar
11	13 Feb 2023	13.00-15.00	L10: To be announced	Banthit
12	15 Feb 2023	09.30-11.30	L11: To be announced	Vorasith
13	15 Feb 2023	13.00-15.00	L12: To be announced	Sujira
14	17 Feb 2023	09.30-11.30	L13: To be announced	Jiraporn
15	17 Feb 2023	13.00-15.00	L14: To be announced	Anuck
15	24 Feb 2023	09.30-11.30	Student presentation	Sukonthar And all staff

### Assessment Criteria:

Assignment 40%

Presentation 30%

Class discussion 20%

Class attendance 10%

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	Description
85-100	A	Excellent
80-84	B+	Very good
70-79	B	Good
60-69	C+	Fairly good
50-59	C	Fair
45-49	D+	Poor
40-44	D	Very poor
< 40	F	Fall

Date revised: September 17, 2022

