

Course Syllabus
MBNS 790 Doctoral Seminars in Neuroscience
Academic Year 1-2026

Course ID and Name: MBNS 790 Doctoral seminars in Neuroscience

Course Coordinator: Asst. Prof. Jiraporn Panmanee

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Instructors:

1. Prof. Dr. Banthit Chatsawang (Banthit.che@mahidol.ac.th)
2. Assoc. Prof. Dr. Nuanchan Chutabhakdikul (Nuanchan.chu@mahidol.ac.th)
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9. Lecturer Dr. Ekkaphot Khongkla (Ekkaphot.kho@mahidol.ac.th)
10. Lecture Dr. Sumeth Klomchitcharoen (sumeth.klo@mahidol.ac.th)

Supporting Staff:

1. Mrs. Somsong Phengsukdaeng
2. Mr. Prapan Premsawat

Credits: 1 (1-0-2)

Curriculum: Doctor of Philosophy Program in Neuroscience (required course)

Semester offering: First semester

Pre-requisites: None

Course learning outcomes (CLOs):

Upon completion of this course, students are able to:

1. Searching pieces of literature to explore up-to-date neuroscience research. Review and summarize research findings from several original articles (PLO2)
2. Interpret new knowledge from a variety of neuroscience disciplines to fill the knowledge gaps and to develop future research questions (PLO3)

3. Communicate scientific ideas, procedures, results, and conclusions using appropriate language and formats (PLO5)
4. Demonstrate ethical awareness in academic presentation including; accurate acknowledgment of authors, accurate citation of sources, and avoiding plagiarism (PLO1)
5. Be an attentive audience, respond constructively by asking appropriate questions, discussing fruitfully, supporting and connecting with others (PLO4)

Alignment of teaching and assessment methods to course learning outcome:

Course learning outcome	Teaching method	Assessment method
CLO1: Searching pieces of literature to explore up-to-date neuroscience research. Review and summarize research findings from several original articles (PLO2)	(1) Assignment (2) Discussion with mentor	(1) Formative assessment by mentor using rubric scoring
CLO2: Interpret new knowledge from a variety of neuroscience disciplines to fill the knowledge gaps and to develop future research questions (PLO3)	(1) Assignment (2) Class discussion and feedback by mentor (3) Practicing scientific presentation	(1) Evaluation of presentation performance using Rubric Scoring
CLO3: Communicate scientific ideas, procedures, results, and conclusions using appropriate language and formats (PLO5)	(1) Mentoring (2) Practicing scientific presentation	(1) Evaluation of presentation performance using Rubric Scoring
CLO4: Demonstrate ethical awareness in academic presentation e.g., citation correctly, avoiding plagiarism (PLO1)	(1) Mentoring (2) Practicing scientific presentation	(1) Evaluation of abstract and presentation slides using Rubric Scoring
CLO5: Be an attentive audience, respond constructively by asking appropriate questions, discussing fruitfully, supporting and connecting with others (PLO4)	(1) Facilitate students' active participation by assigning various roles in seminar class	(1) Scoring for class participation

Course description:

MBNS 790 Doctoral seminars in Neuroscience

Searching and gathering advanced knowledge in neuroscience in the field of interest; Practice scientific presentation skills; Ethics in research citation

Course Schedule

MBNS 790 Doctoral seminars in Neuroscience

Academic Year 2026-1

Date: 11 August – 1 October 2026

Time: Thursday, 9:00am-12:00pm

Venue: 2nd Floor, MaSHARES co-working space @ MB Building

Course schedule: MBNS 691 and MBNS 790 Academic Year 1/2026:

Date	Time	Topic/Details	Speaker
11 Aug, 2026	13:30-15:00	MBNS 691 Course Orientation MBNS 790 Course Orientation	Ekkaphot Jiraporn
3 Sep 2026	10:00-12:00	Special Seminar: Human iPSC-Derived Neuronal Models as a Platform for Investigating Pathogenesis and Therapeutic Strategies in Neuropathic Gaucher Disease	Nithi Asavapanumas (M.D., Ph.D.), Chakri Naruebodindra Medical Institute, Faculty of Medicine Ramathibodi Hospital, Thailand
10 Sep 2026	09.00-10.30	- To be announced -	MBNS 691 Student 1
	10.30 -12.00	- To be announced -	MBNS 691 Student 2
17 Sep 2026	09.00-10.30	- To be announced -	MBNS 691 Student 3
	10.30 -12.00	- To be announced -	MBNS 691 Student 4

Date	Time	Topic/Details	Speaker
24 Sep 2026	09.00-10.30	- To be announced –	MBNS 691 Student 5
	10.30 -12.00	- To be announced –	MBNS 790 Student 1
1 Oct, 2026	9:00-10:30	- To be announced –	MBNS 790 Student 2
	10.30-12.00	- To be announced –	Kohsheen Baliya (Ph.D.)

Important date

Ph.D. Students must submit the seminar topic, the abstract, and reference papers (approved by mentor) within **10 Sep, 2026** by email to jiraporn.pam@mahidol.ac.th

Please use the Abstract Template provided here: [Abstract Template file](#)

Assessment Criteria:

Criteria	Assessment Method	Scoring Rubric
Formative assessment 20%		
Seminar Preparation (20%)	Assessment student's processes to preparing the seminar presentation with rubric scores	1) Responsibility and Punctuality 2) Problem solving and critical thinking skills 3) Ethical conduct
Summative assessments 80%		
Presentation skills (60%)	Assessment of student's scientific presentation skills by teacher, using the rubric scores	(1) Knowledge and Comprehension (2) Ability to delivered presentation in a clear and engaging manner (3) Ability to create of future research questions (3) Ability to answer questions
Peer evaluation (10%)	Assessment of student's scientific presentation skills by peer, using the rubric scores	(1) Knowledge and Comprehension (2) Ability to delivered presentation in a clear and engaging manner (3) Ability to create of future research questions (3) Ability to answer questions

Criteria	Assessment Method	Scoring Rubric
Class attendance and participation (10%)	Teacher records the number of student's signed in to participate the seminar class. Teachers observe and record student's participation in class	(1) Calculate the percent of student attending the seminar classes, total hour is 100%. (2) Student demonstrates as an active audience during seminar such as discussion, asking questions, and comments on other's presentation.

Student's achievement will be graded based on the following criteria:

Percentage	Grades	Descriptions
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

Rubrics scoring

Part A. Seminar Preparation (20%) by the mentor

CLO1: Literature Search and Review (10%)

Criteria	5 Excellent	4 Good	3 Satisfactory	2 Needs Improvement	1 Poor
Selected relevant and recent original research articles	Articles are highly relevant, recent, and from high-quality sources	Mostly relevant and recent articles	Adequate selection of articles	Limited relevance or outdated sources	Inappropriate or insufficient sources
Demonstrated comprehensive literature search	Extensive literature search	Good range of sources used	Adequate search effort	Limited literature search	Minimal evidence of literature search

	with multiple sources				
Connected findings from multiple studies	Excellent synthesis across studies	Good integration of studies	Some connections made	Limited integration	No integration of findings

CLO2 & CLO4: Preparation and Academic Integrity (10%)

Criteria	5 Excellent	4 Good	3 Satisfactory	2 Needs Improvement	1 Poor
Critically evaluated the literature	Insightful critical analysis	Good critical evaluation	Basic evaluation	Limited evaluation	No critical evaluation
Proper citation of sources	All sources cited correctly	Minor citation errors	Several citation errors	Frequent citation errors	Sources not cited
Avoided plagiarism	Fully original presentation with proper attribution	Minor concerns only	Generally acceptable	Questionable attribution	Evidence of plagiarism

Part B. Presentation Skills (60%) by instructors

CLO2: Interpretation and Critical Thinking (20%)

Criteria	5 Excellent	4 Good	3 Satisfactory	2 Needs Improvement	1 Poor
Explained scientific concepts accurately	Concepts explained clearly and accurately	Mostly accurate explanations	Adequate explanations	Several inaccuracies	Major inaccuracies
Interpreted findings correctly	Insightful interpretation	Correct interpretation with minor issues	Adequate interpretation	Misinterpretations present	Incorrect interpretation
Identified limitations of studies	Thorough discussion of limitations	Good discussion	Some limitations identified	Few limitations identified	No limitations discussed
Synthesized knowledge across disciplines	Excellent interdisciplinary synthesis	Good synthesis	Some integration	Limited integration	No synthesis

Proposed future research directions	Innovative and well-justified ideas	Relevant future directions	Basic suggestions	Weak suggestions	No future directions proposed
Identified knowledge gaps in the field	Identified knowledge gaps in the field	Identified knowledge gaps in the field	Identified knowledge gaps in the field	Identified knowledge gaps in the field	Identified knowledge gaps in the field

CLO3: Scientific Communication (20%)

Criteria	5 Excellent	4 Good	3 Satisfactory	2 Needs Improvement	1 Poor
Presentation was logically organized	Excellent structure and flow	Well organized	Adequately organized	Poor organization	Disorganized
Scientific terminology used appropriately	Precise and consistent terminology	Mostly appropriate terminology	Adequate terminology	Inappropriate use at times	Incorrect terminology
Clear explanation of methods and results	Very clear and easy to follow	Mostly clear	Adequately clear	Often unclear	Difficult to understand
Conclusions supported by evidence	Strong evidence-based conclusions	Mostly supported	Adequately supported	Weakly supported	Unsupported conclusions
Time management was appropriate	Excellent timing	Minor deviations	Within acceptable limits	Poor time management	Major timing issues
Visual aids effectively supported communication	Visual aids effectively supported communication	Visual aids effectively supported communication	Visual aids effectively supported communication	Visual aids effectively supported communication	Visual aids effectively supported communication

CLO4: Ethical Presentation Practice (10%)

Criteria	5 Excellent	4 Good	3 Satisfactory	2 Needs Improvement	1 Poor
Figures/tables properly credited	All figures properly credited	Minor omissions	Most credited	Several missing credits	No credits provided

References presented correctly	Complete and accurate references	Minor formatting errors	Adequate referencing	Multiple errors	References absent
Data presented accurately	Accurate and unbiased presentation	Minor inaccuracies	Generally accurate	Several inaccuracies	Misrepresented data

CLO5: Discussion and Question Handling (10%)

Criteria	5 Excellent	4 Good	3 Satisfactory	2 Needs Improvement	1 Poor
Responded accurately to questions	Accurate, confident, and detailed responses	Mostly accurate responses	Adequate responses	Limited responses	Unable to answer
Demonstrated critical thinking during discussion	Excellent critical analysis	Good critical thinking	Adequate critical thinking	Limited critical thinking	No critical thinking demonstrated
Engaged constructively with audience comments	Highly engaged and respectful	Good engagement	Adequate engagement	Limited engagement	No engagement

Part C. Peer Evaluation (10%) by students

Criteria	5 Excellent	4 Good	3 Satisfactory	2 Needs Improvement	1 Poor
Presentation improved my understanding of the topic	Significantly improved understanding	Improved understanding	Moderately helpful	Slightly helpful	Not helpful
Presenter communicated ideas clearly	Very clear communication	Mostly clear	Adequately clear	Often unclear	Difficult to follow
Presenter demonstrated critical analysis	Excellent analysis	Good analysis	Adequate analysis	Limited analysis	No analysis
Presenter showed academic integrity	Excellent scholarly practice	Good practice	Acceptable practice	Some concerns	Serious concerns

Presenter engaged effectively with the audience	Highly engaging	Engaging	Moderately engaging	Limited engagement	Not engaging
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Part D. Attendance and Participation (10%) by the course coordinator

Criteria	Yes	No
Attended seminar session	<input type="checkbox"/>	<input type="checkbox"/>
Submitted peer evaluation form	<input type="checkbox"/>	<input type="checkbox"/>
Participated in discussion	<input type="checkbox"/>	<input type="checkbox"/>
Asked or answered questions appropriately	<input type="checkbox"/>	<input type="checkbox"/>

Date revised: June 2026