NS8001: NEUROSCIENCE RESEARCH SEMINAR

Effective Term
Semester B 2024/25

Part I Course Overview

Course Title
Neuroscience Research Seminar

Subject Code
NS - Neuroscience
Course Number
8001

Academic Unit
Neuroscience (NS)

College/School
College of Biomedicine (BD)

Course Duration
Non-standard Duration

Other Course Duration
The whole candidature period of the students

Credit Units
3

Level
R8 - Research Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
Nil

Precursors
Nil

Equivalent Courses
Nil

Exclusive Courses
Nil

Part II Course Details

Abstract

This course aims to engage students in active and effective discussions on their own scientific research projects with teachers and peers. Through presentations in seminars and attending seminars from other peer students, the students will benefit in multiple ways that can promote their future development in academia. These include:

(i) broadening the scientific horizon by being introduced to various approaches of advanced neuroscience research;

(ii) developing the critical scientific mentality in formulating hypothesis, identifying current gaps of knowledge, choosing the appropriate methodologies, interpreting scientific data and designing future experiments;

(iii) growing confidence to present and exchange ideas in front of audience;

(iv) exposure to different presentation skills and develop his/her own way to present logically and clearly; and

(v) developing effective communications through scientific writing. The students will also write peer reviews on others' presentations, thereby providing opportunities for them to learn from each other through constructive feedbacks.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Formulate hypothesis and identify gaps of current knowledge	10	x	x	
2	Apply different methodologies to address the biological questions	10		x	x
3	Present and discuss scientific findings effectively	40	x	x	x
4	Develop critical interpretation of scientific data	20	x	x	x
5	Communicate idea effectively through writing	20		x	x

A1: Attitude
Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability
Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments
Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Seminar presentation and attendance	Oral presentation of knowledge and discussion of ideas	1, 2, 3, 4	
2	Peer review report	Writing review of presentations from peer students	3, 4, 5	

Additional Information for LTAs

The seminar is scheduled with presentation(s) by PhD students of the Department of Neuroscience on the progress of their research projects.

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Attendance	1, 2	20	Each PhD student within the Department of Neuroscience is required to participate in the course with at least 70% attendance in each academic year.
2	Seminar Presentation	1, 2, 3, 4	50	Apart from the first year PhD student who gives a brief presentation to introduce himself/herself and their proposed research projects, each PhD student should present at the Seminar once a year after their first year of study. The student is expected to use this opportunity to introduce his/her research to a wide audience of neuroscientists, grow their confidence to communicate effectively with fellow scientists, inspire scientific discussions, and foster potential collaborations with other laboratories within the Department.

3	Peer review report	1, 2, 3, 4, 5	30	Each student is required to submit two reports (each around 500 words) that review two chosen seminars given by other students in the course in his/her first year of study. The report should include: (i) a brief summary of the presented project; (ii) what the student likes about the seminar; (iii) constructive comments on how the seminar can be further improved; (iv) scientific questions related to the project. The reports will be provided anonymously back to the presenters to strengthen their future presentations.

Continuous Assessment (%)

100

Assessment Rubrics (AR)

Assessment Task

Attendance

Criterion

The student is able to demonstrate motivation and passion for dissemination and discussion of scientific findings

Pass (P)

(P) Achieve at least 70% of attendance

Failure (F)

(F) Fail to achieve at least 70% attendance in each year.

Assessment Task

Presentation

Criterion

The student is able to:
i) present the rationale and significance of his/her study;
ii) introduce the methodologies used in the study;
iii) present and interpret his/her data and make the appropriate conclusions;
iv) address limitations of the study and provide future research direction

Pass (P)

(P) Able to deliver a clear and logical presentation and address audience questions effectively

Failure (F)

(F) Unable to deliver a clear and logical presentation; fail to address audience questions effectively

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Assessment Task

Peer review

Criterion

The student is able to critically review the presentations of peers and provide constructive feedback to the presenters

Pass (P)

(P) Write two reports that present the idea clearly with well organization and plagiarism check less than 15 % similarity

Failure (F)

(F) Unable to write two reports that present the idea clearly with well organization, or plagiarism check more than 15 % similarity

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Part III Other Information

Keyword Syllabus

The syllabus is neuroscience-related, but is customized based on the research topics of individual presenter.

Reading List

Compulsory Readings

	Title
1	N/A

Additional Readings

	Title
1	N/A