

**City University of Hong Kong**  
**Course Syllabus**

**offered by Department of Neuroscience**  
**with effect from Semester A 2023/2024**

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**Part I Course Overview**

<b>Course Title:</b>	Research Project in Neuroscience
<b>Course Code:</b>	NS6001
<b>Course Duration:</b>	Two semesters
<b>Credit Units:</b>	6
<b>Level:</b>	P6
<b>Medium of Instruction:</b>	English
<b>Medium of Assessment:</b>	English
<b>Prerequisites:</b> <i>(Course Code and Title)</i>	Nil
<b>Precursors:</b> <i>(Course Code and Title)</i>	Nil
<b>Equivalent Courses:</b> <i>(Course Code and Title)</i>	Nil
<b>Exclusive Courses:</b> <i>(Course Code and Title)</i>	Nil

## Part II Course Details

### 1. Abstract

*(A 150-word description about the course)*

The aim of the course is to give the students an opportunity to perform a research project within the field of neuroscience or related area under supervision according to an individual study plan that commonly written by the supervisor. With these trainings, the students will be able to write a research proposal and report as well as present the research results in a poster or PowerPoint-based format. Students who plan to pursue PhD studies in the future are strongly advised to take this elective to enrich themselves and gain valuable research experience during a two semester-long study period.

### 2. Course Intended Learning Outcomes (CILOs)

*(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)*

No.	CILOs <sup>#</sup>	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Perform a research project according to an individual study plan with independence, critical and creative thinking.	25	✓		
2.	Present project and results logically, able to answer questions.	20	✓	✓	
3.	Formulate new scientific questions that came up during project performance.	20	✓	✓	✓
4.	Able to identify and solve the research problems.	15		✓	✓
5.	Prepare a coherent dissertation with effective presentation of literature and analysis of results.	20		✓	✓
		100%			

*\* If weighting is assigned to CILOs, they should add up to 100%.*

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 self-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.*

### 3. Teaching and Learning Activities (TLAs)

(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.					Hours/week (if applicable)
		1	2	3	4	5	
Project Consultation	Consultation sessions will be made up via instructor and students to assist students in identifying appropriate project topics and to supervise the project progress	✓	✓	✓		✓	
Individual works	Learn through individual work to help students develop the independent capability of formulating and solving problems via sufficient diligence.	✓		✓	✓		
Lab based research training	Participation in seminars, journal clubs or similar activities in the respective scientific environment	✓	✓	✓	✓	✓	

### 4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.					Weighting*	Remarks
	1	2	3	4	5		
Continuous Assessment: <u>  100  </u> %							
Project Proposal			✓	✓		20%	
Project Milestone Meetings	✓		✓	✓		20%	
Dissertation	✓	✓	✓	✓	✓	40%	
Oral Presentation		✓				20%	
Examination: <u>  0  </u> % (duration: <u>      </u> , if applicable)							

\* The weightings should add up to 100%.

100%
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## 5. Assessment Rubrics

*(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)*

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
1. Project Proposal	The content, literature review and logic of the proposal (70%). Hypothesis and scientific questions (30%)	Demonstrates a high level of knowledge and integration regarding content, literatures, and issues. Provide extensive with different possibilities with detailed explanations for hypothesis and scientific questions to be addressed.	Demonstrates a well-developed knowledge regarding content, literatures, and proposed topics. Provide clear hypothesis for scientific questions.	Demonstrates a basic knowledge regarding content, literatures, and proposed topics. Provide hypothesis partially for scientific questions	Lack ability to demonstrate the content, literatures, and proposed topics without logic and details.
2. Project Milestone Meetings	Show a professional attitude regarding time planning, collaboration, and the link between theoretical and practical knowledge.	High	Significant	Moderate	Not even reaching marginal levels
3. Dissertation	To be able to define the scientific concept, principles and research questions clearly and logical with integration. Able to present and analyze the data, discuss current limitations. Propose possible solutions and explanations will add additional mark.	Demonstrates a high level of understanding for the content with integration. Able to present and analyze a substantial amount of the data, discuss current limitations.	Demonstrates understanding of the content and develops deep thinking for discussed issues. Present and analyze the data correctly.	Demonstrate a basic content. The discussed issues are easy to understand but lacking of critical data.	Do not submit the essay or not involved in any discussion. The content is poorly written without data.
4. Oral Presentation	To be able to define the scientific concept, principles and research questions clearly and logical with integration. Able to present and analyze the data, discuss current limitations. Proper answer questions with extensive explanations will add additional mark.	High	Significant	Moderate	Not even reaching marginal levels

### **Part III Other Information** (more details can be provided separately in the teaching plan)

#### **1. Keyword Syllabus**

*(An indication of the key topics of the course.)*

No formal syllabus. Students will be required to undertake individually supervised research and dissertation preparation.

#### **2. Reading List**

##### **2.1 Compulsory Readings**

*(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)*

Individual reading list will be established in the study plan.

##### **2.2 Additional Readings**

*(Additional references for students to learn to expand their knowledge about the subject.)*

Nil