

The Hong Kong University of Science and Technology
Division of Social Science
SOSC2240 Biological Psychology
Spring Semester 2024

	Lecturer	Teaching Assistant
	Dr. Nicolson Siu	Wong Ka Yee
Office:	Room 2371	Room 2359
Email:	nicsiu@ust.hk	egkayee@ust.hk
Phone	2358-7839	-
Consultation	By appointment	By appointment

Lecture Time: Tuesday & Thursday HKT15:00-16:20

Venue: Room 2503 (Lift 25-26)

**The format of the course will follow University guidelines. Consistent with the other SOSC Psychology courses offered, this course will not be recorded.

Course Description

This course introduces the biological approach to psychology. Comparative studies on non-human animals and the issue of genetic inheritance of behavior will be discussed. Emphasis will be placed on key principles of human nervous system function and how they are reflected in human thought and behavior. Key topics covered include the organization of the brain, the visual system, how learning and memory occur in the brain, and the cognitive and behavioral consequences of brain injury and disease.

Intended Learning Outcomes (ILOs)

Upon completion of this course, you should be able to:

1. Describe major signaling mechanisms, structures, and pathways of the human nervous system from functional perspectives.
2. Analyze the relationship between different functional systems of the human brain and mind and behavior.
3. Analyze the implications of brain damages on cognitive and behavioral output.
4. Describe methods used in brain research and analyze their advantages and limitations.
5. Identify the limitations of the biological approach to psychology and the limitations of current knowledge about the relationship between brain activity and mental function.

Assessment Scheme

Assessment Tasks	Alignment of ILOs	Weighting
1. Tutorial Assignments	1,2,3	30%
2. Group Project Presentation	2,3,4,5	25%
3. Individual Report	2,3,4,5	15%
4. Quizzes	1,2,3,4,5	30%

*1. Tutorial Assignment (15%*2)*

You will have to complete two tutorial assignments. Guidelines of the assignments will be distributed on Canvas in due course.

2. Group Project Presentation (25%)

You will be randomly assigned in a team of 4-5 people to prepare a 20-minute presentation on a topic related to biological psychology. Further details and guidelines will be provided in due course. You will evaluate the contributions of fellow members towards the completion of the project using iPeer. Each person's individual grade will be adjusted based on the peer evaluation.

3. Individual Report (15%)

It is likely that a presentation would not cover all the prepared materials. Moreover, during the presentation and discussion, opinions and suggestions will be received from other students and the lecturer. Hence, an individual written report is evidential to show the effort and the understanding towards the investigated topic.

4. Quizzes

There will be two quizzes in the form of multiple-choice questions. The duration is 1 hour. Materials discussed in the lectures and tutorials will be covered.

- Quiz 1 covers Week # 1-6
- Quiz 2 covers Week # 7-12

Remarks:

There will be **NO** make-up quizzes in this course. This means that if you miss a quiz, you will simply lose the number of points associated with it. Your grade will therefore be computed as if that entry was a zero. Make-up quiz will be granted only to absentees with medical condition, which is supported by a validated medical certificate and presented to our teaching team **within 24 hours**. Such notes must be in the form of a written note from your doctor, attesting to the fact that on the day of the test you were too ill to attend the quiz. All make-ups consist of long answers and an oral session.

Academic Integrity

All of you are expected to observe the University's policies regarding academic integrity (<https://acadreg.ust.hk/generalreg.html#b>). Academic dishonesty such as plagiarism and cheating usually results in a reduced or failing grade in eth course. Please consult the teaching team if you are not clear about the guidelines.

Course Communication Platform

All lecture materials and announcements will be posted on CANVAS. Be sure to check CANVAS from time to time for any updated news.

Some Other Notes

- ***Interaction in class*** – I believe interactions (both verbal and non-verbal) between the lecturer and the students (and among students) are one of the key ingredients to an optimal learning experience. Your active participation in class discussion or activities will not only enhance your learning, but also motivate the teaching team to do better! Stay behind the class and share with me your thoughts about the course contents.
- ***Lecture slides*** – Lecture slides will be posted to CANVAS before each class, but the contents will be a bit different from the displayed slides as I hope to encourage you to take your own notes. Note-taking facilitates your reflection and assimilation of the lecture contents.
- ***Penalties*** – Score deduction applies to any assignments over the word limit. Details can be found in the assignment guidelines.
- ***Late submission*** – Submissions received less than 5 hours after the deadline will not be penalized. No submissions will be accepted after 5pm HKT on the due date.
- ***Communication*** – Please expect that your emails will be responded to during weekdays 10am to 6pm HKT.
- ***Your feedback*** – Your opinions about the course are very valuable to help me improve the course. Feel free to drop by to talk to me. A course evaluation will also be held at the end of the course.

Suggested Textbook

Kalat, J. W. (2023). Biological psychology (14th ed.). Boston, MA, USA: Cengage.

Teaching Schedule

Week	Date	Topic	Deadline
1.	1 Feb	Introduction	
2.	6 Feb	Nerve Cells and Impulses	
	8 Feb	Tutorial 1: Project Briefing	
3.	13 Feb	Lunar New Year (No Class)	
	15 Feb		
4.	20 Feb	Synapse	
	22 Feb	Neuroanatomy & Neurodevelopment	Finalized Group List
5.	27 Feb	Research Methods	
	29 Feb	Tutorial 2: EEG	
6.	5 Mar	Vision	
	7 Mar		Tutorial 2 Assignment
7.	12 Mar	Other Sensory Systems	
	14 Mar	QUIZ 1 (Coverage: Week 1 – Week 6)	
8.	19 Mar	Sleep and Brain Mechanism	
	21 Mar	Learning and Memory	
9.	26 Mar		
	28 Mar	<i>Mid-Term Break</i>	
	2 Apr		
	4 Apr	Ching Ming Festival (No Class)	
10.	9 Apr	Tutorial 3: Memory	
	11 Apr	Group Project Consultation	
11.	16 Apr	Emotion	Tutorial 3 Assignment
	18 Apr	Neurodevelopmental Disorders	
12.	23 Apr	Neurodegenerative Disorders	
	25 Apr	QUIZ 2 (Coverage: Week 7-12)	
13.	30 Apr	Tutorial 4: Neuroplasticity	Power-point Submission
	2 May	Group Project and Q & A Sessions	
14.	7 May	Group Project and Q & A Sessions	
	9 May	Group Project and Q & A Sessions	
	13 May	-	Individual Report Peer Evaluation