The Hong Kong University of Science and Technology
Division of Social Science
SOSC2240 Biological Psychology
Fall Semester 2022

	Lecturer	Teaching Assistant
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Consultation	By appointment	By appointment

Lecture Time: Monday and Wednesday 12:00pm-1:20pm

Venue: Room 2404 (Lift 17-18)

**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 5-7 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 and structural questions. The duration is 1 hour. Materials discussed in the lectures and tutorials are tested

- 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. 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. (2019). Biological psychology (13th ed.). Boston, MA, USA: Cengage.

Teaching Schedule

Week	Date	Topic	Deadline
1.	5 Sept	Introduction	
	7 Sept	Nerve Cells and Impulses	
2.	12 Sept	*The second day following the Chinese Mid-Autumn Festival (Holiday)*	
	14 Sept	Synapse	
3.	19 Sept	Neuroanatomy & Neurodevelopment	**Finalized Group List**
	21 Sept		
4.	26 Sept	Research Methods	
	28 Sept	**Tutorial 1: EEG**	
5.	3 Oct	Vision	
	5 Oct		**Tutorial Assignment 1**
6.	10 Oct	Other Sensory Systems	
	12 Oct		
7.	17 Oct	**QUIZ 1 (Coverage: Week 1 – Week 6)**	
	19 Oct	Sleep and Brain Mechanism	
8.	24 Oct		
	26 Oct	**Tutorial 2: Chronotype**	
9.	31 Oct	Learning and Memory	
	2 Nov		**Tutorial Assignment 2**
10.	7 Nov	*Mid-Term Break*	
	9 Nov	**Group Project Consultation**	
11.	14 Nov	Neurodevelopmental Disorders	
	16 Nov	**Tutorial 3: Neuroplasticity**	
12.	21 Nov	Neurodegenerative Disorders	
	23 Nov	**QUIZ 2 (Coverage: Week 7-12)**	
13.	28 Nov	**Group Project and Q & A Sessions**	
	30 Nov	**Group Project and Q & A Sessions**	
14.	7 Dec	-	**Individual Report**