

THE EDUCATION UNIVERSITY OF HONG KONG

Course Outline

Part I

Programme Title	: Bachelor of Social Sciences (Honours) in Psychology/ All Undergraduate Programmes
Programme QF Level	: 5
Course Title	: Biological Psychology
Course Code	: PSY2001
Department	: Psychology
Credit Points	: 3
Contact Hours	: 39
Pre-requisite(s)	: Basic Principles of Psychology (or equivalent)
Medium of Instruction	: EMI
Course Level	: 2

Part II

The University's Graduate Attributes and seven Generic Intended Learning Outcomes (GILOs) represent the attributes of ideal EdUHK graduates and their expected qualities respectively. Learning outcomes work coherently at the University (GILOs), programme (Programme Intended Learning Outcomes) and course (Course Intended Learning Outcomes) levels to achieve the goal of nurturing students with important graduate attributes.

In gist, the Graduate Attributes for Sub-degree, Undergraduate, Taught Postgraduate, Professional Doctorate and Research Postgraduate students consist of the following three domains (i.e. in short "PEER & I"):

- Professional Excellence;
- Ethical Responsibility; &
- Innovation.

The descriptors under these three domains are different for the three groups of students in order to reflect the respective level of Graduate Attributes.

The seven GILOs are:

1. Problem Solving Skills
2. Critical Thinking Skills
3. Creative Thinking Skills
- 4a. Oral Communication Skills

- 4b. Written Communication Skills
5. Social Interaction Skills
6. Ethical Decision Making
7. Global Perspectives

1. Course Synopsis

This course aims to introduce students to the biological basis of human behavior and psychological processes. Topics include the structure and functions of the brain and the nervous system, multiple sensory systems, biological rhythms, and the biological basis of emotion, cognition, and learning. Students will learn and critically evaluate the contributions of biological knowledge to the understanding of psychological processes through lectures and participation in hands-on activities.

2. Course Intended Learning Outcomes (CILOs)

Upon completion of this course, students will be able to:

- CILO₁ Understand the major concepts, theories, and research findings in biological psychology;
- CILO₂ Describe the basic structures and functions of the human brain and nervous system;
- CILO₃ Evaluate critically the current evidence on the association between biological structures and functions and human behavior;
- CILO₄ Understand the research design and methodology for studying the biological basis of human behavior in an ethical manner;
- CILO₅ Apply knowledge and principles in biological psychology to understand human behavior in different settings and to solve real-life problems.

3. Content, CILOs and Teaching & Learning Activities

Course Content	CILOs	Suggested Teaching & Learning Activities
Introduction	CILO ₁ ,	Lecture and class activities
Neurons and action potentials	CILO _{1-3,5}	Lecture, class activities, and videos
Communication at synapses	CILO _{1-3,5}	Lecture, class activities, and videos
Neuroanatomy	CILO _{1-3,5}	Lecture, class activities, and videos
Research methods for studying brain-behavior relationships, research ethics in biological psychology research	CILO ₁₋₅	Lecture, class activities, and videos
Sensory systems: vision	CILO _{1-3,5}	Lecture, class activities, and videos
Sensory systems: hearing, the body senses, and the chemical senses	CILO _{1-3,5}	Lecture, class activities, and videos
The biological bases of learning and	CILO ₁₋₅	Lecture, class activities, and videos

memory		
Emotion, stress, and adaptation	CILO ₁₋₅	Lecture, class activities, and videos
Language	CILO ₁₋₅	Lecture, class activities, and videos
Wakefulness and sleep	CILO ₁₋₅	Lecture, class activities, and videos

4. Assessment

Assessment Tasks	Weighting (%)	CILO
Learning activities - Students will complete self-learning exercises individually on Moodle before class in order to prepare themselves for class discussion.	10%	CILO ₁₋₅
Individual essay - Students will write an 800- to 900-word essay individually. In the essay, students will analyze and interpret data of an assigned research article, and propose the next experiment to be done.	25%	CILO ₁₋₄
Quizzes - The two online or in-class quizzes will consist of multiple-choice and short-answer questions. Questions will assess comprehension and integration of course materials.	65%	CILO ₁₋₅

5. Use of Generative AI in Course Assessments

Please select one option only that applies to this course:

☐ **Not Permitted:** In this course, the use of generative AI tools is not allowed for any assessment tasks.

☒ **Permitted:** In this course, generative AI tools may be used in some or all assessment tasks. Instructors will provide specific instructions, including any restrictions or additional requirements (e.g., proper acknowledgement, reflective reports), during the first lesson and in relevant assessment briefs.

6. Required Text(s)

Kalat, J. W. (2019). *Biological psychology* (13th ed.). Cengage Learning.

[The 12th edition is also fine. The contents are essentially the same across the two editions.]

7. Recommended Readings

Bear, M. F., Connors, B. W., & Paradiso, M. A. (2025). *Neuroscience: Exploring the brain* (5th ed.). Jones & Bartlett Learning.

Cacioppo, J. T., Tassinary, L. G., & Bernston, G. G. (2016). *Handbook of psychophysiology*

(4th ed.). Cambridge University Press.

Carlson, N. R., & Birkett M. A. (2022). *Physiology of behavior* (13th ed.). Pearson Education Limited.

Freberg, L. A. (2023). *Discovering behavioral neuroscience: An introduction to biological psychology* (5th ed.). Cengage Learning.

Kolb, B., & Whishaw, I. Q. (2015). *Fundamentals of human neuropsychology* (7th ed.) Worth Publishers.

8. Related Web Resources

<https://openpress.sussex.ac.uk/introductiontobiologicalpsychology/>

9. Related Journals

Biological Psychiatry

Biological Psychology

Cognitive, Affective, and Behavioral Neuroscience

Cognitive Brain Research

Cognitive Neuropsychology

Human Brain Mapping

Journal of Cognitive Neuroscience

Nature Neuroscience

NeuroImage

Neuropsychology

Neuropsychologia

NeuroReport

Psychophysiology

10. Academic Honesty

The University upholds the principles of honesty in all areas of academic work. We expect our students to carry out all academic activities honestly and in good faith. Please refer to the *Policy on Academic Honesty, Responsibility and Integrity* (<https://www.eduhk.hk/re/uploads/docs/000000000016336798924548BbN5>). Students should familiarize themselves with the Policy.

11. Others

Nil