

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	: Learning Theories and Processes
Course Code	: PSY3021
Department	: Psychology
Credit Points	: 3
Contact Hours	: 39
Pre-requisite(s)	: Basic Principles of Psychology (or equivalent)
Medium of Instruction	: EMI
Course Level	: 3

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

The nature of learning, its components, and how to most efficiently enhance learning have been examined from a number of theoretical, empirical, and applied perspectives. This course aims to provide an overview of the processes responsible for learning. It is designed to enhance students' understanding in two classic learning theories --- classical conditioning and operant conditioning. The application of learning theories to educational and other settings will also be covered.

2. Course Intended Learning Outcomes (CILOs)

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

- CILO₁ Explain and compare major features of learning theories/principles and their underlying processes, extensions, and limitations;
- CILO₂ Discuss factors affecting learning processes and behavioral outcomes;
- CILO₃ Apply learning principles to hypothetical and/or real life situations.

3. Content, CILOs and Teaching & Learning Activities

Course Content	CILOs	Suggested Teaching & Learning Activities
Historical background: Historical background of learning theories; five schools of behaviorism; early theories about the association of ideas.	CILO _{1,2}	Lectures, discussion, online collaborative exercises
General principles of learning Elicited behaviors; habituation; sensitization; opponent-process theory of emotion.	CILO ₁₋₃	Lectures, discussion, demonstrations
Classical conditioning Pavlov's discovery of classical conditioning; basic procedure, components, and measurement of classical conditioning; basic conditioning phenomena; higher order conditioning; theories of associative learning; types of associations; the form of the conditioned	CILO ₁₋₃	Lectures, demonstrations, experiments, online collaborative exercises

response; underlying processes in classical conditioning; applications of classical conditioning and individual differences .		
Operant conditioning The law of effect; the procedure of shaping; principles and measurement of operant conditioning; four types of contingencies; reinforcement schedules; factors affecting performance on reinforcement schedules; theories of reinforcement; token economy; shaping and individual differences.	CILO ₁₋₃	Lectures, demonstrations, experiments, reflective exercises
Avoidance & Punishment Two-factor theory; one-factor theory; learned helplessness; factors influencing the effectiveness of punishment; disadvantages of using punishment; negative punishment; positive punishment; response cost; time-out; extinction; stimulus control.	CILO ₁₋₃	Lectures, discussion, experiments, demonstrations, online collaborative exercises
Choice & Self-Control The matching law; optimization theory; momentary maximization theory; melioration theory	CILO ₁₋₃	Lectures, discussion
Observational learning Theories of imitation; imitation as an operant response; Bandura's theory of imitation; modeling in behavior therapy	CILO ₁₋₃	Lectures, demonstrations, discussion
Rule-governed behavior Personal rules in self-regulation; psychopathology, psychotherapy and rule-governed behavior	CILO ₁₋₃	Lectures, discussion

4. Assessment

Assessment Tasks	Weighting (%)	CILO
a. Individual assignment Students will submit 2 lab reports by completing lab report sheets that are to be downloaded from Moodle. Each report should not be longer than 2 pages. Each report contributes 10%.	20%	CILO ₁₋₃

b. Mid-term quiz A mid-term quiz is designed to assess students' mastery over the two major learning theories. It consists of multiple-choice questions and short questions that test students' understanding of theories and concepts.	30%	CILO ₁₋₃
c. Final exam A final exam is set to assess students' abilities in mastering, applying and synthesizing the theories and concepts explained in this course. It consists of multiple-choice questions and short questions. Test items will be designed to test students' understanding of basic terminology, and elementary concepts, and their ability to integrate and apply these concepts to analyze hypothetical and/or real-life examples. Not all the materials in the textbook will be covered in class, and some materials discussed in class will not be found in the textbook. However, materials for the final exam can be derived from the textbooks, lectures, and assigned readings.	50%	CILO ₁₋₃

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)

Mazur, J. E., & Odum, A. L. (2023). *Learning and behavior* (9th ed.). Routledge.
<https://doi.org/10.4324/9781003215950>

7. Recommended Readings

Bailey, J. S., & Burch, M. R. (2024). *Research methods in applied behavior analysis*. Routledge. <https://doi.org/10.4324/9781003429302>

- Banihashem, S. K., Gašević, D., Noroozi, O., Jarodzka, H., Joosten-ten Brinke, D., & Drachsler, H. (2025). Optimizing formative assessment with learning analytics: A systematic review. *Review of Educational Research*.
<https://doi.org/10.3102/00346543251370753>
- Mayer, G. R., Wallace, M., & Sulzer-Azaroff, B. (2025). *Behavior analysis for lasting change* (6th ed.). Sloan Educational Publishing.
- Qushem, U. B., Christopoulos, A., Kaliisa, R., Khalil, M., Salakoski, T., & Laakso, M. J. (2025). Technology-enhanced Learning and Learning Analytics for personalized STEM learning: A scoping review. *International Journal of Educational Research*, 134, 102827. <https://doi.org/10.1016/j.ijer.2025.102827>
- Rasmussen, E. B., Clay, C. J., Pierce, W. D., & Cheney, C. D. (2022). *Behavior analysis and learning: A biobehavioral approach* (7th ed.). Routledge.
<https://doi.org/10.4324/9781003202622-13>
- Schunk, D. H. (2019). *Learning theories: An educational perspective* (8th ed.). Pearson.
- Willingham, D. T. (2021). *Why don't students like school? A cognitive scientist answers questions about how the mind works and what it means for the classroom* (2nd ed.). Jossey-Bass.

8. Related Web Resources

General sites:

American Psychological Association: <http://www.apa.org/>

British Psychological Society: <https://www.bps.org.uk/>

Specific sites:

EDUCAUSE Learning Analytics Resources:

<https://library.educause.edu/topics/teaching-and-learning/learning-analytics>

Operant conditioning: This site gives a comprehensive overview of key elements of operant conditioning. <http://www.brembs.net/operant/>

9. Related Journals

Learning and Behavior

Behavior Therapy

Behavioural Processes

Journal of Experimental Analysis of Behavior

Journal of Experimental Psychology: Animal Learning and Cognition

Learning and Motivation

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