

SS3712: COGNITIVE PSYCHOLOGY

Effective Term

Semester A 2024/25

Part I Course Overview

Course Title

Cognitive Psychology

Subject Code

SS - Social and Behavioural Sciences

Course Number

3712

Academic Unit

Social and Behavioural Sciences (SS)

College/School

College of Liberal Arts and Social Sciences (CH)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

SS1101 Basic Psychology or SS2023 Basic Psychology I

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to develop students' ability in understanding basic knowledge of major theories and research paradigms in cognitive psychology. It also aims to foster their positive attitudes toward applying the concepts of cognitive psychology to everyday experiences through conducting empirical studies.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if DEC-A1 app.)		DEC-A2	DEC-A3
1	Describe principle theories and concepts in cognitive psychology;	30	x		
2	Explain major research methods and paradigms in cognitive psychology;	20	x		
3	Analyze the link between research in cognitive psychology and everyday experience; and	20	x	x	
4	Compare and contrast the strengths and weaknesses of different approaches to understand information processing in humans through conducting empirical studies.	30		x	

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 real-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.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Students will participate in formal lectures to learn key theories and principles of cognitive psychology, focusing on the usefulness of various experimental paradigms for testing specific hypotheses across different areas within the field.	1, 2, 4	
2	Laboratories	Students will learn concepts related to the experimental basis of research in cognitive psychology through online or laboratory studies and experiments.	2, 3	

3	Tutorials	Students will design and present scientific studies investigating topics relevant to cognitive psychology. They will be promoted to discover the linkage between research and real-life experiences.	1, 3, 4	
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Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Experimental Report	1, 2, 3, 4	30	
2	Group Project	2, 3, 4	20	
3	Quizzes	1, 2, 3, 4	50	

Continuous Assessment (%)

100

Assessment Rubrics (AR)**Assessment Task**

1. Experimental Report

Criterion

Ground research question onto testable hypotheses and propose appropriate methods to test the hypotheses

Excellent (A+, A, A-)

Insightful and clear description of research question and hypotheses, with appropriate methods to test the hypotheses

Good (B+, B, B-)

Adequate description of research question and hypotheses, with reasonable methods to test the hypotheses

Fair (C+, C, C-)

Information provided regarding the research question and hypotheses, with acceptable methods to test the hypotheses

Marginal (D)

Limited content provided regarding the research question and hypotheses, with clear attempts to test the hypotheses

Failure (F)

Little evidence generating research question and hypotheses, with weak attempts to test the hypotheses

Assessment Task

2. Group Project

Criterion

Communicate the scientific investigation proposed for a research question

Excellent (A+, A, A-)

Demonstrate thorough knowledge, strong scientific methods proposed with strong presentation skills

Good (B+, B, B-)

Demonstrate considerable knowledge, adequate scientific methods proposed with reasonable presentation skills

Fair (C+, C, C-)

Demonstrate some knowledge and some scientific methods proposed with efforts made to communicate the information

Marginal (D)

Limited knowledge and methods proposed with little effectiveness in communication

Failure (F)

Unacceptable knowledge and proposed methods with limited effort in communicating the information

Assessment Task**3. Quizzes****Criterion**

Demonstrate ability to compare, contrast and apply theories of cognitive psychology.

Excellent (A+, A, A-)

Excellent ability to compare, contrast and apply theories

Good (B+, B, B-)

Reasonable and adequate ability to compare, contrast and apply theories

Fair (C+, C, C-)

Ability to compare, contrast and apply theories in a general way.

Marginal (D)

Limited ability to compare, contrast and apply theories

Failure (F)

Little evidence of understanding of the theories

Part III Other Information**Keyword Syllabus**

Assumptions and models in cognitive psychology, Perception and attention, Memory, Language, Knowledge representation, Problem Solving, Decision Making...

Reading List**Compulsory Readings**

Title	
1	Goldstein, E. B. (2019). Cognitive psychology: Connecting mind, research, and everyday experience (5th ed.). Stamford, CT: Cengage Learning

Additional Readings

Title	
1	Goldstein, E. B. (2007). Sensation and perception (7th ed., pp.373-378). Belmont, CA: Thomson Wadsworth.
2	Loftus, E. F., Levidow, B., & Duensing, S. (1992). Who remember best? Individual differences in memory for events that occurred in a science museum. Applied Cognitive Psychology, 6, 93-107.

3	Baars, B. J., & Gage, N. M. (2010). <i>Cognition, brain, and consciousness: Introduction to Cognitive Neuroscience</i> (2nd ed). USA: Elsevier.
4	Robinson-Riegler, B., & Robinson-Riegler, G. L. (2014). <i>Cognitive Psychology: Applying the science of the mind</i> . UK: Pearson.
5	CogLab: http://coglab.wadsworth.com
6	Castelhano, M. S., & Witherspoon, R. L. (2016). How you use it matters: Object function guides attention during visual search in scenes. <i>Psychological Science</i> , 27, 606-621
7	Ekroll, V., Sayim, B., & Wagemans, J. (2017). The other side of magic: The psychology of perceiving hidden things. <i>Perspectives on Psychological Science</i> , 12, 91-106.
8	Shipstead, Z., Harrison, T. L., & Engle, R. W. (2016). Working memory capacity and fluid intelligence: Maintenance and disengagement. <i>Perspectives on Psychological Science</i>
9	Mazza, S., Gerbier, E., Gustin, M.-P., Kasikci, Z., Koenig, O., Toppino, T. C., & Magnin, M. (2016). Relearn faster and retain longer: Along with practice, sleep makes perfect. <i>Psychological Science</i>
10	Miyatsu, T., Nguyen, K., & McDaniel, M. A. (2018). Five popular study strategies: Their pitfalls and optimal implementations. <i>Perspectives on Psychological Science</i>
11	Sisk, V. F., Burgoyne, A. P., Sun, J., Butler, J. L., & Macnamara, B. N. (2018). To what extent and under which circumstances are growth mind-sets important to academic achievement? Two meta-analyses. <i>Psychological Science</i>
12	Lupyan, G., & Clark, A. (2015). Words and the world: Predictive coding and the language-perception-cognition interface. <i>Current Directions in Psychological Science</i>
13	Kahneman, D., & Tversky, A. (2013). Prospect theory: An analysis of decision under risk. In <i>Handbook of the fundamentals of financial decision making: Part I</i> (pp. 99-127).
14	Daniel, K. (2011). <i>Thinking, fast and slow</i> .