

The Hong Kong University of Science and Technology

Division of Social Science

Fall Semester, 2024

Course Title: Cognitive Psychology

Course Code: SOSOC2250

No. of Credits: 3

Pre-/co-requisites: SOSOC 1960/1969/1980

Lecture Time: Mon & Wed 9:00-10:20pm (HKT)

Venue: Rm 2503, Lift 25-26

	Lecturer	Teaching Assistant
	Dr. Nicolson SIU	Ms. Vivian Ng
Office:	Room 2371	Room 2359
Email:	nicsiu@ust.hk	vivianci@ust.hk
Phone	2358-7839	TBC
Office Hours	By appointment	TBC

*When contacting us by email, please ***prefix the subject line*** of your message with the course code [SOSOC2250]. Use your university email account only.

Course Description

Cognitive Psychology explores mental processes, including perception, attention, memory, language processing, and problem-solving. This course introduces basic concepts, theories, research findings, and new developments in studying how people acquire, store, and use information and knowledge. Methods and skills in investigating cognitive processes will also be discussed. Students are expected to gain experience in conducting cognitive psychology experiments and writing laboratory reports.

Intended Learning Outcomes (ILOs)

By the end of this course, students should be able to:

1. Demonstrate a comprehensive understanding of the major concepts, findings, and theories in cognitive psychology, while recognizing and appreciating their significance in the field;
2. Acquire practical skills and hands-on experience in conducting research within the domain of cognitive psychology;
3. Develop critical thinking skills to effectively evaluate empirical evidence and draw well-informed conclusions;
4. Apply their knowledge of cognition to enhance their performance in everyday life, effectively utilizing cognitive strategies and insights; &
5. Cultivate effective communication skills through written and oral presentations, enabling them to convey complex ideas and research findings clearly and persuasively.

Assessment and Grading

This course will be assessed using criterion-referencing and grades will not be assigned using a curve. Detailed rubrics for each assignment are provided below, outlining the criteria used for evaluation.

Assessments:

Assessment Task	Contribution to Overall Course grade (%)	Due date
Mid-Term Quiz	15%	23/10/2024*
Lab Report	30%	9/10/2024* 11/11/2024*
Group Project	30%	25/11/2024
Final Quiz	25%	27/11/2024*

* Assessment marks for individual assessed tasks will be released within two weeks of the due date.

Mapping of Course ILOs to Assessment Tasks

Assessed Task	Mapped ILOs
Mid-Term Quiz	ILO1, ILO3,
Lab Report	ILO1, ILO2, ILO3, ILO4
Group Project	ILO1, ILO2, ILO3, ILO4, ILO5
Final Quiz	ILO1, ILO3,

Grading Rubrics

1. Mid-Term Quiz (15%)

- Mid-Term Quiz will be administered to test your understanding of course materials. The quiz will include multiple-choice questions only
- The quiz is scheduled on **Oct 21** and covers topics from **Week 1 to 6**.
- Supplementary readings are also listed in the lecture note but they will NOT be included in the quizzes. These readings are useful for a deeper understanding in the course contents.
- Please arrive on time for the quiz as no additional time will be given for students arriving late.
- No make-up quizzes will be given to students who are absent from the examination unless students can provide validated medical reasons. You should notify the teaching team (through email) about your absence by attaching your official medical certificate ***within 24 hours of the original exam date*** if you wish to arrange for a make-up quiz. All make-up quizzes will ONLY be in the form of essay questions.

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	<ul style="list-style-type: none">• Student demonstrates a thorough and comprehensive understanding of the course material covered in the quiz.• Student answers almost all multiple-choice questions correctly, showcasing their ability to apply concepts, analyze information, and make informed decisions.• Responses indicate the student has gone beyond the basic requirements and has a deep, nuanced grasp of the subject matter.

B	Good Performance	<ul style="list-style-type: none"> • Student displays a strong understanding of the course material covered in the quiz. • Student answers the majority of multiple-choice questions correctly, demonstrating a solid grasp of the key concepts and principles. • Responses indicate the student has a well-rounded comprehension of the subject matter, with only minor lapses or areas that could be improved.
C	Satisfactory Performance	<ul style="list-style-type: none"> • Student exhibits a satisfactory understanding of the course material covered in the quiz. • Student answers a portion of the multiple-choice questions correctly, demonstrating a basic familiarity with the subject matter. • Responses indicate the student has grasped the fundamental concepts, but may struggle with more complex or nuanced aspects of the material.
D	Marginal Pass	<ul style="list-style-type: none"> • Student shows a limited understanding of the course material covered in the quiz. • Student answers fewer than half of the multiple-choice questions correctly, indicating significant gaps in their knowledge and comprehension of the subject matter. • Responses suggest the student has difficulty applying concepts and may need additional support or intervention to improve their performance.
F	Fail	<ul style="list-style-type: none"> • Student demonstrates a lack of understanding of the course material covered in the quiz. • Student answers the majority of multiple-choice questions incorrectly, indicating a significant deficiency in their knowledge and comprehension of the subject matter. • Responses suggest the student has not engaged with the material or has fundamental misunderstandings that need to be addressed.

2. Lab Reports (15% x 2)

- A cognitive psychology lab report aims to summarize and analyze the findings of a cognitive psychology experiment. As part of this process, students will attend **TWO** tutorial sessions where they will participate in cognitive experiments and gain hands-on experience with the methods and concepts of cognitive psychology. After participating in these experiments, students will be required to write **TWO** lab reports, one for each tutorial, that discusses their findings and their implications for cognitive psychology research.
- The guidelines for the reports will be uploaded on Canvas in due course. Please read and follow the instructions carefully.

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	<ul style="list-style-type: none"> • The lab report demonstrates a comprehensive understanding of the relevant cognitive psychology concepts, theories, and research methods.

		<ul style="list-style-type: none"> The report is exceptionally well-organized, with a clear and logical flow of information, and excellent use of headings, subheadings, and formatting to enhance readability.
B	Good Performance	<ul style="list-style-type: none"> The lab report demonstrates a solid understanding of the relevant cognitive psychology concepts, theories, and research methods. The report is exceptionally well-organized, with a clear and logical flow of information, and excellent use of headings, subheadings, and formatting to enhance readability.
C	Satisfactory Performance	<ul style="list-style-type: none"> The lab report demonstrates a basic understanding of the relevant cognitive psychology concepts, theories, and research methods. The report is somewhat organized, with a reasonably clear flow of information, but the use of headings and subheadings could be improved.
D	Marginal Pass	<ul style="list-style-type: none"> The lab report demonstrates a limited understanding of the relevant cognitive psychology concepts, theories, and research methods. The report is poorly organized, with a lack of clear structure and ineffective use of headings and subheadings.
F	Fail	<ul style="list-style-type: none"> The lab report demonstrates a significant lack of understanding of the relevant cognitive psychology concepts, theories, and research methods. The report is poorly organized, with no clear structure or effective use of headings and subheadings.

3. Group Project (30%)

A group of 4-5 students will collaborate to study a cognitive assessment and deliver a presentation to the class, showcasing how the assessment reflects an individual's cognitive functions. It is expected that students will develop a fundamental understanding of the selected cognitive assessment and generate thoughtful questions regarding its application. Prior to the tutorial, each student in the group is required to conduct a literature review to ensure a fruitful discussion with their lecturer and peers. Finally, the group will be expected to present their findings for 15-minute including a Q&A session.

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	<ul style="list-style-type: none"> The presentation is exceptionally well-organized, clear, and engaging, with effective use of visual aids and multimedia to support the content. The group members work seamlessly together, exhibiting strong collaboration, communication, and problem-solving skills. The analysis and insights provided go beyond the basic requirements, showcasing the group's critical thinking and ability to apply concepts to real-world scenarios. The group responds to questions from the audience with confidence, depth, and a clear command of the subject matter.

B	Good Performance	<ul style="list-style-type: none"> • The presentation is well-organized, clear, and engaging, with appropriate use of visual aids and multimedia. • The group members work well together, displaying effective collaboration and communication skills. • The analysis and insights provided meet the project requirements, demonstrating a good grasp of the subject matter. • The group responds to questions from the audience with confidence and a good understanding of the material.
C	Satisfactory Performance	<ul style="list-style-type: none"> • The presentation is somewhat organized and clear, with some use of visual aids and multimedia. • The group members work together, but their collaboration and communication skills could be improved. • The analysis and insights provided meet the minimum project requirements, but lack depth and critical thinking. • The group responds to questions from the audience, but may have difficulty providing comprehensive or nuanced answers.
D	Marginal Pass	<ul style="list-style-type: none"> • The presentation lacks organization, clarity, and engaging elements, with minimal use of visual aids and multimedia. • The group members struggle to work together effectively, exhibiting poor collaboration and communication skills. • The analysis and insights provided are superficial and do not adequately address the project requirements. • The group has difficulty responding to questions from the audience, suggesting a poor grasp of the subject matter.
F	Fail	<ul style="list-style-type: none"> • The presentation is poorly organized, unclear, and lacks engaging elements, with no use of visual aids or multimedia. • The group members are unable to work together effectively, exhibiting a complete breakdown in collaboration and communication. • The analysis and insights provided are severely lacking or absent, failing to meet the project requirements. • The group is unable to respond to questions from the audience, indicating a complete deficiency in their knowledge and understanding of the subject matter.

4. Final Quiz (25%)

- Final quiz will be administered to test your understanding of course materials. The exam will include multiple-choice questions only and non-cumulative (The relevant chapters will appear on the last page of the lecture handouts).
- The final quiz is scheduled on **27 Nov** and covers topics from **Week 7 to 11**.
- Supplementary readings are also listed in the lecture note but they will NOT be included in the exam. These readings are useful for a deeper understanding in the course contents.

- No make-up quizzes will be given to students who are absent from the examination unless students can provide validated medical reasons. You should notify the teaching team (through email) about your absence by attaching your official medical certificate ***within 24 hours of the original exam date*** if you wish to arrange for a make-up quiz. All make-up quizzes will ONLY be in the form of essay questions.

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	<ul style="list-style-type: none"> • Student demonstrates a thorough and comprehensive understanding of the course material covered in the quiz. • Student answers almost all multiple-choice questions correctly, showcasing their ability to apply concepts, analyze information, and make informed decisions. • Responses indicate the student has gone beyond the basic requirements and has a deep, nuanced grasp of the subject matter.
B	Good Performance	<ul style="list-style-type: none"> • Student displays a strong understanding of the course material covered in the quiz. • Student answers the majority of multiple-choice questions correctly, demonstrating a solid grasp of the key concepts and principles. • Responses indicate the student has a well-rounded comprehension of the subject matter, with only minor lapses or areas that could be improved.
C	Satisfactory Performance	<ul style="list-style-type: none"> • Student exhibits a satisfactory understanding of the course material covered in the quiz. • Student answers a portion of the multiple-choice questions correctly, demonstrating a basic familiarity with the subject matter. • Responses indicate the student has grasped the fundamental concepts, but may struggle with more complex or nuanced aspects of the material.
D	Marginal Pass	<ul style="list-style-type: none"> • Student shows a limited understanding of the course material covered in the quiz. • Student answers fewer than half of the multiple-choice questions correctly, indicating significant gaps in their knowledge and comprehension of the subject matter. • Responses suggest the student has difficulty applying concepts and may need additional support or intervention to improve their performance.
F	Fail	<ul style="list-style-type: none"> • Student demonstrates a lack of understanding of the course material covered in the quiz. • Student answers the majority of multiple-choice questions incorrectly, indicating a significant deficiency in their knowledge and comprehension of the subject matter. • Responses suggest the student has not engaged with the material or has fundamental misunderstandings that need to be addressed.

Final Grade Descriptors:

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	Demonstrates a comprehensive grasp of subject matter, expertise in problem-solving, and significant creativity in thinking. Exhibits a high capacity for scholarship and collaboration, going beyond core requirements to achieve learning goals.
B	Good Performance	Shows good knowledge and understanding of the main subject matter, competence in problem-solving, and the ability to analyze and evaluate issues. Displays high motivation to learn and the ability to work effectively with others.
C	Satisfactory Performance	Possesses adequate knowledge of core subject matter, competence in dealing with familiar problems, and some capacity for analysis and critical thinking. Shows persistence and effort to achieve broadly defined learning goals.
D	Marginal Pass	Has threshold knowledge of core subject matter, potential to achieve key professional skills, and the ability to make basic judgments. Benefits from the course and has the potential to develop in the discipline.
F	Fail	Demonstrates insufficient understanding of the subject matter and lacks the necessary problem-solving skills. Shows limited ability to think critically or analytically and exhibits minimal effort towards achieving learning goals. Does not meet the threshold requirements for professional practice or development in the discipline.

Course AI Policy

Students are allowed to use AI-powered tools and models for tasks such as research, brainstorming, and proofreading, provided that the final work submitted is their own. Students must disclose the use of any AI-powered tools or models in their work. This includes acknowledging the use of AI-powered assistants, such as chatbots, for research or ideation purposes.

Communication and Feedback

All lecture materials and announcements will be posted on CANVAS. Be sure to check CANVAS frequently 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.

Required Texts and Materials

Goldstein, E. B. (2018). *Cognitive psychology: Connecting mind, research and everyday experience* (5th Edition). Cengage Learning.

Academic Integrity

Students are expected to adhere to the university's academic integrity policy. Students are expected to uphold HKUST's Academic Honor Code and to maintain the highest standards of academic integrity. The University has zero tolerance of academic misconduct. Please refer to [Academic Integrity | HKUST – Academic Registry](#) for the University's definition of plagiarism and ways to avoid cheating and plagiarism. We will investigate every suspected case of plagiarism and report the confirmed case to the Division of Social Science for further review or action. Make sure you understand academic dishonesty would result in a reduction of scores or even a failing grade in the course.

Teaching Schedule

Week	Date	Topic	Readings
1	2 Sep	Introduction	Ch. 1
	4 Sep	Research Methods in Cognitive Psychology	Ch. 2
2	9 Sep	Perception	Ch. 3
	11 Sep		
3	16 Sep	Attention I	Ch. 4
	18 Sep	[Holiday] Mid-Autumn Festival	
4	23 Sep	Attention II	-
	25 Sep	Class 1 - [Tutorial 1A: Lab 1] Class 2 - [Tutorial 1B: Project Discussion]	-
5	30 Sep	Class 1 - [Tutorial 1B: Project Discussion] Class 2 - [Tutorial 1A: Lab 1]	-
	2 Oct	[Tutorial 2] Data Analysis I	-
6	7 Oct	Memory I	Ch. 5-7
	9 Oct	Memory II <Lab Report 1 Due at 12noon>	Ch. 5-7
7	14 Oct	Conceptual Knowledge	Ch. 9
	16 Oct	Language I	Ch. 11
8	21 Oct	Mid-Term Quiz	-
	23 Oct	Mid-Term Break (No class)	
9	28 Oct	Class 1 - [Tutorial 3A: Project Discussion] Class 2 - [Tutorial 3B: Lab 2]	-
	30 Nov	Class 1 - [Tutorial 3B: Lab 2] Class 2 - [Tutorial 3A Project Discussion]	-
10	4 Nov	[Tutorial 4] Data Analysis II	-
	6 Nov	Language	Ch. 11
11	11 Nov	Problem Solving & Creativity <Lab Report 2 Due at 12noon>	Ch. 12
	13 Nov	Judgement, Decision Making & Reasoning	Ch. 13
12	18 Nov	Presentation (Group 1-4)	-
	20 Nov	Presentation (Group 5-8)	-
13	25 Nov	Presentation (Group 9-12)	-
	27 Nov	Final Quiz	-