

Course Code	HP 2600
Course Title	Cognitive Psychology
Pre-requisites	1. HP1000 Introduction to Psychology 2. HP1100 Fundamentals of Social Science Research, or CS2008 Fundamentals of Research
No of AUs	3 AUs

Course Aims

This course serves as an introduction to Cognitive Psychology: the field of study about how the brain forms an active understanding of the external world and interacts with it. In particular, we investigate how information is perceived, retained and acted upon by using mental representations. The representation, processing and retention of information are basic cognitive processes in psychology. In understanding these processes, this course covers topics such as perception, attention, memory, language and problem solving. The course provides the foundation of the concepts necessary for further study in more advanced theoretical and applied aspects of psychology such as perception, educational psychology, social psychology, etc.

Intended Learning Outcomes (ILO)

By the end of this course, you (as a student) would be able to:

1. Explain basic concepts and theories in various levels of cognitive processes
2. Engage the debates among cognitive psychologists on how mental processes are conducted
3. Execute the empirical methods used to investigate cognitive processes
4. Analyze data in order to test hypotheses in cognitive psychology and write experimental lab reports

Course Content

Sensation and Perception, Attention, Memory (sensory memory, short-term/working memory, long-term memory, memory encoding and retrieval), Knowledge, Visual imagery, Language, Problem Solving, Reasoning and Decision Making.

Assessment (includes both continuous and summative assessment)

Component	ILO Tested	Related Programme LO or Graduate Attributes	Weighting	Team/Individual
1. Final Exam	1, 2, 3	Competence	60%	Individual
2. Term Paper	2, 3, 4	Communication Civic mindedness Creativity	20%	Team
3. Quizzes	1, 2, 3	Competence	15%	Individual
4. Class Participation	1, 2, 3, 4	Character Communication	5%	Individual
Total			100%	

Formative feedback

Class participation: You will discover whether your standpoints are valid through class discussion.
Exam and quiz: You will be able to check your test results and discuss personally your answers and shortcomings with the instructors. General feedback on your performance will be provided to everyone.

Lab Report: You will be provided specific feedback based on your writings in term papers. General feedback on your performance will be provided to everyone.

Learning and Teaching approach

Approach	How does this approach support students in achieving the learning outcomes?
Lecture	You will learn the theories and debates among cognitive psychologists in establishing the knowledge. Demos of experiments are presented to educate you on the concepts.
Tutorial	You will participate in debates on competing ideas in cognitive psychology, after reading key journal papers in the field. You will also run through the details of key experiments in the topics.

Reading and References

Recommended References

Textbook: E. Bruce Goldstein (2014). Cognitive Psychology: Connecting Mind, Research and Everyday Experience (4th edition). ISBN-13: 978-1285763880.

Course Policies and Student Responsibilities

(1) General

You are expected to complete all assigned pre-class readings and activities, attend all seminar classes punctually and take all scheduled assignments and tests by due dates. You are expected to take responsibility to follow up with course notes, assignments and course related announcements for seminar sessions you have missed. You are expected to participate in all lecture/tutorial discussions and activities.

(2) Absenteeism

You are required to be in class to contribute to team work. Absence from class without a valid reason will affect your overall course grade. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies. There will be no make-up opportunities for in-class activities.

If you miss a tutorial session, you must inform me via email (include email address) prior to the start of the class. If you have missed in-class activity with valid reasons will earn the participation score. If you have missed class without a valid reason will earn nothing for that session of absence.

(3) Online Compulsory Assignments

You are required to submit online compulsory assignments on due dates.

Academic Integrity

Originality of work and appropriate acknowledgement of reference source are extremely important in the academic context. See here for the details:

<https://ntulearn.ntu.edu.sg/bbcswebdav/courses/AI0001-Master/m/index.htm>

As a psychology student, you are expected to follow the guidelines of the American Psychological Association on referencing and citation (see APA Publication Manual, 7th Edition).

As a student of NTU, you are expected to uphold the Honor Code against plagiarism and collusion. Plagiarism and collusion are defined as the following in the Honor Code:

Plagiarism: "To use or pass off as one's own, the writings or ideas of another, without acknowledging or crediting the source from which the ideas are taken."

Collusion: "Submitting an assignment, project or report completed by another person and passing it off as one's own; Preparing an assignment, project or report for a fellow student who submits the work as his or her own."

Committing plagiarism and/or collusion in this course warrants serious penalty, see here for more details:

<http://www.sss.ntu.edu.sg/Programmes/Undergraduate/CurrentStudents/Pages/Plagiarism.aspx>

Planned Weekly Schedule

Week	Topic	Course LO	Readings/ Activities
1	Introduction	To learn about evolution of the idea that forms the core of cognitive psychology and understand the basic neuroscience behind it	Textbook Ch. 1-2
2	Perception	To understand the first step in psychology: Sensation and perception, i.e. how information enters the brain.	Textbook Ch. 3
3	Attention	To understand how the brain selects information through diverting attention.	Textbook Ch. 4
4	Memory part 1	To understand the early components in memory formation, such as sensory memory and short term	Textbook Ch. 5

		working memory.	
5	Memory Part 2	To understand how memory can be stored for a long time (long-term memory)	Textbook Ch. 6
6	Memory Part 3	To understand how memory is encoded and retrieval	Textbook Ch. 7
7	Memory Part 4	To understand factors that lead to memory distortion and forgetting	Textbook Ch. 8
8	Knowledge	To understand how we gain knowledge by organizing concepts into categories and semantic networks	Textbook Ch.9
9	Visual imagery	To understand the phenomenon of imagery in the absence of external stimuli and compare it with perception	Textbook Ch. 10
10	Language	To understand the general structures of language and how the brain process languages	Textbook Ch. 11
11	Problem Solving	To introduce the brain's different ways of solving problem and the underlying representation	Textbook Ch. 12
12	Decision Making	To discuss the processes humans make decisions and how it leads to errors sometimes	Textbook Ch. 13
13	Revision	Nil	Nil