Program	BS (4 Years)	Course Code	APSY-122	Credit Hours	3
Course Title	**Cognitive Psychology**				

Course Introduction

Cognitive Psychology is the scientific study of internal mental processes. Cognitive Psychology is used throughout the entire range of human knowledge, perception, activity, speech processing, problem solving and thinking about learning and memory. The course will focus on key areas of cognitive psychology which include reasoning, thinking, mental imagery, memory, perception, attention, etc. The course will give students knowledge of the most important concepts, themes, problems and empirical research in modern cognitive theory as it concerns how we receive, interpret, edit, use and save information. The course will deal with the study of both general traits and individual differences. It will further discuss the controversies associated with cognitive psychology, and will train students to apply the basic principles of cognitive psychology to everyday and real world activities.

Learning Outcomes

On the completion of the course, the students will be able to:

1. Think critically about the internal processes involved in human cognition.
2. Articulate the basic principles, major theories, and research concerning higher mental processes

Course Contents

Introduction
Nature and Scope of Cognitive Psychology
Historical Perspective

Neural Basis of Cognition
Neural representation of information
Organization of the brain and neural localization of function
Information coding in visual cells

Perception and Attention
Sensory memory: Iconic memory& echoic memory
Pattern recognition: Template matching and Feature Analysis
Speech recognition and Voice onset time
Perceptual Laws of Organization
Object Perception
Spatial vs. linear representation
Depth Perception
Colour Perception
Perception of Movement

Knowledge Representation
Perception based knowledge
Meaning based knowledge
Memory
Implicit and Explicit memory
Retention in episodic memory
Working memory and long term memory
Interference: Fan effect
Recall vs. recognition

Thinking and Problem solving
Mean –ends Analysis
Problem Solving by Analogy
Heuristic and algorithms

Reasoning
Deductive and inductive reasoning
Conditional Reasoning
Syllogism

Language
Language comprehension: Parsing, Semantic considerations and Utilization.
Language and thought
Child Language Acquisition
Psycholinguistics
Linguistic Determinism
Transformational Grammar

Textbooks and Reading Material

2.1 Books

- Eysenck, M. W., & Keane, M. T. (2020). *Cognitive psychology: A student's handbook*. Psychology press.
- Friedenberg, J. (2012). *Cognitive science* (2nd ed.). Los Angeles: Sage.
- Galotti, K. M. (2013). *Cognitive psychology in and out of the laboratory*. Thousand Oaks: SAGE
- Publications.
- Groome, D.(2013).*An introduction to cognitive psychology: Processes and disorders*. London:
- Psychology Press.
- Henderson, L. (Ed.). (2017). *Orthographies and reading: Perspectives from cognitive psychology, neuropsychology, and linguistics* (Vol. 3). Routledge.
- Kellogg, R. T. (2012). *Fundamentals of cognitive psychology* (2nd ed.). Los Angeles: Sage.
- Medin, D., Ross, B., & Markmen (2005).*Cognitive psychology*.(4th ed.). UK: John Wiley Inc.
- Parkin, A. J. (2013). *Essential cognitive psychology: Classic edition*. Hove, East Sussex:
- Routledge.
- Reed,S.K. (2000). *Cognition* (5thed.).Belmont: Wadsworth / Thomson Learning.
- Reisberg, D. (2013). *The Oxford handbook of cognitive psychology*. Oxford: Oxford University
- Press
- Robinson-Riegler, G. (2012). *Cognitive psychology* (2nd ed.). South Asia: Pearson.
- Sternberg, R. J. (2005). *Cognitive psychology*. New York: Wadsworth.
- Sternberg,R.J.(1999).*Cognitive psychology*(2nded.).New York: Harcourt College Publishers.
- Sternberg, R. J., Sternberg, K., & Mio, J. S. (2012). *Cognitive psychology*. Australia:
- Wadsworth/Cengage Learning.

2.2 Journal Articles/ Reports

- Brédart, S. (2017). The cognitive psychology and neuroscience of naming people. *Neuroscience & Biobehavioral Reviews*, *83*, 145-154.
- Cremers, J., & Klugkist, I. (2018). One direction? A tutorial for circular data analysis using R with examples in cognitive psychology. *Frontiers in psychology*, *9*, 2040.

- Lamont, M., Adler, L., Park, B. Y., & Xiang, X. (2017). Bridging cultural sociology and cognitive psychology in three contemporary research programmes. *Nature Human Behaviour*, *1*(12), 866-872.
- Pattyn, N., Van Cutsem, J., Dessy, E., & Mairesse, O. (2018). Bridging exercise science, cognitive psychology, and medical practice: Is "cognitive fatigue" a remake of "the emperor's new clothes"?. *Frontiers in Psychology*, *9*, 1246.
- Ritter, S., Barrett, D. G., Santoro, A., & Botvinick, M. M. (2017, July). Cognitive psychology for deep neural networks: A shape bias case study. In *International conference on machine learning* (pp. 2940-2949). PMLR.
- Skavronskaya, L., Scott, N., Moyle, B., Le, D., Hadinejad, A., Zhang, R., ... & Shakeela, A. (2017). Cognitive psychology and tourism research: state of the art. *Tourism Review*.

Note: It is preferable to use latest available editions of books.

Teaching Learning Strategies

1. Lectures/Tutorials
2. Semester work
3. Class participation /Presentation
4. Assignments/Class Projects
5. Quizzes

Assessment

Sr. No.	Elements	Weightage	Details
1.	Midterm Assessment	35%	Written Assessment at the mid-point of the semester.
2.	Formative Assessment	25%	Continuous assessment includes: Classroom participation, assignments, presentations, viva voce, attitude and behavior, hands-on-activities, short tests, projects, practical, reflections, readings, quizzes etc.
3.	Final Assessment	40%	Written Examination at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.