SES's L.S. RAHEJA COLLEGE OF ARTS AND COMMERCE (AUTONOMOUS)

Syllabus of Clinical Neuropsychology under NEP 2020 vertical (Major) with effect from 2024-25

Department of Psychology

HoD/Sr. Person of the Department: Neha Dalal

Date of approval by the BoS: 27/04/2024

Approved by the Academic Council on: 29/04/2024

Ratified by the Governing Body on: 06/05/2024

Programme: Master of Arts				Semester: II	
Course: Clinical Neuropsychology Academic Year: 2024-2025 Batch: 2024-2026				Code: PGMAIIMJ224	
Teaching Scheme			Evaluation Scheme		
Lectures	**Practical**	**Tutorials**	**Credits**	**Internal Continuous Assessment (ICA) (weightage)**	**Term End Examinations (TEE) (weightage)**
60	**0**	**0**	4	40	60

Particulars	Marks
Class tests	20
Projects	10
Viva Voce	10

Learning Objectives:	**1.** Demonstrate a comprehensive understanding of brain anatomy, organization, and function, including the central and peripheral nervous systems, cortical organization, and higher cognitive functions. **2.** Knowledge of various neuroimaging techniques and neurological assessment methods used in neuropsychology.
Learning Outcomes:	**1.** Explain the evolution of neuropsychology, brain anatomy, and functions, and neuroimaging techniques, and explain the role of the brain in higher cognitive functions **2.** Explain the organization of sensory pathways and cortical regions involved in sensory processing, explain the roles of the CNS and PNS in regulating bodily functions and processing sensory information.
Pedagogy:	Interactive lectures PowerPoint presentations Observation and Analysis

Detailed Syllabus: (per session plan)
Each lecture session would be of one hour duration (60 sessions).

Module	Module Content	Module Wise Pedagogy Used	Module Wise Duration
I	**Foundations of Neuropsychology** a. Development of Neuropsychology b. Overview of the evolution of the human brain. c. Introduction to the central nervous system (CNS) and peripheral nervous system (PNS). d. Overview of different neuroimaging techniques and neurological assessment.	Interactive lectures Powerpoint presentations Observation and Analysis	15
II	**Cortical Organization and Functions:** a. Organization of the Sensory Systems	Interactive lectures PowerPoint	15

	b. Overview of the neocortex and its role in higher cognitive functions. c. Hemispheric specialization and lateralization of brain functions. d. Individual differences in cerebral asymmetry.	presentations Observation and Analysis	
III	**Higher Cognitive Functions:** e. Learning and Memory f. Language g. Neural basis of emotion h. Neural mechanisms underlying spatial perception and navigation	Interactive lectures PowerPoint presentations Observation and Analysis	15
IV	**Plasticity and Disorders:** e. Brain Development and Plasticity f. Neurodevelopmental disorders g. Intervention and treatment approaches h. Neural plasticity in the adult brain	Interactive lectures PowerPoint presentations Observation and Analysis	15

REFERENCE BOOKS

Anderson, S. W., Damasio, H., & Tranel, D. (2016). Clinical Neuropsychology: A Practical Guide to Assessment and Management for Clinicians. Oxford University Press.

Bigler, E. D. (2017). The Traumatized Brain: A Family Guide to Understanding Mood, Memory, and Behavior after Brain Injury. Oxford University Press.

Golden, C. J., & Espe-Pfeifer, P. (2014). Neuropsychological Interpretation of Objective Psychological Tests. Springer Publishing Company

Heilman, K. M., & Valenstein, E. (2011). Clinical Neuropsychology (5^{th} edition). Oxford University Press.

Joshua David Greene, Morrison, I., & Seligman, M. E. P. (2016). Positive neuroscience. Oxford University Press.

Kolb, B., & Whishaw, I. Q. (2021). Fundamentals of Human Neuropsychology (8th edition). Worth Publishers.

Lezak, M. D., Howieson, D. B., Bigler, E. D., & Tranel, D. (2012). Neuropsychological Assessment (5th edition). Oxford University Press.

Mesulam, M. M. (2000). Principles of Behavioral and Cognitive Neurology. Oxford University Press.

Morgan, J. E., Ricker, J. H., & Axelrod, B. N. (2012). Introduction to Neuropsychology (2nd edition). Academic Press.

Shukla, G., & Gupta, A. (2014). Clinical Neuropsychology: A Pocket Handbook for Assessment (1st edition). Jaypee Brothers Medical Publishers.

Sinha, V. K., & Satishchandra, P. (2015). Textbook of Clinical Neurology (3^{rd} edition). Elsevier.

Spreen, O., & Strauss, E. (2006). A Compendium of Neuropsychological Tests: Administration, Norms, and Commentary (3rd edition). Oxford University Press.

Srivastava, A., & Chaturvedi, S. K. (2017). Handbook of Clinical Neuropsychology in India. Springer.

Stuss, D. T., & Knight, R. T. (2013). Principles of Frontal Lobe Function (2^{nd} edition). Oxford University Press.

Tripathi, M., & Padma, M. V. (2013). Neuropsychiatry and Behavioral Neurology: An Indian Perspective**.** Jaypee Brothers Medical Publishers**.**

QUESTION PAPER PATTERN
(60 marks)

Q1. Answer any one **(15 marks)**

A. Unit one

Or

B. Unit one

Q2. Answer any one **(15 marks)**

A. Unit two

Or

B. Unit two

Q3. Answer any one **(15 marks)**

A. Unit three

Or

B. Unit three

Q4. Answer any one **(15 marks)**

A. Unit four

Or

B. Unit four