Course Type	Course Code	Name of the Course	L	T	P	Credits
DE	NHSD541	Experimental Psychology	3	0	0	3

Course Objective
To provide an in depth understanding of select higher mental processes to enable students to take them up for further study or research
Learning Outcomes
Upon successful completion of the course, student will: 1. Be aware about the major topics and issues in cognition and behavior 2. Be able to understand methods used for investigating cognitive processes 3. Critically Analyze and evaluate empirical research findings in cognitive psychology.

Unit No.	Topics to be Covered	Lectur Hours	Learning Outcome
1	*Foundations* Scientific Reasoning: Sources of knowledge, nature of scientific explanation, Psychology as a science. Variables, Claims and validities in psychological research. Measurement in Psychology History of Experimental Psychology	9	Understand the historical development, theoretical perspectives, and methodological approaches used in the study of cognition, including various types of studies and measures employed in cognitive research
2	*Non-experimental Methods* Observational Research: construct validity, sampling and generalizability Correlational Research: bivariate, multivariate, statistical evaluation	6	Understanding of non-experimental methods such as observational and correlational research. Awareness of the techniques to evaluate such types of research
3	*Experimental Method* Experiment in Psychology, Independent and Within-group designs, Role in causal claims Threats to validity: Confounding and obscuring variables Complex Designs: Factorial Designs, Quasi-experimental Designs and Small-N Designs	10	Understand the concept of experimental and its many variations used in psychology research. Awareness about various factors that influence causal claims and modifications to the experimental design
4	*Studying Higher Mental Processes* Reaction Time. Paradigms of studying memory. Thinking and Problem Solving	9	Understanding of higher mental processes within the context of experimental psychology research. Appreciate application of experimental method in understanding mental processes.
5	*Advanced Approaches and Issues* Computational Approaches: Neural Networks, Mathematical Modeling Replication and Generalization	8	Proficiency in use of advanced computational approaches and understand replication techniques to generalize experimental findings in psychology
	Total Lecture Hours	**42**	

Text Books:

1. Kantowitz, B.H., Roediger III, H.L., & Elmes, D.G. (2016). *Experimental Psychology*. 10th Ed. Cengage

2. Morling, B. (2021). *Research Methods in Psychology*. Norton

Reference Books:

1. Reisberg, D. (Ed.). (2013). *The Oxford Handbook of Cognitive Psychology*. Oxford University Press
2. Wixted, J. (2002). *Stevens' Handbook of Experimental Psychology, vol 4, Methodology*. New York: Wiley