

INTRODUCTION TO BRAIN & BEHAVIOUR

PROF. ARK VERMA

TYPE OF COURSE : Rerun | Core | PG

Department of Humanities and Social Sciences

COURSE DURATION: 8 weeks (21 Feb' 22 - 15 Apr' 22)

IIT Kanpur

EXAM DATE : April 24, 2022

INTENDED AUDIENCE: Students across various disciplines from the Cognitive Sciences, Neurosciences, Psychology doing either their Bachelors or Masters, and even PhD may benefit from this course.

COURSE OUTLINE:

The course is meant to familiarise the students with theneural basis of mental/cognitive processes. The course will stress on both how the mental functions operate to give rise to human behaviour and also simultaneously show how these processes are implemented in the human brain.

ABOUT INSTRUCTOR:

Prof. Ark Verma have done my Bachelor's Degree in Psychology & English Literature from the University of Allahabad in 2007. After that I did my Master's Degree in Cognitive Science at the Centre of Behavioral & Cognitive Sciences, University of Allahabad in 2009. I joined the PhD program in the Department of Experimental Psychology at Ghent University, Belgium in January 2010 & was awarded my PhD in 2014. I joined IIT Kanpur as an Assistant Professor of Psychology in May 2015. My research lies in the field of Cognitive Psychology (Lateralisation, Symmetry Detection, Attention) & Psycholinguistics (Visual Word Recognition & Bilingualism).

COURSE PLAN:

Week 1: A Brief History of Cognitive Neuroscience. Structure and Function of the Nervous System.

Week 2: Methods in Cognitive Neuroscience

Week 3: Neural Basis of Sensation and Perception.

Week 4: Neural Basis of Object Recognition.

Week 5: Neural Basis of Attention and Consciousness.

Week 6: Neural Basis of Learning and Memory.

Week 7: Neural Basis of Language & Dognitive Control.

Week 8: Special Topics in Cognitive Neuroscience.