



# PSYCHIATRY - AN OVERVIEW AND HOW THE BRAIN CREATES MINDS

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**INTENDED AUDIENCE** : MBBS doctors, undergraduate in Psychology, neurosciences and Post Graduate students in any medical discipline. Any one interested in Psychology, Physics & The Brain

**PRE-REQUISITES** : No Specific Courses Required. Basic Knowledge about Brain should suffice

**INDUSTRIES SUPPORT** : Health, Pharmaceutical, Psychology; Brain computer interface

## **COURSE OUTLINE :**

This course is intended for medical students both UG and PG (from any speciality) as an introduction to Psychiatry and other mental health issues. It will be useful for Psychology and Neurosciences students too as it provides an overview of Psychiatric illnesses and their treatment as well as the biological /psychological basis of behavior.

This course intends to introduce the human brain and its processes especially with regards to electrochemical activity, the issues of mind and consciousness. It also indicates towards further possibilities of research. Anyone with an interest in Human brain can join. Just a basic understanding of Brain would suffice. It should be useful for students of Neurosciences, Psychology, Medical and people working at brain computer interface

## **ABOUT INSTRUCTOR :**

Prof. Alok Bajpai has been trained in Psychiatry at National Institute of Mental health and NeuroSciences (NIMHANS) Bangalore. He did his DPM, MD and is currently practicing at Kanpur and is also the Psychiatrist with Counselling cell, IIT Kanpur. His research interest are in Physics of Brain, Sleep and EEG.

## **COURSE PLAN :**

**Week 1** - Brain and Behaviour –approaches

**Week 2** - Diagnostic process in Psychiatry

**Week 3** - Psychiatric Disorders and their treatment-1

**Week 4** - Psychiatric Disorders and their treatment -2

**Week 5** : Brain to Mind-- and how do we know it---(essentially single neuron to multiple) Brain and gross specialization --- areas, right-left, association, connectivity and our tools to learn including EEG

**Week 6** : Being Conscious -- Dynamics --- how do we learn about it from EEG

**Week 7** : Cognition, Memory, Emotion -- Normal and Pathology

**Week 8** : Sleep Brain and Future-- with interactive session