

# PSY361 Biological Basis of Psychology

**Level:** 3

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JULY

## Synopsis:

Biological Basis of Psychology is an advanced course in psychology that concerns itself with the relationship between the nervous system and behaviour. The goal of biopsychology is to describe how psychological functioning is implemented in the nervous system. This is especially challenging because of the human brain and its neural mechanisms are not directly observable. Nevertheless, these challenges have been overcome, through integrating knowledge from various disciplines and the development of technology and research methods.

Complex sequences of neural mechanisms is taking place even as you are reading this course guide, and even as we go through simple daily routines like eating and drinking. One major goal of this course is to help you integrate knowledge of basic biological functions into your existing knowledge base. This provides you a sound scientific framework for your ideas and when you learn new information in future. The second goal of this course is to nurture your critical thinking skills in scientific inquiry. The field of biopsychology is continually advancing and seemingly contradicting theories and findings provide you with natural opportunities to think critically so as to uncover the reasons behind the discrepancies.

In this course, you will gain basic knowledge of the nervous system, be able to map psychological experience of both basic and complex behaviour to underlying brain structure and neurotransmission, learn how the brain relies on chemicals and how subtle imbalance can result in psychiatric illness.

## Topics:

- Introduction to Biopsychology
- The Anatomy of the Nervous System
- Neural Conduction & Synaptic Transmission
- The Research Methods of Biopsychology
- The Visual System
- Brain Damage & Neuroplasticity
- Learning, Memory & Amnesia
- Sleep, Dreaming & Circadian Rhythms
- Lateralization, Language & the Split Brain
- Biopsychology of Psychiatric Disorders

## Textbooks:

Pinel, J.P.J. . Allyn & Bacon.: Introduction to Biopsychology. (eText) ISBN:9781292158501 (10th)  
Pearson  
ISBN-13: 1292158501

**Learning Outcome:**

- Discuss biopsychological theories of human behaviour.
- Examine the brain structure and their connectivity.
- Evaluate the neuronal processes in biopsychology.
- Appraise biopsychological models of human behaviour.
- Illustrate the study of the biological basis of behaviour using various research methods.
- Apply biopsychological concepts to real-life situations

**Assessment Strategies (Evening Class):**

<b>Components</b>	<b>Description</b>	<b>Weightage Allocation (%)</b>
Overall Continuous Assessment	PRE-CLASS QUIZ 1	5
	PRE-CLASS QUIZ 2	5
	TUTOR-MARKED ASSIGNMENT 1	20
	TUTOR-MARKED ASSIGNMENT 2	20
Overall Examinable Components	Written Exam	50
<b>Total</b>		<b>100</b>