

Departmental Learning Goals for Psych 202: Biopsychology

Understanding the field:

Biopsychology is a branch of neuroscience that is concerned with the biology of behavior. Biopsychology uses the language and theories provided by Biology (primarily Neurobiology) and is particularly focused on topics that are relevant to human behavior and psychology in general. These topics include motivated behaviors such as eating and drinking, reproductive behavior, sleep, and addiction. Other topics include the study of perception, motor behavior, development, learning and memory.

Specific Learning Goals:

By the end of this course, students will be able to:

1. Explain biopsychology as a branch of neuroscience and its importance to the study of human behavior.
2. Identify the elements of neuronal structure, anatomical subdivisions of the nervous system, and their interconnections.
3. Explain neuronal conduction and synaptic transmission of electrical signals.
4. Use basic concepts of neurobiology to understand mechanisms underlying the development of normal and abnormal behaviors.
5. Use knowledge of physiological systems to understand and describe:
 - Sensation and perception by the visual, auditory, and other sensory systems
 - How motor behavior is produced and regulated
 - The development of the nervous system, brain damage and recovery
 - How the brain stores and retrieves information
 - Ingestive behavior and why we begin and stop eating and drinking
 - The functions and mechanisms of sleep
 - Human communication and related disorders
 - Hormonal and neurological control of reproductive behaviors
 - Neural control of emotion
6. Read scientific articles pertaining to course topics, identify the hypothesis, scientific methodology, and results obtained, and critically evaluate the outcomes and contribution of the articles to scientific knowledge. In addition, students should be able to summarize these concepts in writing.
7. Reflect on topics covered in the course, including brain physiology/development and motivated behaviors, and apply this information to their lives.
8. Understand the basic methodology used for obtaining the information covered in the biological psychology course.