PSY 102: PSYCHOBIOLOGY

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2024
Credits:	3
Total Contact Hours:	54
Lecture Hours :	54
Lab Hours:	0
Hours Arranged:	0
Outside of Class Hours:	108
Total Student Learning Hours:	162
Prerequisite:	PSY 101 or PSY 101H.
Strongly Recommended:	BIOL 105 or BIOL 105H; ENGL 101 or ENGL 101H.
District General Education:	B1. Natural Sciences - Life Sciences
Transferable to CSU:	Yes
Transferable to UC:	Yes - Approved
Grading Method:	Standard Letter, Pass/No Pass

Catalog Course Description

This course introduces the scientific study of the biological bases of behavior and its fundamental role in the neurosciences. Physiological, hormonal, and neurochemical mechanisms, and brain-behavior relationships underlying the psychological phenomena of sensation, perception, regulatory processes, emotion, learning, memory, and psychological disorders will be addressed. The course also notes historical scientific contributions and current research principles for studying brain-behavior relationships and mental processes. Ethical standards for human and animal research are discussed in the context of both invasive and non-invasive experimental research. 54 lecture hours.

Course Objectives

- Define and use basic biological, physiological, and psychological terminology of the neurosciences .
- Differentiate among specialty areas within Biological Psychology and the related disciplines within the Neurosciences and the types of research that characterize the biopsychological approach
- Summarize the major issues in human evolution, genetics, and behavioral development that underlie the “biology of behavior.”
- Generate and explicate concrete examples of invasive vs. noninvasive research methods and the general principles of research ethics for the study of animals and human beings, including the research safeguards and the peer-review process in science.
- Explain scientific approaches used in methodologies for the study of brain-behavior relationships.
- Explain the general anatomy and physiology of the nervous system and its relationship to behavior
- Describe neural conduction and synaptic transmission
- Discuss the role of the neuroendocrine system as it relates to behavior.
- Exemplify with concrete examples various brain-behavior relationships including ingestive behavior, motivation, sexual behavior, sleep, learning, memory, stress, drug dependence, and psychiatric disorders such as affective disorders and schizophrenia.

Major Course Content

1. Nerve Cells and Nerve Impulses
2. Synapses
3. Anatomy and Research Methods
4. Genetic, Evolution, Development and Plasticity
5. Vision
6. Other Sensory Systems
7. Movement
8. Wakefulness and Sleep
9. Internal States
10. Reproductive Behavior
11. Emotional Behavior
12. Learning, Memory and Intelligence
13. Cognitive Functioning
14. Psychological Disorder
15. Psychopharmacology
16. Use of Animals and Human Subjects in Research

Suggested Reading Other Than Required Textbook

Annual Editions: Biopsychology New York Times Newspaper Psychology Today

Examples of Required Writing Assignments

1. APA style research paper on a biopsychological topic. 2. Pictures of various brain injuries and the students work together to determine the effects upon behavior and present their case from a written report. 3. Biopsychological topic group papers demonstrating objective, analytical and deductive reasoning skills.

Examples of Outside Assignments

Research Paper 1. Literature review 2. Discussion Section 3. Abstract 4. Resources, references

Instruction Type(s)

Lecture, Online Education Lecture

IGETC Area 5: Physical and Biological Sciences

5B. Biological Science