

**Course Outline**  
**Psy 250**  
**Psychobiology**  
**3 Semester Hours**

**The Community College of Baltimore County**

**Description**

Psychobiology

Investigates physiological and neurological basis of behavior; considers receptor, central, and effector structures; the organization of behavior as it relates to action of the nervous system.

Prerequisite: PSYC 101

**Overall Course Objectives**

Upon completion of this course the student will be able to:

1. Identify the underlying mechanisms of behavior
2. Discuss the philosophical issues related to "mind and brain"
3. Describe the structures of the nervous system including; chemical communication; sensory and motor mechanisms; motivational mechanisms; and learning and memory mechanisms
4. Distinguish the various experimental methods available for understanding brain-behavior relationships
5. Identify the underlying mechanisms of human communication
6. Explain the relationship between the central nervous system and behavior
7. Discuss the neurological contributions to psychological disorders
8. Explain the interaction between biology (including genetics) and the environment in the determination of behavior

**Major Topics**

1. Introduction; roots of physiological psychology
2. Structure and function of cells of the nervous system; neural activity
3. Neural communication, both physically and pharmacologically
4. Structure of the nervous system, central and peripheral
5. Methods and techniques for investigation of brain-behavior relationships
6. Sensory and motor system: central and peripheral mechanisms
7. Motivational systems: Central and peripheral mechanisms of sleep, reproduction and ingestive behavior
8. Memory: anatomical, physiological, and biochemical aspects
9. Brain mechanisms of reinforcement and relationship to addiction
10. Human communication
11. Mental disorders, physiological and biochemical relationships
12. Role of heredity and environment in determination of behavior

## **Course Requirements**

Evaluation and student feedback in this course will combine several of the following formats:

1. Tests/Quizzes
2. Research papers
3. Oral presentations
4. Cooperative learning group assignments
5. Classroom participation

## **Other Course Information**

This course is an elective course in the department of psychology, and is recommended as part of the transfer program.

Revised: 06/14/00