

PSY 403 Physiological Psychology

Wintermester 2019

Number of Credits

3

Instructor

Kyle Killebrew

Catalog Description

Physiological mechanisms associated with reflex action, emotions, motor skills, thinking and language. Effects of drugs, internal secretions and neural lesions on behavior.

Required Textbooks/Materials

The following texts are required material in this course:

Biopsychology, 10th Edition. By: John P.J. Pinel & Steven J. Barnes

Student Learning Outcomes

Upon successfully completing this course, students will be able to demonstrate and understanding of

- basic neural anatomy, neural function and psychopharmacology;
- basic mechanisms underlying behavioral capacities and behavioral pathologies; and
- common methodologies used in the field.

First Week of Materials/Assignments

The following schedule is subject to change:

January 2: Chapters 1, 2—Intro to biopsychology; Evolution, Genetics, and Experience

January 3: Chapters 3, 4—Anatomy of the nervous system; Neural communication

January 4: Chapters 5, 6—Research Methods; Mechanisms of perception

January 7: Chapters 6, 7—Mechanisms of perception

Course Details

Dichotomous thinking regarding biology and the mind has, over the past few centuries, given way to a different view. The line between the biological and the psychological is continually dissipating to reveal a deeper understanding of human behavior through the lens of neural processing and other biological functions. In this course, we will explore the biological basis of behavior and cognition. Subjects covered will include: basics of neural function and communication, sensory processing, research methods in biopsychology, brain development, brain plasticity, motivation, memory, emotion & pathology. In addition to summarizing important results of empirical research pertaining to these subjects, we will focus on clinical, neuropsychological and evolutionary perspectives. Finally, we will explore how biology and environment interact to create the stunningly diverse repertoire of human behavior. Upon completion of this course, I hope students come away with a deeper understanding and appreciation of the fascinating neural processes underlying their own behavior.

Grade Breakdown

The point distribution for the course is:

Assignment	Percentage
Exam 1	25
Exam 2	25
Exam 3	25
Homework/Assignments	25
<i>Total</i>	<i>100</i>

The percentage distribution for the course is:

Letter	Percentage
A	90–100
B	80–89
C	70–79
D	60–69
F	below 60