

Syllabus for
PSY 305--Physiological Psychology
3 Credit hours
Spring 2001

I. COURSE DESCRIPTION

A survey of neural and endocrine mechanisms followed by detailed consideration of selected problems in physiology of behavior. Emphasizes learning, motivation and sensory processing. Prerequisite: PSY 201

The course is designed to introduce the student to physiological basis of behavior. Structure (Neuroanatomy) and function of both the peripheral and central nervous systems are covered. Theories of mind/body relationships are reviewed as they relate to aspects of adaptation in personality, behavior, and in health and disease.

II. COURSE GOALS

This course is designed to teach the students how to do the following:

- A. acquire the basic knowledge for further learning and experience in the fields of physiological psychology and psychophysiology.
- B. identify the physiological foundations of behavior with regard to motor organization, brain dynamics, states of consciousness, motivation, emotion, learning, and stress.
- C. critically review some aspect of research in physiological psychology.

III. COURSE OBJECTIVES

As a result of successfully completing this course, the student will be able to do the following:

- A. distinguish structure and function of the nervous system.
- B. relate, in his or her own words, an elementary understanding of the physiological basis of behavior.
- C. relate principles of physiological response mechanisms to aspects of adaptation in personality, behavior, and in health and disease.
- D. analyze and recognize the relations between psychological processes and somatic adaptive responses and compare various theories explaining the mind/body relationship.
- E. critically review some aspect of research in physiological psychology or psychophysiology.
- F. evaluate interrelationships between observable physiological function and psychological behavior, with special reference to the human organism.

IV. TEXTBOOK

Carlson, Neil R. (2000) Physiology of behavior. (7th ed.) Boston: Allyn and Bacon.

V. POLICIES AND PROCEDURES

A. University Policies and Procedures

1. Attendance at each class or laboratory is mandatory at Oral Roberts University.
2. Double cuts will be assessed for absences immediately preceding or following breaks or holidays.
3. Excessive absences can reduce a student's grade or deny credit for the course.
4. Students and faculty at Oral Roberts University adhere to all laws addressing the ethical use of others' materials, whether it be in the form of print, video, multimedia, or computer software.
5. Students taking a late exam because of an unauthorized absence will be charged a late exam fee.
6. Final exams cannot be given before their scheduled times. Students need to check the final exam schedule before planning return flights or other events at the end of the semester.

B. Course Policies and Procedures

1. Evaluation Procedures

a. Grading Summary

4 Unit Exams (100 points each)	400 points
1 Journal Critique & Presentation	50 points
1 Writing Assignment	<u>100</u> points
	550 points

- b. Writing Assignment--In an 8-10 page paper worth 100 points the student should describe the physiology of a specific mental disorder. This involves choosing a diagnosable disorder from the DSM-IV and describing its physiology according to the following categories and format:
- (1) symptomatology--what symptoms characterize this particular disorder?
 - (2) physiology--what physiological changes are associated with this disorder?
 - (3) Treatment--how do the various treatment approaches seek to effect the person physiologically?
 - (4) This paper is written according to APA format and must cite a minimum of eight sources. The 100 points are divided as follows:
 - (a) symptomatology 25 points
 - (b) physiology 50 points
 - (c) treatment 25 points

- c. Journal Critique and Presentation--A sign-up sheet is passed around class to sign-up for a day to present a summary of a journal article. Each day has a specific journal article number assigned to it. This number corresponds to an article published in the Annual Editions of Biopsychology, which is available on reserve. The student's responsibility is to critique the article and then, in a five-minute presentation, summarize it to the class. The critique should be 2 pages typed and handed in. The first page is a summary of the article in the student's own words. The second page consists of the student's interaction with the article by critiquing the author's points and conclusions and integrating the article's content with class discussions. This assignment is worth 50 points to be assessed as follows:

(1)	Content--summary and critique	40 points
(2)	Mechanics--spelling and grammar	5 points
(3)	Presentation--clarity and creativity	5 points
	Total	50 points

2. Other Policies and Procedures

- a. One percentage point is deducted from the point total for each class missed after three absences.
- b. Three late arrivals count as one absence.

VI. COURSE CALENDAR

<u>Week</u>	<u>Subject</u>	<u>Text</u>
1	Introduction	ch. 1
2	Cells of the Nervous System	ch. 2
3	Structure of the Nervous System	ch. 3
4	Psychopharmacology	ch. 4
5	Exam I	
	Vision	ch. 6
6	Audition, Body Senses and Chemical Senses	ch. 7
7	Movement	ch. 8
8	Sleep and Biological Rhythms	ch. 9
9	Exam II	
	Reproductive behavior	ch. 10
10	Emotion	ch. 11
11	Thirst and Hunger	ch. 12 & 13
12	Learning and Memory	ch. 14
13	Exam III	
	Communication	ch. 16
14	Schizophrenia and Affective Disorders	ch. 17
15	Anxiety, Autistic, and Stress Disorders	ch. 18
16	Final Exam	

Feller, R.
Name of Instructor

PSY 305
Course No.

Physiological Psychology
Title of Course

Behavioral Sciences
Name of Department

MISSION

The lifestyle at ORU is rooted in the word "Wholeness." ORU seeks to educate the whole person, with balanced emphasis placed on the development of the mind, spirit, and body.

GENERAL OUTCOMES

1. Spiritual Development
2. Physical Development
3. Communication
4. Analysis
5. Problem Solving
6. Valuing in Decision-making
7. Social Interaction
8. Global Perspectives
9. Effective Citizenship
10. Aesthetic Responsiveness

MAJOR OUTCOMES

1. Develop an understanding of the physiological basis of behavior.
2. Distinguish between the structures and functions of the nervous systems.
3. Be familiar with theories explaining the mind-body relationship.
3. Develop an appreciation for the intricate interaction between mind, body, and spirit.

COURSE GOALS

1. Demonstrate a factual understanding of physiological processes related to motor organization, brain dynamics, consciousness, motivation, emotion, learning, and stress.
2. Review and present a journal article addressing a current issue in physiological psychology.
3. Develop a personal appreciation of mind, body-spirit interaction through an applied research project.

ASSESSMENT OF COURSE OUTCOMES

STIMULI:

Class discussion
Group presentations
Videos
Guest speakers

CRITERIA:

Four unit exams
Journal review and presentation to class
Research paper