LEAD CITY UNIVERSITY
Faculty of Social and Management Science
Department of Sociology and Psychology

COURSE PARTICULARS

Course Code: Psy 214
Course Title: Physiological Psychology
No. of Units: 3
Status: Compulsory

LECTURER DETAILS

Name: Dr Lydia Titilayo Dada
Qualifications: Ph.D
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Area of Specialization: Clinical Psychology

COURSE DESCRIPTION

Psy 214 introduces students to a biological framework for understanding complex human and animal behaviours and mental processes. It deals with how the individual's experience and socio-cultural environment interact with the machinery (anatomy, physiology, and chemistry) of the nervous and endocrine systems to produce such activities as consciousness, perception, motor control, learning, memory, emotion, motivation, etc.
The course has extensive applications for both theory and practical development in bio-medicine, neuroscience, cognitive science, clinical science, psychiatry, neurology, surgery, clinical psychology, counselling psychology, rehabilitation psychology, occupational therapy, social work.

COURSE DISCRIPTION:

- The nervous system
- Body Senses
- Movement
- Sexual Behaviour
- Sleep and Dream

COURSE OBJECTIVES:

- To build on knowledge and skills already acquired in the requisite Psy 111 (Biopsychology).
- To provide students with a more detailed understanding of the divisions, structures, and functions of the central and peripheral nervous systems, and the endocrine system, and how they determine, or interact with behaviour.
- To elucidate the role of nature and nurture in the determination of behaviour and conscious experience.

- To highlight the ethics of bio-psychological research
- To introduce students to bio-psychological research and applications.

ASSESMENT

Class Attendance 5 marks
Test(s) and Assignments 25 marks
Final Examination 70 marks

LECTURE PLAN

Week	Topic
Week 1	Introduction**;** History of Physiological Psychology Research Techniques used in Physiological Psychology
Week 2	Anatomy of the Brain: Damage and Recovery The neurones, Synapse and Glia
Week 3	Neural control of movement
Week 4	Brain mechanisms of movement Disorders of movement
Week 5	Internal Regulation Temperature, thirst and hunger
Week 6	The Body senses
Week 7	MID SEMESTER TEST**.**
Week 8	Emotional behaviours
Week 9	Reproductive behaviours
Week 10	Wakefulness, sleep and Dream
Week 11	Stress and Health
Week 12	Revision

READING LIST

1. Kalat, J.W. 2007 “Biological Psychology (Ninth Edition)”: Wardsworth.

2. Lahey, B.B. 2007 “Psychology: An Introduction (Ninth Edition): McGraw-Hill.

3. Widmaier, E.P., Raff, H., and Strang, K.T. 2004 “Human Physiology: The Mechanisms of Body Function: McGraw-Hill.

TUTORIAL QUESTIONS (*12questions)*

Question 1

i. Describe the research technique used in physiological psychology.
ii. Differentiated between invasive and non-invasive physiological investigations.

Question 2

i. Describe the Limbic system.
ii. State the functions of the Limbic system
iii. Describe the cerebellum.

Question 3

i. Identify the different categories of muscles, and indicate their functions.
ii. What are extensor and flexor muscles?
iii. Discriminate between voluntary and involuntary muscles.

Question 4

i. Describe the condition known as Parkinson's disease.
ii. Enumerate the motor symptoms of Parkinson's disease, and describe some of the cognitive effects of the disease.
iii. Describe the mode of management.

Question 5

i. Describe neuromuscular junction and explain activities that take place there for movement to occur .
ii. What type of muscle is required for a leg or arm to move in two directions? Give an example

Question 6

i. Explain the term homeostasis.
ii. Define basal metabolism
iii. The set point for human temperature is equal to _____ centigrade.
iv. Amphibians, reptiles, and most fish are described as _____ because their bodies assume the temperatures of their environments.
v. An animal that uses physiological mechanisms to maintain constant body temperature over a wide range of environmental temperatures is described as _____.

Question 7

i. Define and explain what is meant by emotions.
ii. Identify different types of emotions.
iii. State the James-Lange Theory of emotion and briefly explain the autonomic nature of emotions.
iv. List the brain areas implicated in emotional behaviour.

Question 8

i. Describe forced sexual behaviour.
ii Highlight the effects it has on the victim.

Question 9

i. Explain what is meant by rhythms of waking and sleeping.
ii. Discuss the brain mechanisms of different sleep stages.
iii. Explain the functions of sleep, dream, and REM.

Question 10

i. Describe the concept of stress according to Hans Selye.
ii. What are the weaknesses the concept.
iii. Identify the major sources of tresses
iv. Explain the factors that may influence reactions to stress

Question 11

i. Discuss circadian rhythm.
ii. Explain the duration of the human circadian rhythm.
iii. What is the most effective way of disrupting the biological clock?

Question 12

i. Explain the bio-psychological health model
ii Explain effective strategies of coping with stress.
iii. Identify four ineffective ways of coping with stress.
iv. What is stress-induced analgesia?