



## BS (4 Years) for Affiliated Colleges

Code	Subject Title	Cr. Hrs	Semester
APSY- 471	Experimental Psychology	3	VII
Year	Discipline		
4	Applied Psychology		

### Course Objectives

- to provide conceptual understanding of experimental psychology and acquaint them with latest research in the areas of learning, perception, and memory; to develop an experimental/investigative approach among students

### Course Outcome

At the completion of the course the student will be able to:

- design, conduct and report lab experiments both on human participants.

### Course Contents

#### **Introduction to Experimental Psychology**

An overview of experimental psychology

Experimental report writing

#### **Psychophysics**

Importance of psychophysics

Psychophysical methods

Theory of signal detection

#### **Sensation**

The five senses: vision, hearing and other senses.

Psychophysics: Absolute threshold, signal detection theory, just noticeable differences and sensory adaptation.

Methods of measurement

#### **Perception**

Definition of perception, relationship of perception and sensation, learning and socio cultural factors in perception.

Perceptual organization, the Gestalt Laws of organization

Depth perception, perception of movement

Perceptual illusions. Perception of time

#### **Cognitive processes/ Thinking**

Reasoning & decision-making

Problem solving & creative thinking

Information processing, executive functioning, multi-tasking

## **Learning and Conditioning**

Definition of learning, Difference between learning, instinctive behavior, habituation and sensitization

Classical conditioning: Pavlovian or Classical Conditioning: the nature and acquisition of classically conditioned responses (CR), Maintenance and extinction of classically conditioned responses, Factors in classical conditioning, theories of conditioning, Secondary conditioning, generalization, Application of classical conditioning.

Operant conditioning: Thorndike's law of effect, the basis of operant conditioning: acquisition, nature and schedules of reinforcement, generalization and discrimination, extinction & Partial Reinforcement Effect (PRE)

Factors, theories, and application of operant conditioning

## **Memory**

Defining memory, Sensory memory, short-term memory, long-term memory, measurement of memory and forgetting

Current Research on memory

Reconstruction of memory

## **Motivation**

Theories of motivation by Helson and Atkinson

## **Designing an Experiment**

### **Recommended Books**

Boring, E. (2007). *History of experimental psychology*. India: Cosmo Publications

Broadbent, D. E (1998). *Perception and communication*. (2nd ed.). London: Pergamon press.

Carter, P. & Russell, K. (2012). *Ultimate IQ tests* (2nd ed.). USA: Viva Books

Chance, P. (2003). *Learning and behavior* (5th ed.). Belmont, CA: Thomson Wadsworth.

Goldstein, F. (1995). *Sensation and perception*. NY: McGraw Hill..

Kimble, G. (1994). A new formula for behaviorism. *Psychological Review*, 1994, 101, 254-258.

Leahay, J. (1998). *Learning and cognition*. New York: Willey series in psychology.

Matlin, P. (1998). *Cognition*. UK: Routledge and Kagan Paul.

Osgood, C. F. (1995). *Methods and theory in experimental psychology*. New York: Oxford. University Press.

Postman, L. & Egan, J.P. (2007). *Experimental psychology: An introduction*. India: CBS Publishers & Distributors.

Stevens, S. S. (1998). *Handbook of experimental psychology*. London: John Wiley.

Watson, J. B. (1994). Reprint of psychology as behaviorist views it. *Psychological Review*, 101, 248-253.