

Introduction to Psychology (HS303)

Course Instructor:

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Textbook

- Feldman, R. S.(2004).**Understanding Psychology**. Tata McGraw-Hill, New Delhi, India
- Morgan, King, Weisz,& Schopler (7th Edition).**Introduction to Psychology**. Tata McGraw-Hill, New Delhi, India

Course Objectives

- At the end of the course, You would have an understanding of the basic theories, findings, and methods in various areas of psychology. The topics include
 - Introduction to Psychology
 - Sensation and Perception
 - Learning
 - Memory
 - Motivation and emotion
 - Language and Thought
 - Personality

Evaluation

- 2 Quizzes
- 1 quiz during the course covering 2 chapters (Introduction to Psychology and Sensation /Perception), August 24, 2017 at 8.30 – 9.25 am.
 - 2nd quiz will be unannounced.
 - Mid Semester examination will be multiple choice, and matching questions
 - End semester will be multiple choice as well as subjective question.

Course Content

- Lectures will cover some material from the text book, and some material NOT in the text book

Why Study Psychology

- Need a social science course
- Learn more about yourself
- Learn more about others
- Learn more about how others influence you
- Learn more about how you influence others
- Investigate psychology as a major
- By Accident

Test your knowledge about Psychology

- Psychologists can read mind of others
- Dreams are always unrealistic
- Genius borders on insanity
- Improved mood rules out depression
- Personality does not change over years
- Intelligent persons can do any job better than others
- Mind leaves no trace in our body

Major issues

- How the knowledge represented ?
- How does individual acquire new knowledge?
- How does visual system organize sensory experiences into meaningful objects and events?
- How does memory work?
- How does the Brain learn?
- What makes an experience conscious?
- What is the basis of unique cognitive capacities of human brain, relative to that other, similar species?

Ways to Validate Truth or Reality

- Personal experience
- Intuition
- Social and/or cultural consensus
- Religious scripture and interpretation
- Philosophy and logical reasoning
- Science and the scientific method

Scientific Method

- An approach to knowledge that relies on a systematic method of generating hypotheses, collecting data, and explaining the data
 - identify a research issue, question or problem
 - design a study to investigate the issue,
 - collect and analyze data,
 - draw conclusions, and
 - communicate their findings
 - The database that is developed using the scientific method

Purpose for Using Scientific Method

Understanding

- Description
- Prediction
- Explanation
- Influence or Control

Database

- Facts & Concepts
- Principles
- Theories
- Laws

Criteria for Using Scientific Method

- Knowledge must be grounded in experience
- Knowledge must be grounded in a paradigm or exemplar
- Falsifiable hypothesis

Psychology

- Derived from the Greek words *psyche*, meaning "mind," and *logos*, meaning "the study of."
 - Scientific methods are used to understand how humans and other living creatures think, feel, and act.

Psychology?

- Psychology is the scientific study of behavior and mental processes.
- Psychologists are interested in every aspect of human thought and behavior.
- Related areas of study
 - Philosophy of Mind
 - Other sciences
 - Biology
 - Sociology
 - Anthropology
 - History
 - Pharmacology
 - Economics
 - Neurobiology
 - Geography
 - Literature and the arts

Psychology

- Goals of Psychology
 - Description
 - First step in understanding most behaviors or mental processes
 - Describes the behavior or mental process of interest as accurately and completely as possible
 - Tells what occurred
 - Prediction
 - When researchers can specify the conditions under which a behavior or event is likely to occur

Continue

- Goals of Psychology (continued)
 - Explanation
 - Requires an understanding of the conditions under which a given behavior or mental process occurs
 - Enables researchers to state the causes of the behavior or mental process they are studying
 - Tells why a given event or behavior occurred
 - Influence or Control
 - When researchers know how to apply a principle or change a condition to prevent unwanted occurrences or to bring about desired outcomes

Psychology

- Two types of research that help psychologists accomplish these goals
 - Basic research
 - Research conducted to advance knowledge rather than for its practical application
 - Example: studying the nature of memory
 - Applied research
 - Research conducted to solve practical problems
 - Example: exploring methods to improve memory

Descriptive Research Methods

- Descriptive research methods
 - Research methods that yield descriptions of behavior rather than causal explanations
 - Naturalistic observation
 - Case studies
 - Surveys
 - Experiment

Naturalistic Observation

- Observing and recording the behavior of humans or animals in their natural environment
- Advantages
 - can observe what occurs before and after target behavior
 - insight into the important factors to study
 - no artificiality of the laboratory
- Disadvantages
 - less control over variables
 - cannot imply causality
 - observer bias and subject reactivity
 - target behavior only occurs once

Case Studies

- Intensive description and analysis of a single individual or just a few individuals.
- Advantages
 - rich description of an individual
 - each individual serves as own control
 - no large groups of participants
 - no random assignment
- Disadvantages
 - generalizability is decreased by small sample size
 - the individual being studied may be an exception
 - observer bias

Surveys

- A research technique in which questionnaires or interviews are administered to a selected group of people.
- Advantages
 - large quantity of information
 - relatively inexpensive
- Disadvantages
 - respondents may not be representative
 - response biases
 - truthfulness of responses

Experimental Method

- A research technique in which an investigator deliberately manipulates selected events or circumstances and then measures the effects of those manipulations on subsequent behavior.
- Independent variable:
 - The variable that is manipulated by the experimenter to test its effects
- Dependent variable:
 - The variable that is measured to see how it is changed by the independent variable

Experimental Method

- Experimental group
- Control group
- Advantages
 - conclusions about causality can be made
- Disadvantages
 - more ethical considerations
 - behavior is constrained to laboratory

Schools in Psychology

- A school: A group of scientists who agree on the three questions:
 - What is the problem we deal with?
 - What phenomena do we look at?
 - How do we look at these phenomena?
- Five schools:
 - Structuralism; Functionalism; Psychodynamic; Behaviorist; Gestalt