Birla Institute of Technology & Science, Pilani
Hyderabad Campus

SECOND SEMESTER 2024-2025

Course Handout Part II

Date: 3-1-25

In addition to part I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course.

Course No. : **HSS GSF232**
Course Title : ***Introductory Psychology***
Instructor-in-Charge : **Madhushree Chakrabarty**

Scope and Objective of the Course:

Psychology is a scientific discipline that aims to understand human behaviour and mental processes and apply the empirical findings to enhance people's quality of life. This course aims to introduce the fundamental ideas, theories, methods, and important topics of psychology. You will gain an understanding of human perception and behaviour from this course, which is essential for creating new technologies, machines, equipment, and designs that are better suited for human use.

Course Objectives:

- Identify basic concepts, themes, and research findings and integrate them to get a holistic idea.
- Apply psychological principles to make positive changes in everyday-life, as well as in research and developmental projects.
- Draw objective conclusions about behaviour and mental processes based on empirical evidence.
- Design basic psychological research and administer basic psychological tests

Textbook:

1. Baron, R.A. and Misra, G. (2016). Psychology: Indian Subcontinent Edition (5th Ed). Pearson.

Reference books

1. Ciccarelli, S.K. and Meyer, G.E. (2008) Psychology: South Asian Edition. Pearson.
2. Kalat, J. W. (2014). Introduction to psychology. Wadsworth Cengage Learning
3. Gregory, R. J. (2015). Psychological Testing: History, Principles and Applications (7th Ed.). Pearson. https://www.pearson.com/en-gb/subject-catalog/p/psychological-testing-history-principles-and-applications-global-edition/P200000004343/9781292067551
4. Wickens, C.D., Helton, W.S., Hollands, J.G., & Banbury, S. (2021). Engineering Psychology and Human Performance (5th ed.). Routledge. https://doi.org/10.4324/9781003177616
5. Stangor, C. and Walinga, J. Introduction to Psychology (1st Ed. Canadian). BCcampus. https://opentextbc.ca/introductiontopsychology/

Course Plan:

Lecture No.	Learning objectives	Topics to be covered	Chapter in the Text Book
1-3	Evolution of psychology as a science and its importance in engineering and technology	Origin of psychology from philosophy; Wundt's contribution and the emergence of psychology as a science; Why this is considered a science; The chronology of the evolution of modern psychology;	Ch. 1
4	Understanding Individuals within Environments	How Individuals and environments are related; How these relationships are affected by cultural and other social processes; Power and fragility of settings; The dynamic nature of settings; Creating alternative settings to promote mental well-being	Ch. 1
5-9	Understanding how biological factors contribute to an individual's behaviour	Role of genetics, hormones, and the nervous system in shaping an individual's behaviour.	Ch. 2
10-21	How we understand the world around us; The mind-body dualism; Understanding Consciousness, Sensation, Perception	How our body receives sensations from the environment; How it is encoded in a specific way; and how these signals are sent to the brain to form conscious perception; How we combine multiple simultaneous sensations and perceptions to understand the world around us. Biological bases of the five senses (hearing, seeing, tasting, smelling, and touching); Accuracy and inaccuracy in perception.	Ch. 2 - 4
22-23	A brief overview of behavioural and neural mechanisms of emotion and motivation	Meaning, importance and theories of Motivation; The neural mechanism of emotion and motivation. Impact of emotion and motivation on cognition	Ch 10
24-29	Understanding the cognitive perspective of human psychology; How do we think, decide and	Attention; Memory; Learning; Language; Communication; Problem solving, and Creative thinking	Ch 5-7

	create novel ideas and work?		
30-31	A brief overview of Human development; Developmental and psychological disorders;	Stages of human development; some important behavioural and mental health issues faced by individuals across the lifespan; Rehabilitation strategies (behaviour modification and different types of therapies, emotional coping, adaptation to disability, cognitive therapy); Role of technology in rehabilitation	Ch 2, 8,9, 13,14,15
32- 34	Basic idea about the nature and characteristics of psychological tests	History, principles, and application; Characteristics of a good psychological test; Reliability and Validity; Types of Tests; Standardisation and Norms	Reference book 3 (A handout will be provided)
35-37	Exploration of the concepts of Intelligence and personality and their interrelationships	Nature and concept of personality and intelligence; types; debates; evaluations; Is there any relationship between intelligence and personality? Personality disorders and intelligence;	Ch 11,12,16
38-42	Importance, and Application of Psychology in Engineering	Role of sustained attention or vigilance in signal detection; Absolute judgement; perceptual errors; The cognitive science of visual-spatial displays: Implications for design. Spatial cognition and navigation.; Role of technology in enhancing language learning and communication in healthy populations and specially-abled populations; Memory training app; Role of technology in decision-making; Role of technology in reducing mental workload and stress; Enhancing human-machine interactions; Aesthetics, architecture, and wellbeing	Reference book 4 (Handout will be provided)

Evaluation Scheme:

Component	Duration	Weightage (%)	Date & Time	Nature of Component
Class Participation		10	TBA*	OB
Mid-semester Test	90 minutes	20	As per Timetable	OB (Only handwritten notes allowed)

Assignment1&2	TBA*	15+15 =30	TBA*	OB
Comprehensive Examination	3 hours	40	As per Timetable	OB (Only handwritten notes allowed)

Chamber Consultation Hour: Saturday 11 AM to 1 PM

Notices: Notices concerning the course will be displayed on the LMS

Make-up Policy: Make-up will be given only in legitimate circumstances after adequate verification

Minimum marks: A minimum score of 20 out of 100 is required to be awarded a grade.

Academic Honesty and Integrity Policy: Students are expected to uphold academic integrity and honesty throughout the semester; any form of academic dishonesty is unacceptable.

Madhushree Chakrabarty
INSTRUCTOR-IN-CHARGE

***TBA: To be announced**
†FN: Forenoon
‡AN: Afternoon