Psychology of Learning and Cognition

Code	Credit Hours
ITL-811	3

Course Description

Psychology of Learning and Cognition is the scientific study of mental processes, of how the mind works (and fails to work) and how humans learn. The purpose of this course is to explore the fundamental processes, theories, and models of learning and cognition. This course fulfills the need to build a perspective for creating meaningful and sustainable educational technology by exploring theory and research from psychology and by explaining human abilities in perception, language, and thought. The course explores concepts and theories in Psychology, particularly the cognitive models as related to learning and cognition in children. Development of and relationships between language and cognition willbe explored. Students will study/observe children at different levels of development and explore how they can be assisted in their learning using appropriate technology. Related areas will be discussed such as perception, attention, and memory.

Text Book:

- 1. Matz, S. C. (2022). Introduction: Welcome to the psychology of technology. In S. C. Matz (Ed.), The psychology of technology: Social science research in the age of Big Data (pp. 3–7). American Psychological Association.
- 2. Chimirri, N. A., & Schraube, E. (2019). Rethinking psychology of technology for future society: Exploring subjectivity from within more-than-human everyday life. In *Psychological Studies of Science and Technology* (pp. 49-76). Palgrave Macmillan, Cham.
- 3. Aukrust, V. G. (2011). Learning and cognition in education (Ed.). Oxford: Elsevier.

Reference Book:

- 1. Graesser, A. C., Sabatini, J. P., & Li, H. (2022). Educational psychology is evolving to accommodate technology, multiple disciplines, and Twenty-First-Century skills. Annual review of psychology, 73, 547-574.
- 2. Kazak, A. E. (2020). Psychology is an essential science: American Psychologist highlights the role ofpsychology in understanding and addressing COVID-19. American Psychologist, 75(5), 605.
- 3. Hayes, G. (2023). Introduction to psychology.

Prerequisites

Applied Psychology and General Psychology

ASSESSMENT SYSTEM FOR THEORY

Quizzes	10%
Assignments	10%
Project	10%
Mid Terms	30%
ESE	40%

Teaching Plan

Week No	Topics	Learning Outcomes
1	Introduction	Course Outline, objectives, teaching plan, assessment method, concepts review
2	The Science ofCognition	Brain and Learning behavior and Schools of Thought
3	Sensation to Perception	From Sensation to Perception, Gestalt Visual pattern- Thehidden mind, From perception, Depth perception, Visual interpretation
4	Models of Human Development	Psycho-social Model, Cognitive Model
5-6	Personality	Major Perspective of Personality and individual differences, Psychoanalysis
7	Attention	Attention and Learning, Models of Attention
8	Memory	Models of Memory, strategies to improve memory
9	MID TERM EXAM	
10-11	Learning	Learning disabilities/deficits
12	Motivation	Motivation and impact of culture on eating habits
13	Difficulties in Mental Health Process	Emotions and Cognitions
14	Reliabilities and Validities	Reviews of some selected test and their administrative analysis
15	Anxiety and stress related disorders	General Learning Anxiety, Study stress, and exam anxiety
16	Intelligence	Concept of intelligence, Perspectives and models of Intelligence, Multiple Intelligences
17	Project presentations and Demos	
18	End Semester Exams	