OVERALL LEARNING OBJECTIVE OF PSYCHOLOGY 1

Psychology 1001 & 1002 together are intended to be a general introduction to the main topics and methods of Psychology and to serve both as a basis for advanced work and as a general overview of the subject for those not proceeding further with it.

PSYCHOLOGY 1002 SYLLABUS

Human Development

1. Introduction to Human Development and its research methods: Naturalistic Methods; Cross-sectional/longitudinal; Experimental/correlational.

2. Genetic contributions to development: Introduction to Mendelian genetics; meiosis and mitosis; dominant and recessive traits and disorders; chromosomal effects; twin studies.

3. Prenatal development: Normal development; factors causing abnormality (teratogenic agents etc.).

4. Postnatal development (i): Language development; stages of phonetic, syntactic and semantic development; Theories of language development.


References:


Learning

1. Basics of Classical conditioning: Introduction to course; use of animals; definition of learning. Basic procedures and terminology; second order conditioning; extinction and spontaneous recovery.

2. Basics of instrumental conditioning: Procedures; distinction between IC and CC. Operant and discrete trial examples; learning curves; extinction.

3. Discrimination and generalization: Stimulus generalization - gradients; generalization of extinction. Discrimination-procedures and results; effect on generalization.

4. Distinction between two types of conditioning - response systems: Learning in two R systems: Skeletal vs. visceral; voluntary vs. involuntary; procedures for distinction.

5. Learning under aversive control: Escape and active avoidance; punishment and passive avoidance. Two factor theory and fear.

References:
Basic information about many of these topics may be found in the Psychology 1 textbook. For a more detailed treatment, a textbook recommended for the Learning and Motivation course in both 2nd and 3rd year will usually prove the most helpful:


A more detailed treatment is provided by:


Cognitive Processes


2. Limitations on cognitive processing: selective attention; attentional resources; automatic processing; attention and memory.


4. Encoding and retrieval in long-term memory: rehearsal; levels of processing; transfer appropriate processing.

5. The architecture of long-term memory: episodic and semantic memory; explicit and implicit memory. Network models of memory.


References:
Basic information about most of these topics can be found in Chapter 7 of the Psychology 1 textbook. More detailed coverage will be found in most textbooks on cognitive psychology. The textbooks used in 2nd and 3rd year Cognition courses (PSYC 2113 and PSYC 3205) should be easily accessible and cover all topics:


Other good comprehensive textbooks that have multiple copies in Fisher Library include:


Visual Perception

1. Introduction: The study of Perception; stimulus properties; absolute and relative judgments; measurement in Perception. The functions of perception; cortical pathways and the "what" and "where" functions.

2. Depth Perception: Monocular cues to depth (e.g., linear perspective, texture gradients, elevation, interposition, motion parallax); binocular retinal disparity as a depth cue; ocular mechanisms as depth cues (accommodation and convergence) to judgments of absolute and relative distance. The relationship between size and distance perception: size constancy; size distance scaling theory.


4. Perception and physiology: Consciousness and behaviour; neurological and behavioural evidence. "Feature Detectors" in the Visual System: The concept of feature detectors; the receptive-field concept; Kuffler's work; the work of Hubel and Wiesel; examples of feature detector explanations of some visual phenomena.

5. The Role of Experience in Perception: Perceptual capabilities of young organisms; depth perception; motion perception, etc.; effects of restricted environmental stimulation on the development of the visual system; critical periods in visual development.

6. Colour Vision: The nature of light: hue, saturation and brightness and their physical correlates; sensitivity of rod and cone mechanisms; colour coding; the Young-Helmholtz Trichromatic Theory; Hering's opponent processes theory of colour vision; recent evidence related to colour coding mechanisms.

References:
Abnormal/Motivation

1. What is abnormal behaviour? Introduction to the classification of psychological disorders; DSM multiaxial classification system; criticisms of classification; models of psychopathology.

2. Focus on the Anxiety Disorders: The distinction between fear and anxiety; components of the anxiety response and desynchrony; basic distinctions among anxiety disorders; the relation of two-factor theory to behavioural treatment of Obsessive-Compulsive Disorder.

3. Focus on Addiction: Addictive processes; the addictive agents and their effects; sociocultural, psychological and biological variables related to substance abuse and dependence.

4. Basic motivational processes: Physiological needs; basic motivational mechanisms; ethological models of behaviour; behavioural analyses of fixed action patterns - imprinting, critical periods; open and closed systems of behaviour.

5. Need based motivation: Drive approach to motivation, primary and secondary sources of drive; sensory reinforcement; reinforcement theories of motivation; social needs.

6. Incentive motivation: Goals and rewards as motivational mechanisms; hedonic theory; the application of incentive motivation to human behaviour.

7. Maslow’s hierarchy of human needs. McClelland’s theory; the acquisition of the need for power, affiliation and achievement.

References:

Human Mental Abilities


2. Psychometric Principles and Procedures. The concepts of test reliability; measurement error and validity; Test standardization and norms.

3. Major Tests of Intelligence: Stanford-Binet Intelligence Scale; Wechsler’s scales (WISC and WAIS); Raven’s Progressive Matrices test.

4. Psychometric Theories of Intelligence 1: General factor theory (C. Spearman); the theory of primary mental abilities (L. Thurstone).

5. Psychometric Theories of Intelligence 2: Guilford’s theory; Hierarchical theories of Burt, Vernon and fluid and crystallized intelligence (R. Cattell and J.L. Horn).

6. Group Differences in Cognitive Abilities: Gender differences in cognitive abilities; Racial, age and socio-economic status differences.

7. Cognitive Psychology and Biology of Intelligence: Brief introduction to the work of cognitive psychologists (e.g. Flunt) who are interested in individual differences; Recent studies of the relationship between intelligence test performance and brain processes (electrical activity and glucose metabolism).
References: