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 designs; Experimental/correlational designs.

2. Genetic contributions to development: Introduction to Mendelian genetics; Dominant and recessive traits and disorders; Chromosomal effects; Behaviour genetics.

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

4. Language development: Stages of phonetic, syntactic and semantic development; Theories of language development.

5. Cognitive development: Piaget’s theory.

References:


LEARNING

1. Simple behavioural processes: Introduction to course; use of animals; definition of learning. The reflex; Control systems; Habituation and Sensitisation.

2. Basics of Classical conditioning: Basic procedures and terminology; second order conditioning; extinction and spontaneous recovery.

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


5. Social learning: Early studies on observational learning; Modelling; Imitation and Emulation

6. Learning and cognition: Voluntary vs involuntary responses; Latent learning; Learning and memory.
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 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:


VISUAL PERCEPTION

1. Basic properties of light: interaction between light and surfaces; the eye as an optical instrument; properties of the retinal image; the problem of 'inverse' geometry

2. Depth perception: Monocular cues to depth; binocular retinal disparity as a depth cue. The relationship between size and distance perception: size constancy; illusions of size and distance.

3. Perceptual organization: Organization of input as a problem in vision and audition; the Gestalt "laws" of organization; figure vs ground; illusory contours.

4. Introduction to the neurophysiology of vision: The receptors in the retina (rods and cones); the blind spot; ganglion cells and the concept of the receptive field.

5. Colour vision: The nature of light: hue, saturation and brightness and their physical correlates; colour coding; the Young-Helmholtz Trichromatic Theory; Hering’s opponent processes theory of colour vision.

6. Motion perception: conditions for motion perception; information for movement in the visual array; motion and perceptual organization; physiology of motion perception.

7. The role of experience in perception: Perceptual capabilities of young organisms; effects of restricted environmental stimulation on the development of the visual system; critical periods in visual development.

References:


ABNORMAL/MOTIVATION

1. Introduction to Abnormal Psychology: Defining abnormal behaviour; the classification of psychological disorders; DSM multiaxial classification system; criticisms of classification; models of psychopathology.

2. Focus on the Anxiety Disorders: Components of the anxiety response and desynchrony; basic distinctions among anxiety disorders; the relation of two-factor theory to the behavioural treatment of anxiety disorders.

3. Focus on Addiction: The definition of addiction; the disease model of addiction; 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.
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. Hunt) who are interested in individual differences; Recent studies of the relationship between intelligence test performance and brain processes (electrical activity and glucose metabolism).

References:


