

COMPREHENSIVE EXAM IN COGNITIVE-AFFECTIVE PSYCHOLOGY

Exam topics from 2019 spring

1. BASIC CONCEPTS OF PERCEPTION

SENSATION AND PERCEPTION. APPROACHES TO STUDY PERCEPTION. COMMON CHARACTERISTIC OF SENSORY MODALITIES. SENSORY CODES AND THRESHOLDS, MEASURING THRESHOLDS. WEBER AND FECHNER'S LAW. SIGNAL DETECTION THEORY

2. VISUAL FORM PERCEPTION

RECEPTIVE FIELDS, VISUAL PATHWAYS, GESTALT LAWS, FIGURE-GROUND SEGREGATION. VISUAL CUES AND PERCEPTION OF FACES

3. SPATIAL LOCALIZATION IN VARIOUS MODALITIES

BINOCULAR DISPARITY, MONOCULAR VISUAL CUES, MOTION PARALLAX, INTERAURAL LEVEL AND TIME DIFFERENCE, MONOCULAR AUDITORY CUES, SPATIAL REFERENCE FRAMES

4. PSYCHOACOUSTICS

PHYSICAL PROPERTIES OF SOUNDS; PERCEPTION OF LOUDNESS, EFFECT OF INTENSITY AND FREQUENCY ON THE PERCEPTION OF LOUDNESS. PERCEPTION OF PITCH IN THE CASE OF SIMPLE AND COMPLEX TONES. PERCEPTION OF TIMBRE

5. OTHER DIMENSIONS OF PERCEPTION AND THEIR ROLE IN THE BASIC PROCESSES OF LEARNING AND MOTIVATION

BODY PERCEPTION; TOUCH AND MOVEMENT PERCEPTION. PERCEPTION OF PAIN. THE ROLE OF PAIN IN BASIC LEARNING PROCESSES, AND THE ROLE OF LEARNING IN THE PERCEPTION OF PAIN. SMELL AND TASTE; THE ROLE OF SMELL AND TASTE IN THE BASIC LEARNING PROCESS.

6. LEARNING AND CONDITIONING

NON-ASSOCIATIVE LEARNING, CLASSICAL CONDITIONING AND ITS EVERYDAY APPLICATION (DRUG TOLERANCE, ACQUISITION, EXTINCTION, SPONTANEOUS RECOVERY, STIMULUS GENERALIZATION AND DISCRIMINATION, SECOND-ORDER CONDITIONING), INSTRUMENTAL CONDITIONING (ACQUISITION AND EXTINCTION, REINFORCEMENT TYPES, PUNISHMENT, SHAPING, GENERALIZATION AND DISCRIMINATION, SCHEDULES OF REINFORCEMENT), COGNITIVE FACTORS IN LEARNING, LEARNING AND THE BRAIN

7. MEMORY SYSTEMS AND PROCESSES

TAXONOMY OF MEMORY, MEMORY ENCODING, LEVELS OF PROCESSING, ENCODING SPECIFICITY, MEMORY CONSOLIDATION, MEMORY RETRIEVAL, MEASUREMENT OF LEARNING, DIFFERENT FORMS OF LEARNING, EXPLICIT AND IMPLICIT MEMORY.

8. SHORT-TERM MEMORY SYSTEMS AND WORKING MEMORY

SENSORY MEMORY, ICONIC AND ECHOIC MEMORY, SHORT-TERM MEMORY, MEMORY SPAN, THE MULTICOMPONENT MODEL OF WORKING MEMORY, THE VISUO-SPATIAL SKETCHPAD, THE PHONOLOGICAL LOOP, THE CENTRAL EXECUTIVE, THE EPISODIC BUFFER.

9. DECLARATIVE MEMORY 1: EPISODIC AND AUTOBIOGRAPHICAL MEMORY

MEMORY SYSTEMS, LEVEL OF PROCESSING, RECALL AND RECOGNITION, RETRIEVAL MODE, ORGANIZATION AND LEARNING, THE IMPORTANCE OF INCIDENTAL CONTEXT IN EPISODIC MEMORY RETRIEVAL. MEASUREMENT OF AUTOBIOGRAPHICAL MEMORY, DEFICITS IN AUTOBIOGRAPHICAL MEMORY, EYEWITNESS TESTIMONY, RECOLLECTION AND FAMILIARITY, SIGNAL DETECTION THEORY OF RECOGNITION MEMORY

10. DECLARATIVE MEMORY: 2 SEMANTIC MEMORY

FAILURE OF RECOGNITION, ABSTRACTION, CONCEPTS, CONCEPT LEARNING IN DEVELOPMENT, EXPERT KNOWLEDGE, ORGANIZATION OF SEMANTIC KNOWLEDGE, SCHEMAS, SEMANTIC VS. EPISODIC MEMORY, CONSTRUCTIVE MEMORY, ADAPTIVE REMEMBERING AND FORGETTING; INCIDENTAL VS. MOTIVATED, AMNESIA, COMPUTATIONAL MODELS OF MEMORY

11. SPEECH AND LANGUAGE

SUB-PROCESSES OF SPEECH PERCEPTION, ROLE OF MENTAL LEXICON IN SPEECH PERCEPTION AND PRODUCTION, WORD RECOGNITION, LEXICAL ACCESS, LEXICAL DECISION, COHORT MODEL, SEMANTICAL PRIMING EFFECT, CONTEXT EFFECT, ERRORS IN SPEECH PRODUCTION, MENTAL CHRONOMETRY, DELL'S MODEL, LEVELT-MODEL, TOT-PHENOMENON, LIBERMAN'S MOTOR THEORY, DEEP AND SURFACE STRUCTURE, TRANSFORMATIONAL GRAMMAR, READING MODELS, SENTENCE COMPREHENSION AND WORKING MEMORY, ROLE OF PROCEDURAL SYSTEM, APHASIA

12. SELECTIVE ATTENTION, ATTENTIONAL PROCESSES

COCKTAIL PARTY EFFECT, DICHOTIC LISTENING, EARLY SELECTION, SPATIAL ATTENTION, POSNER PARADIGM, OBJECT RELATED ATTENTION, FEATURE INTEGRATION THEORY, INATTENTIONAL BLINDNESS, CHANGE BLINDNESS

13. SOCIAL COGNITION

CODE MODEL, COMMUNICATION, GRICE MODEL, SPERBER-WILSON MODEL, RELEVANCE, THEORY OF MIND, INTENTIONALITY, MODULARITY, SIMULATION THEORY, THEORY-THEORY

14. HIGH LEVEL PROBLEM SOLVING

GESTALT MODEL, INSIGHT, PROBLEM-SPACE MODEL, EXPERTISE, CREATIVITY

15. REASONING AND DECISION MAKING

NORMATIVE SYSTEMS FOR REASONING AND DECISION MAKING, ABSTRACT-RULE THEORY, MENTAL MODELS THEORY, DOMAIN-SPECIFIC RULE THEORY, DECISION MAKING BIASES.

16. BASIC CONCEPTS OF MOTIVATION

TYPES OF MOTIVATION (PHYSIOLOGICAL, PSYCHOLOGICAL, SOCIAL. HIERARCHY OF HUMAN NEEDS, DEFICIENCY AND GROWTH NEEDS). THE PHYSIOLOGICAL NEED—PSYCHOLOGICAL DRIVE—BEHAVIORAL ACTION PROCESS, HOMEOSTASIS, NEGATIVE FEEDBACK, CENTRAL AND PERIPHERAL / INTRA- AND EXTRAORGANISMIC MECHANISMS OF REGULATION, DRIVE THEORIES (DRIVE REDUCTION / INDUCTION). PAIN PERCEPTION, THE MOTIVATIONAL AND AFFECTIVE ASPECTS OF PAIN (GATE CONTROL THEORY, THE NEUROMATRIX)

17. PHYSIOLOGICAL NEEDS: THIRST AND HUNGER

THIRST: PHYSIOLOGICAL REGULATION, THIRST ACTIVATION AND SATIETY.
HUNGER: SHORT-TERM APPETITE, LONG-TERM ENERGY BALANCE, COMPREHENSIVE MODEL OF HUNGER REGULATION (GLUCOSTATIC AND LIPOSTATIC HYPOTHESIS), INTERACTIONS BETWEEN HOMEOSTASIS AND INCENTIVES, SET POINT / SETTLING POINTS, EATING DISORDERS.

18. GENDER AND SEXUALITY. AGGRESSION.

GENDER AND SEXUALITY: EARLY SEXUAL DEVELOPMENT, PHYSIOLOGICAL REGULATION, HORMONES VS. ENVIRONMENT, ADULT SEXUALITY, THE SEXUAL RESPONSE CYCLE, SEXUAL ORIENTATION.
DEFINITION AND KINDS OF AGGRESSION. AGGRESSION AS A DRIVE / AS A LEARNED RESPONSE. EXPRESSION OF AGGRESSION AND CATHARSIS. THE FLIGHT OR FIGHT SYSTEM.

19. PSYCHOLOGICAL AND SOCIAL NEEDS. PROSOCIAL BEHAVIOR, ALTRUISM.

PSYCHOLOGICAL NEEDS: AUTONOMY, COMPETENCE, RELATEDNESS. SOCIAL NEEDS: ACQUIRED NEEDS, ACHIEVEMENT (ATKINSON'S MODEL), AFFILIATION AND INTIMACY.

HELPING BEHAVIOR AND ALTRUISM: THE EVOLUTIONARY, SOCIOCULTURAL, LEARNING AND DECISION-MAKING PERSPECTIVE. ATTRIBUTION THEORY AND HELPING BEHAVIOR. THE NEGATIVE STATE RELIEF MODEL AND EMPATHY. THE BYSTANDER EFFECT.

20. NATURE OF EMOTIONS

COMPONENTS OF EMOTION, EMOTION AS A PROCESS. RELATIONSHIP OF EMOTION AND MOTIVATION. BIOLOGICAL AND COGNITIVE PERSPECTIVE OF EMOTION. NUMBER OF EMOTIONS, BASIC EMOTIONS. FUNCTIONS OF EMOTIONS. DIFFERENCE OF EMOTION AND MOOD.

21. ASPECTS OF EMOTIONS

BIOLOGICAL ASPECTS OF EMOTION, BODILY CHANGES AND EMOTION: JAMES-LANGE THEORY AND ITS CRITICISM. FACIAL EXPRESSION AND EMOTION: THE FACIAL FEEDBACK HYPOTHESIS. COGNITIVE ASPECTS OF EMOTION: APPRAISAL AND ATTRIBUTION. SOCIAL AND CULTURAL ASPECTS OF EMOTION. EMOTION REGULATION.

21. CONSCIOUSNESS AND ALTERED STATES OF CONSCIOUSNESS

NATURE AND FUNCTIONS OF CONSCIOUSNESS, CONSCIOUS, UNCONSCIOUS, PRECONSCIOUS, SUBCONSCIOUS, DISSOCIATION, TYPES OF ALTERED STATES OF CONSCIOUSNESS AND THEIR COMMON FEATURES, SLEEP AND DREAMS, MEDITATION, HYPNOSIS, PSYCHOACTIVE DRUGS. UNCONSCIOUS MOTIVATION.

REFERENCES:

Compulsory readings (cognitive)

- Atkinson & Hilgard's Introduction to Psychology (16th Edition)
- Baddeley, A., Eysenck, M. W., & Anderson, M. C. (2014). Memory (2nd Edition). Abingdon: Psychology Press: Chapter 1, 6, 7, 11.

Recommended reading (cognitive)

- Eysenck, M., Keane, M.T. (2015): Cognitive Psychology: A Student's Handbook, 7th Edition. Psychology Press, London

13. SOCIAL COGNITION

- Sperber, D., & Wilson, D. (1987). Précis of relevance: Communication and cognition. *Behavioral and brain sciences*, 10(04), 697-710.
- Goldman, A.I., Margolis, E., Samuels, R. & Stich, S. (2012). Theory of mind. *The Oxford Handbook of Philosophy of Cognitive Science*, 404-424.

Compulsory readings (affective)

- Reeve, J. (2009/2014) *Understanding motivation and emotion* (5th or 6th edition). Wiley.
- *Atkinson & Hilgard's Introduction to Psychology* (15th or 16th Edition), Chapter 6 Consciousness. Chapter 10. Motivation. Chapter 11. Emotion.
- Kihlstrom, J. F. (1984). Conscious, subconscious, unconscious: A cognitive perspective. In K. S. Bowers & D. Meichenbaum (eds.), *The Unconscious Reconsidered*. Wiley.
- Farthing, G. W. (1992). The psychology of consciousness. *Chapter 9. Altered states of consciousness*. Upper Saddle River, NJ, etc.: Prentice-Hall, Inc.
<https://www.ocf.berkeley.edu/~jfkilstrom/ConsciousnessWeb/Farthing/Farthing.htm>
- Melzack, R., & Katz, J. (2004). The Gate Control Theory: Reaching for the Brain. In T. Hadjistavropoulos & K. D. Craig (Eds.), *Pain: Psychological perspectives* (pp. 13-34). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
<https://pdfs.semanticscholar.org/91a8/e964ff218da6e782d31f0d0b3543b4901b37.pdf#page=26>
- Taylor, S. E., Peplau, L. A., & Sears, D. O. (2003) *Social psychology*. 11th edition. (*Chapter 12 Helping behavior*, pp. 370-401) Upper Saddle River, NJ, etc.: Prentice Hall, Pearson Education.
- Franken, R. E. (1998). *Human motivation*. Fourth edition. (Chapter 8. Aggression, pp. 208–238). Pacific Grove, etc.: Brooks/Cole Publishing Company.