

## PSYB17-115 Comprehensive Exam in Cognitive/Affective Psychology

### Aim of the course

#### Aim of the course:

The main objective of the course is to give an overview on the theoretical frames of affective cognitive psychology, with its basic concepts.

#### Learning outcome, competences

knowledge:

- Basic concepts of affective and cognitive psychology
- Theories of emotions, perception, memory, thinking and motivation, including current research trends and their outputs
- Relations of affective and cognitive mechanisms and their malfunctioning

attitude:

- Ability to understand and ask questions in relation to the functioning of mind,
- Utilisation of knowledge in scientific communication, presentation

skills:

- Skills of applying main methods
- Skills of identifying and segmenting basic psychological mechanisms

### Content of the course

#### Topics

##### 1. Basic concepts of perception

sensation and perception; approaches to study perception; common characteristic of sensory modalities; sensory codes and thresholds, measuring thresholds; Weber's and Fechner's law; signal detection theory

##### 2. Visual form perception

receptive fields, visual pathways, Gestalt laws, figure-ground segregation, visual cues perception of faces

##### 3. Spatial localization in various modalities

binocular disparity, monaural visual cues, motion parallax, interaural onset and volume 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 processes; the connection of smell and taste with the basic drives (eating, sex)

## **6. Learning and memory.**

Measurement of learning, the role of practice and repetition, different forms of learning, learning and implicit memory, memory in infants, developmental changes in memory during childhood

## **7. Working memory**

Short-term memory, memory span, the multicomponent model, imagery and the visuo-spatial sketchpad, the central executive, the episodic buffer, individual differences in working memory, working memory and aging

## **8. Declarative memory 1: Episodic and autobiographic memory**

Levels of processing, limits of levels, organization and learning, retrieval, the importance of incidental context in episodic memory retrieval, measurement of autobiographic memory, deficits in autobiographical memory, eyewitness testimony

## **9. Declarative memory 2: Semantic memory**

Semantic vs. episodic memory, concepts, organization of semantic knowledge, learning new concepts, schemas, forgetting: incidental vs. motivated, forgetting, amnesia

## **10. Models of speech perception and production**

subprocesses of speech perception, role of mental lexicon in speech reception and production, word recognition, lexical accessibility, logogen theory, autonomous model of speech perception, interactive activation model, cohort model, recognition point, intermodal priming, word frequency effect, phonological neighbourhood density, semantic priming effect, context effect, failures at speech production, spoonerism, mental chronometry, Dell's model, Levelt-model, perseveration, lemma, Ellis and Young model, macro planning, micro planning, TOT-phenomenon, Liberman's motor theory

## **11. Social Cognition**

Perspective taking, theory of mind, intentionality, modularity theory, theory-theory, simulation theory, dual process accounts, code model of communication, Grice-model, Relevance theory, autism.

## **12. Consciousness and awareness**

intentionality, representations, computer metaphor, modularity, transducer, domain-specificity, encapsulated, connectionist models, dualism, epiphenomenalism, private characteristics of consciousness, qualia, inverse spectral problem, others mind, phenomenological method, Block's theory, subliminal perception, perceptual parry, blind vision, colour phi-phenomenon, cutaneous rabbit phenomenon, Libet's experiment, global workspace theory, focused attention, divided attention, automatic processing, SAS theory, executive functions

## **13. High level problem solving**

Gestalt model, insight, problem-space model, expertise, creativity

## **14. Reasoning and decision making**

Normative systems for reasoning and decision making, abstract-rule theory, mental models theory, domain-specific rule theory, decision making biases

### **15. Basic concepts and the levels of regulation of motivation and emotion.**

Physiological, psychological/cognitive, social, and cultural levels; need, drive, homeostasis, incentive, central and peripheral mechanisms

### **16. Primary motives and basic emotions**

Thirst, hunger, sex, aggression, roots of altruism and prosocial behavior, cognitive motivation; fear, anger, disgust, sadness, threat and harm, joy, interest

### **17. Human specific motives and emotions**

Autonomy, competence, relatedness, intrinsic and extrinsic motivation, achievement motivation, human altruism and prosocial behavior, affiliation, power, self-actualization, love

### **18. Motor control, reaction time, and sensory-motor coordination**

Stages and types of reaction time, factors influencing reaction time, ballistic movement, tracking movement, goal-directed movement, role of afferentation in movement

#### **Evaluation of outcomes**

#### **Learning requirements, mode of evaluation, criteria of evaluation:**

requirements

- Reliable basic knowledge in the domain of affective and cognitive psychology

The comprehensive exam consists of a written and an oral part, during which the students should show their knowledge of the required study material. The written exam consists of multiple choice questions and serves as a preliminary test: a student needs to complete successfully 62% of the questions in order to continue to the oral exam. - The criterion for participate in the oral exam is minimum of 8 points (62%) achieved in the computer based test. After that, however, only the grade received at the oral exam will count as a grade for the comprehensive exam – the result of the written exam will not be taken further into account.

The oral part of the exams consists of several topics which cover the studied material. Each topic comprises a list of the main concepts which are connected to the topic, and profound knowledge of these concepts is required in order to successful pass the comprehensive exam.

The oral and the written exam will took place on the same day.

#### **Reading list**

#### **Compulsory reading list**

- Atkinson and Hilgard (2014): Introduction to Psychology. Cahpetrs--- 15th Edition, UK
- The content of lectures

Franken, R. E. (1998). Human motivation. Fourth edition. (Chapter 8. pp. 208–238). Pacific Grove, etc.: Brooks/Cole Publishing Company

Józsa Emese, Gősiné Greguss, A. C. (2014). Motor control and reaction time (Handout)

Legge, D., & Barber, P. J. (1976). Information and skill. (Chapter 2-5. pp. 22-77.) London: Methuen

Reeve, J. (2009). Understanding motivation and emotion. 5th edition. International Edition: Wiley & Sons.

Smith, E. E., Nolen-Hoeksema, S., Fredrickson, B. L., & Loftus, G. (2009) Atkinson and Hilgard's introduction to psychology. 15th edition. Australia, etc.: Thomson Wadsworth. Chapters 2, 10, 11, & 14

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

### **Recommended reading list**

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