

**BIOPSYCHOLOGY, UNDERGRADUATE STUDY PROGRAMME**

**COURSE DESCRIPTIONS**

**Course name: FOUNDATIONS OF PSYCHOLOGY**

Number of ECTS credits: 6

**Content:**

Course offers an introduction to important achievements in the history of psychology from the onset of thinking about human psyche until now. Course emphasize the “tradition of empiricism”, which opened the door for the new scientific discipline: from structuralism to functionalism, from gestalt psychology to behaviorism, from psychoanalysis to cognitivism, etc. Course emphasize themes connected with functionalism and behavioral sciences, especially with analysis of tests which represent an important face of these branches of psychology.

**Course name: EVOLUTIONARY PSYCHOLOGY**

Number of ECTS credits: 6

**Content:**

The concept of evolutionary psychology. The evolution of development thinking apparatus - cortex. Evolution and adaptation to environmental change. Development of motivation. Evolutionary importance of behavior and structure of integrated behavior. Genetic innate need. Choice of conduct. Power and powerlessness. Evolutionary psychology and ecology. Evolutionary psychology and understanding of the importance of establishing quality relationships. Development and change - managing the future. The importance of the unconscious in evolutionary psychology. The importance of the collective unconscious in evolutionary psychology. Evolutionary psychology and gender differences. Evolutionary psychology and natural selection. Values and ethics from the perspective of evolutionary psychology. Morality and evolutionary psychology. Sense and nonsense from the perspective of evolutionary psychology.

**Course name: COGNITIVE PSYCHOLOGY**

Number of ECTS credits: 6

**Content:**

Psychology of perception, sensation and attention. Theories of perception, sensory disturbances and hallucinations and illusions. Memory. Learning. Higher cognitive processes, thinking, thinking theory. Thinking and speech. Consciousness. Theories of intelligence, the basic types of intelligence.

Cognitive psychology methods:

- Experiment
- Biophysiological methods
- Self-reporting
- Case studies
- Natural observation
- Computer simulation and artificial intelligence.

**Course name: DEVELOPMENTAL PSYCHOLOGY I**

Number of ECTS credits: 6

**Content:**

- Definition of developmental psychology, methods and techniques in developmental psychology. Principles of development. Genetic and environmental factors of development.
  - Understanding the development from the perspective of different developmental theories: psychodynamic, behavioural, humanistic, cognitive, ethological, contextualist and behavioural-genetics theory. Contribution and critique of the developmental theories.
  - Characteristics of developmental stages from conception to late childhood. Specificities in development and sensitive periods of development. Individual differences in development. Family environment and other social groups (peers, friends, etc.) and development. The importance of the broader social environment for development. Intercultural differences in development.
  - Prenatal development: characteristics of the period and protective and risk factors of development. Birth and newborn period. Characteristics of temperament. The development the attachment and separation anxiety.
  - Baby and toddler: motor development and developmental milestones; perceptual and cognitive development including the contemporary empirical findings (based on research on habituation, classical and instrumental conditionality; theory of mind); language, social and emotional development; development of big five personality dimensions. Screening and developmental tests to determine the characteristics of early development.
  - Cognitive, language, moral, personal and emotional development in early, middle and late childhood and the development of intelligence. The development of children's play and drawings. Social cognition and the development of understanding of emotions.
  - Children in kindergarten and school. Academic achievement through the development. Prosocial and antisocial behavior in childhood.
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**Course name: DEVELOPMENTAL PSYCHOLOGY II**

Number of ECTS credits: 6

**Content:**

Characteristics of developmental stages from adolescence to late adulthood. Individual differences in development. The influence of genetic and broader (society) and specific social factors (e.g., family, peer groups, friends) on development from adolescence to late adulthood. Society and development - intercultural differences in development from adolescence to late adulthood. Cognitive, social, moral and emotional development in adolescence: traditional and contemporary conceptualizations of adolescence; intelligence development, formal logical thinking; emotions; development of big five personality dimensions; identity formation and occupational choices; romantic relationships, relationships with parents; pro-social and anti-social behaviour in adolescence; moral reasoning. Individual differences. Emerging adulthood: conceptualization and rationale of a new developmental period; characteristics of emerging adults; secondary individuation; reaching criteria of adulthood. The importance of social factors in order to achieve the criteria of adulthood. Cognitive, personality, social and occupational development in early, middle, and late adulthood: postformal thinking, practical intelligence, wisdom, quantitative changes in cognitive abilities; romantic and peer relationships, parenthood; development of big five personality dimensions, normative crises models of personality development, model of timing of significant life events; prejudice to late adulthood and aging. Dealing with death and bereavement.

**Course name: SOCIAL PSYCHOLOGY I**

Number of ECTS credits: 6

**Content:**

Students learn about the historical development and current status of the various factions within social psychology and methodological peculiarities of research in social psychology.

Special focus will be on the content, that enables us to better understand the dynamics of groups and societies and which is as follows: social influence and social power, social motivation, obedience and compliance, social attribution and social cognition, prosocial behavior and antisocial behavior, etc. Importance of understanding the field of social reality for understanding groups and the society. In-depth explanation of its structure (through the integration of individual social psychological phenomena such as soc. norms, soc. representations, attitude, prejudice, etc...) and dynamics (through integration of social psychological processes of conformity, social innovation, group polarization, etc.). Students will gain experience in the role of participants in social psychological experiments and with their own project work apply the learned knowledge and skills to the group and the society level of activity.

**Course name: BIOPSYCHOLOGY OF MOTIVATION AND EMOTIONS**

Number of ECTS credits: 6

**Content:**

Biopsychology of motivation - basics

- Definition, specifics and type of motivation
- Fundamental approaches and concepts in the (bio) psychology of motivation
- Models and theories of motivation: biological and physiological, neurological, behavioral, cognitive and humanistic theories
- Motivation in relation to other (bio) psychological processes
- Homeostasis: regulation of the internal environment
- Production of steroids in the brain
- Hormones made by the brain for the brain
- Brain's reward circuits and (drug) addiction

Biopsychology of emotion, stress, and health

- Theoretical models of emotions (socio-constructivist, neurobiological and cognitive models) and definitions of emotions
- Experience, expression and recognition of emotions. Individual and cross-cultural differences
- Development of emotions
- Emotional regulation strategies
- Impact of emotions on psychosocial health, learning and behavior
- Emotions, aggression, and stress
- The role of the autonomic system in emotional and social stress
- Emotional responses, amygdala, and the interaction of autonomic and adrenal hormones
- Interaction of the brain and the immune system
- Synaptic Changes during Fear Conditioning
- Emotions and mental health

Hunger, Eating, and Health

- Appetite regulation and weight-loss strategies
- Food addiction and dopamine-reward models of weight gain

Hormones and Sex: Evolutionary, Hormonal, and Neural Bases

- Neural bases of human sexual behavior
- Neurochemical aspects of sexual behavior, including drug effects

- Neural mechanism of sexual orientation
- Parenting behavior
- Love
- Role of sleep in learning and memory in humans
- Sleep within particular brain regions

**Course name: PERSONALITY PSYCHOLOGY**

Number of ECTS credits: 6

**Content:**

Course offers an insight into different areas of temperament and personality, theories of personality: dimensions as extroversion (E), neuroticism (N), psychoticism (P) by H.J. Eysenck, J. Gray's model, J. Strelau's model; Costa and McRae's big-five model; sensation seeking and five alternative factors by Zuckerman and colleagues, psychobiological and psychophysiological studies of temperament and personality, neuropsychology and psychopharmacology; twin brains by MacLean, monoaminergic systems, stress and behavior, personality and health, psychophysiology of emotion, anxiousness, schizophrenia and depression, use of concepts about temperament.

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**Course name: BASICS OF EDUCATIONAL PSYCHOLOGY**

Number of ECTS credits: 6

**Content:**

Definition of educational psychology, methods, and techniques in educational psychology. Different views of learning, learning types, motivation, and learning self-esteem. Criteria and factors of learning successfulness. Intelligence and creativity. Work field of school psychologist, elements of educational interaction (class characteristics, types of lessons, work forms, styles of teaching).

**Course name: FUNDAMENTALS OF WORK AND ORGANISATIONAL PSYCHOLOGY**

Number of ECTS credits: 6

**Content:**

Introduction to work and organisational psychology (W&O psychology) with an emphasis on work psychology.

I. Orientation:

- areas of W&O psychology,
- theoretical approaches, its connections with other fields of psychology and scientific disciplines,
- development of the discipline and its history in Europe and the rest of the world,
- W&O psychology as an applied discipline; roles, tasks and work methods of scientists and practitioners,

II. Job creation and job description:

- the changing nature of work: past, present, future;
- work in different work contexts: work process, working conditions, tasks, tools, time arrangements, team-work,
- job analysis and job description: definition, aims and goals, methods and information sources, work profiling,
- work design: work process design, job design, tools design, sociotechnical system design,

- planning and performing interventions for the optimization of the work and the work environment.

III. Competencies at Work:

- understanding the competence concept,
- necessary, useful and harmful competencies,
- competence profiles.

IV. Motivation and attitudes

- theories of work motivation,
- attitudes toward work.

V. Work performance

- theories, determinants, errors, assessment, optimizing the outcomes and the criteria involved,
- organisational citizenship behaviour,
- contraproductive behaviours: withdrawal, absence, lateness, turnover, absenteeism.

VI. Teams and groups: definition, structure, processes, effectiveness, team building.

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**Course name: THE PSYCHOLOGY OF COMMUNICATION**

Number of ECTS credits: 6

**Content:**

Definitions and key models of the communication process. Differentiation and overview of the fields of verbal and nonverbal communication, focusing on the emotional and relational, and conscious and unconscious communication. Deepening the understanding of communication as an active process, with emphasis on understanding of the creation of social reality by language. Developing communication skills.

**Course name: ETHICS AND HUMANITY**

Number of ECTS credits: 6

**Content:**

The notion of ethics and its concepts. Analysis of the relationships between ethics and moral philosophy. Fundamental bioethical issues (abortion, euthanasia, genetic engineering, etc.). Understand the concepts of life, liberty, dignity and integrity of the individual (with an emphasis on mental integrity), sociality, social responsibility, human rights and freedoms. Understanding of humanity as ethical self-understanding of society and the individual, as well as a moral quality of life. Ethics and humanity in harmony with the psychology of an individual and society. The practical value and applicability of knowledge about ethics and humanity.

**Course name: SELECTED BIOPSYCHOLOGICAL TOPICS IN THE ENGLISH LANGUAGE**

Number of ECTS credits: 6

**Content:**

Social cognition. Social attribution. Social identity. Self-categorization. Social Scheme. Social Scripts. Biology of human Behavior. Brain anatomy. Neurons and Neurotransmitters. Action potential and postsynaptic potentials. Perception. Emotions. Behavior. Cognition and cognitive disorders. Plasticity of the Brain. Neurological developmental Disorders. Learning and Memory. Lateralization of the Brain. Language and Speech. Actions of Psychoactive Drugs. Topics by student's choice.