Study program: Special Education and Rehabilitation, module Sensorimotor Disability

Type and level of studies: Basic Academic

Title of the subject: Biological Foundations of Behavior

Lecturer: Dragan S. Marinković

Course status: Obligatory

ECTS: 4

Prerequisites: none

Aim:

To introduce students with biological mechanisms of different categories of behavior and possibilities for their control and modulation. To reveal at first place those categories of behavior that are of significance for execution and control of motor action; process of vision and object recognition; and process of language reception, recognition and comprehension.

Outcomes:

Students acquire knowledge from the scientific discipline of biology of behavior (behavioral neuroscience, biological psychology) that will allow them to fully understand behavior and mental processes of healthy and disabled person. Acquired knowledge is of importance for understanding various impairments in process of vision, hearing, motor action, cognition and behavior.

Content

Lectures: Definition of behavior. Importance of nervous system specialization and plasticity for different types of behavior. Elements of hormone regulation of behavior. Interaction between genetic factors and experience in development of behavior. Methods for studying behavior: methods of visualization and stimulation of the brain, detection of psychophysiological activities, pharmacological methods, animal models, neuropsychological tests. The role of sensory systems in the regulation of the behavior. Motor action. Food and drink uptake regulation. Biology of sexual behavior. Biology of behavior regulated by circadian rhythm. Biological mechanisms of emotional processing. Nonverbal communication in regulation of behavior. Biology of memory and learning. Behavioral disorders. Agents that influence behavior (alcohol, drugs, medications...).

Practical work: Presentation of various cases of emotional and behavioral disorders. Critical analysis of different scientific experiments from the field of biology of behavior. Video presentations of different problems from the field of biology of behavior. Choosing topic and writing seminar paper.

Literature

- 1. Dragan Marinković. (2017). Biološke osnove ponašanja. Univerzitet u Beogradu-Fakultet za specijalnu edukaciju i rehabilitaciju, Beograd
- 2. John P. J. Pinel. (2002). Biološka psihologija. Naklada Slap, Zagreb
- 3. Mira Pašić. (2003). Fiziologija nervnog sistema. Centar za primenjenu psihologiju, Beograd

Number of active classes per week:	Lecture: 2	Practical work: 1
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Teaching methods:

Classical educational method using PowerPoint presentations, presentation and discussion of different videos, writing of seminar papers and active learning.

Evaluation of knowledge (maximum score 100)			
Pre obligations	Score	Final exam	Score
activities during the lectures	15	written exam	25
practical teaching	10	oral exam	25
midterm(s)			
seminars	25		