Biological Psychology Practice

Course Description

Aim of the course

Aim of the course: The course aims to demonstrate psychophysiological phenomena and measurement methods under laboratory conditions. Trough these examples, the course attempts to develop a biologically founded approach to pychology.

Learning outcome, competences

knowledge:

- The student knows the theories presented in the introductory courses (Biological foundations of psychology)
- Possesses appropriate knowledge to understand and analyse the major research questions of psychology

attitude:

- The student is sensitive to and interested in the understanding of psychological phenomena and problems
- Accepts the biological background of psychological phenomena and processes
- attempts to integrate his or her biological and psychological knowledge

skills:

- The student is able to explain the biological background of psychological phenomena
- Able to recognize causal relationships, to think in a logical way, and to present summarizing reviews
- Able to perceive human behavior in a differentiated way and efficiently identify situations
- Able to follow and understand the psychological literature

Content of the course

Topics of the course

- Activity of the heart (ECG, pulse), heart rate and its variability, heartbeat detection
- Basic spirometry, respiration rate, tidal volumes, vital capacity
- Activity of the stomach, EGG
- Electrodermal activity and its measurement; electrodermal lability/stability
- EEG: alpha and beta waves, desynchronization
- EEG: evoked potentials
- Temperature of the skin and its measurement
- Pain (ischemic and termal)
- Proprioceptive acuity and its measurement
- EMG and relaxation
- Biofeedback methods
- Affective (sensual) touch and its biological importance
- Emotions and visceral changes

Learning activities, learning methods

Evaluation of outcomes

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

- Active participation in at least 75% of the classes
- Evaluation: practical mark (1-5), based on midterms and materials submitted by the student

Reading list

Compulsory reading list

- Kalat, J.W. (2018): Biological psychology, 13th edition. Wadsworth Publishing, Belmont. ISBN: 9781337408202
- Czigler B., Márkus A., (2019): Neurológia pszichológia szakos hallgatók számára. Bővített, átdolgozott kiadás. Akadémiai Kiadó Zrt, Budapest. ISBN: 9789634540779

Recommended reading list

 Sapolsky, R. (2017): Behave: The Biology of Humans at Our Best and Worst. Penguin Press, London. ISBN: 1594205078