PSYB17-106 Physiology and Anatomy Practical

Aim of the course

Aim of the course: practical tasks concerning diverse physiological functions

Learning outcome, competences

knowledge:

- functioning of certain organs, organ systems
- background of experimental/diagnostic methods

attitude:

- scientific mode of thinking; planning experiments, analyzing and evaluating data

skills:

- experience in computer-based human physiological experiments
- insight into animal behavioral experiments
- analysis, interpretation, presentation of measured data

Content of the course

Topics of the course

- Investigation of human blood – blood groups, blood glucose level
- Investigation of skeletal muscle function – electromyography, dynamometry
- Investigation of the circulatory system – electrocardiography, blood pressure
- Investigation of brain functions – electroencephalography
- Investigation of respiration – spirometry
- Parallel recording of physiological functions – polygraphy, oculography
- Human perception, sensory organs
- Testing animal behavior and learning
- Testing drug effects on the central nervous system

Learning activities, learning methods

Experiments on each other, analysis, presentation and interpretation of data with help of pre-made data report forms

Evaluation of outcomes

Learning requirements, mode of evaluation, criteria of evaluation:

requirements

- 10 occasions per semester, maximum 2 missed practical lessons allowed
- data report to be prepared of all attended lessons (to hand in alone, in pairs or in groups)

mode of evaluation:

- evaluation of all data reports as acceptable / not acceptable
- written test at the end of the semester which decides the grade

criteria of evaluation:

- data report forms correctly filled out
- percentage of correct answers in written test questions concerning the practical material

Reading list

Compulsory reading list

- Practical textbook and additional materials available on http://physiology.elte.hu

Recommended reading list

- G. J. Tortora, B. H. Derrickson: Principles of Anatomy and Physiology (12th Edition, Wiley)
- R. M. Berne, M. N. Levy: Physiology (Mosby - Year Book)