

Institute of Translational Medicine

Clinical Physiology Laboratory Measurements
elective course
detailed schedule 2019/2020

Lectures

1st week – Introduction to the bases of measurement techniques. **9/10/2019**
(Zsuzsanna Miklós/Enikő Major)

3rd week – Scientific and diagnostic measurement techniques for studying the electrophysiology of motor nerves, neuromuscular transmission and skeletal muscle. **9/24/2019** (Zsuzsanna Miklós)

5th week – Electrophysiology of the heart, cardiac arrhythmias. Regulation of arterial blood pressure under physiological and pathophysiological conditions. The characteristics of the pulse wave propagation. **10/8/2019**
(Éva Ruisanchez)

7th week – Mechanical properties of the respiratory system under physiological conditions and in respiratory diseases. Adaptation of the cardiorespiratory system to physical exercise. (Zsuzsanna Miklós/Enikő Major) **10/22/2019**

9th week – Regulation of carbohydrate metabolism and its disorders. **11/5/2019** (Ivanics Tamás)

11th week – Reflexes of the somatic nervous system. Function of the vestibular system. Regulation of body position under physiological conditions and in neural disorders. **11/19/2019** (Éva Margittai)

13th week – Consultation **12/3/2019** (Zsuzsanna Miklós)

Practices

2nd week – Introduction to the uses of instruments and data acquisition software applied during the course. **9/17/2019** (Zsuzsanna Miklós/Enikő Major)

4th week – Electromyography, electroneurography. Study of the electrical properties of the skeletal muscle, measurement of the impulse conduction velocity of a motor nerve by Biopac student lab system. **10/1/2019** (Zsuzsanna Miklós)

6th week – Measurement of pulse wave velocity. Recording and analysis of a 12-lead ECG. Demonstration of pathological ECG recordings. **10/15/2019** (Éva Ruisanchez)

8th week – Spirometry. Studying the circulatory and respiratory adaptation responses during physical exercise. **10/29/2019** (Zsuzsanna Miklós/Enikő Major)

10th week – Oral glucose tolerance test, determination of HbA1c level, analysis of normal and pathologic glucose tolerance curves. **11/12/2019** (Zsuzsanna Miklós)

12th week – Neurological examination techniques: examination of motor reflexes and vestibular function, EOG. **11/26/2019** (Éva Margittai)

13th week – Optional lab retake, repetition and practice for the practical exam **12/3/2019** (Zsuzsanna Miklós)

14th week – Exam. **12/10/2019**