

<b>Level:</b> master				
<b>Course title:</b> Physiological Monitoring				
<b>Status:</b> elective				
<b>ECTS:</b> 9				
<b>Requirements:</b> none				
<b>Learning objectives</b> To provide basic understanding of scientific principles and practical aspects of signal processing techniques, and physiological monitoring clinical medicine. To introduce students to the characteristics of signals which are common in everyday use in clinical medicine.				
<b>Learning outcomes</b> <p>General skills: to have knowledge and understanding of important physiological parameters, theoretical knowledge base related to basic physiological monitoring techniques; ability to search for relevant literature and other forms of information, capability to present research results.</p> <p>Subject-specific skills: to apply knowledge and understanding to the designed and used clinical sensors and transducers; To understand the design of configurations and their limitations in the use of sensors for measuring the clinical practice.</p>				
<b>Syllabus</b> <i>Theoretical instruction</i> Signals that are recorded over a longer period of time (the characteristics of sensors and transducers: sensors for measuring pressure, piezoelectric sensors, temperature sensors, fluid flow speed sensors, optical sensors, sensors for gases and ions) ECG - Holter EEG, EOG, blood pressure recording; monitoring the breathing.  <i>Practical instruction</i> Practical classes are held at the respective clinics at the Medical Faculty.  <i>Seminar</i> Detailed analysis of the issues selected from some of the abovementioned areas.				
<b>Weekly teaching load</b>				Other:
Lectures: 3	Exercises: 1	Other forms of teaching:1	Student research:	