Medical Biophysics – General medicine – 2019/20
Wednesdays 11,00 – 11,50, A11, 114/Thursdays 13,00 – 14,50, A11,114
Main lecturer: Prof. Mornstein

Wed September 18th
Medical Physics and Biophysics: Introduction

Thu September 19th
Healthcare informatics (dr. Bourek)

Wed September 25th
Thermodynamic principles.

Thu September 26th
Structure of matter. Structure of living matter (Mgr. Vlk)

Wed October 2nd
Thermodynamics and life

Thu October 3rd
Introduction to biophysics of receptors. Biophysics of hearing and vestibular sense

Wed October 9th
Biophysics of visual perception

Thu October 10th
Resting and action membrane potential

Wed October 16th
Matriculation

Thu October 17th
Biomolecular and Cellular Research Devices (Vlk)

Wed October 23rd
Sensory perception examination and aids

Thu October 24th
X-ray Imaging

Wed October 30th
Biosignals and their processing. Thermometry

Thu November 31st
Magnetic resonance imaging (MRI). Infrared imaging
Wed November 6th
Devices for electrochemical analysis. Auxiliary laboratory devices

Thu November 7th
Nuclear medicine and radiotherapy I

Wed November 13th
Nuclear medicine and radiotherapy I

Thu November 14th
Biophysics of cardiovascular system. Biophysics of breathing. Spirography

Wed November 20th
Devices for substitution and assist of body organs

Thu November 21st
Nanomedical Devices (Mgr. Bernard)

Wed November 27th
Safety aspects of air pressure and gravity changes, and ultrasound

Thu November 28th
Microscopy

Wed December 4th
Physical Therapy

Thu December 5th
Ultrasound diagnostics

Wed November 11th and Thu November 12th
autopsy practice

Wed December 18th
Endoscopes, tissue ablation devices and lithotripters

Thu December 19th
Protection of the Patient from Ionizing Radiation and Image Quality Outcomes in X-Ray Imaging