

# **Medical Biophysics – Dental medicine – 2019/20**

Fridays 11,00-12,40 room A11,327

Main lecturer Prof. Mornstein

September 20<sup>th</sup>

**Medical Devices: Introduction. Structure of matter.**

September 27<sup>th</sup>

**Structure of living matter and how to study it**

October 4<sup>th</sup>

**Thermodynamic principles. Thermodynamics and life**

October 11<sup>th</sup>

**Biophysics of hearing and vestibular sense. Biophysics of visual perception.  
Sensory perception examination and aids.**

October 18<sup>th</sup>

**Ultrasound diagnostics**

October 25<sup>th</sup>

**Magnetic resonance imaging (MRI)**

November 1<sup>st</sup>

**Nuclear medicine and radiotherapy**

November 8<sup>th</sup>

**Biophysics of cardiovascular system. Biophysics of breathing.**

November 15<sup>th</sup>

**X-ray Imaging. Safety aspects of ultrasound. Physical therapy overview.**

November 22<sup>nd</sup>

**Protection of the Patient from Ionizing Radiation and Image Quality Outcomes in  
X-Ray Imaging**

November 29<sup>th</sup>

**Resting and action membrane potential. Microscopy**

December 6<sup>th</sup>

**Biosignals and their processing. Biocybernetics.**

December 13<sup>th</sup>

**Healthcare informatics (dr. Bourek)**