

# **Medical Biophysics – Dental medicine – 2024/25**

Fridays 10,00-11,40 (room B11,211), Main lecturer Prof. Mornstein

Friday September 20<sup>th</sup>

*Lecture cancelled*

Friday September 27<sup>th</sup>

**Introduction. Structure of matter. Structure of living matter and how to study it  
(Mgr. Vlk)**

Friday October 4<sup>th</sup>

**Thermodynamic principles. Thermodynamics and life**

Friday October 11<sup>th</sup>

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

Friday October 18<sup>th</sup>

**Ultrasound diagnostics**

Friday October 25<sup>th</sup>

**Magnetic resonance imaging (MRI)**

Friday November 1<sup>st</sup>

**Nuclear medicine and radiotherapy**

Friday November 8<sup>th</sup>

**X-ray Imaging.**

Friday November 15<sup>th</sup>

**Safety aspects of ultrasound. Physical therapy overview.**

Friday November 22<sup>nd</sup>

**Biosignals and their processing. Biocybernetics.**

Friday December 29<sup>th</sup>

**Resting and action membrane potential.**

Friday December 6<sup>th</sup>

**Microscopy (Mgr. Vlk)**

Friday December 13<sup>th</sup>

**Healthcare informatics (dr. Bourek)**