

Medical Biophysics – Dental medicine – 2021/22

Fridays 11,00-12,40 (room B11,327), Main lecturer Prof. Mornstein

Friday September 17th

Medical Devices: Introduction. Structure of matter.

Friday September 24th

Structure of living matter and how to study it

Friday October 1st

Thermodynamic principles. Thermodynamics and life

Friday October 8th

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

Friday October 15th

Ultrasound diagnostics

Friday October 22nd

Magnetic resonance imaging (MRI)

Friday October 29th

Nuclear medicine and radiotherapy

Friday November 5th

Biophysics of cardiovascular system. Biophysics of breathing.

Friday November 12th

X-ray Imaging.

Friday November 19th

Safety aspects of ultrasound. Physical therapy overview.

Friday November 26th

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

Friday December 3rd

Resting and action membrane potential. Microscopy

Friday December 10th

Biosignals and their processing. Biocybernetics.

Friday December 17th

Healthcare informatics (dr. Bourek)