Tantárgyfelelős: Bacsó Zsolt
Gyakorlati felelős: Fazekas Zsolt

Weeks 1-7, lect1, MONDAY 12:00-12:45, Ophtalmology lect2, THURSDAY 10:00-10:45, Internal Medicine "A"

Biophysics
Pharmacy
spring semester

Date	#	Title
9 Febr (Monday) 12:00-13:00	1	Introduction to the course. Generation and absorption of X-rays. X-ray contrast materials
12 Febr (Thurday) 10:00-11:00	2	Ionizing radiations and their interaction with materials. Dosimetry, tissue effects, detection of radiation.
16 Febr (Monday) 12:00-13:00	3	Research, diagnostic and therapeutic application of stable and radioactive isotopes. Contrast materials, radipharmacons.
19 Febr (Thurday) 10:00-11:00	4	Medical imaging (CT, PET, SPECT, MRI)
23 Febr (Monday) 12:00-13:00	5	Diffusion at the molecular level, statistical interpretation. Fick's 1st law. Thermodiffusion. Osmosis.
26 Febr (Thurday) 10:00-11:00	6	Structure of biological membranes. Membrane transport
2 March (Monday) 12:00-13:00	7	Pharmacology of ion channels (gating, selectivity). Patch clamp technique.
5 March (Thurday) 10:00-11:00	8	Origin of membrane potential Resting potential, action potential, electric excitbility.
9 March (Monday) 12:00-13:00	9	Fluorescence spectroscopy, flurescence techniques
12 March (Thurday) 10:00-11:00	10	Methods of pharmacological research. Gelelectrophoresis, isoelectric focussing, blotting. Detecting molecular interactions (SPR, FCS, FRET)
16 March (Monday) 12:00-13:00	11	Lasers and their biomedical applications. Photodynamic therapy.
19 March (Thurday) 10:00-11:00	12	Optical and electron microscopy.
23 March (Monday) 12:00-13:00	13	Fluid mechanics, blood circulation. Newtonian fluids, viscosity, creams and emulsions
26 March (Thurday) 10:00-11:00	14	Biophysics of drug delivery. Nanotechnology approaches.
		Biophysics grade offering exam(electronic exam),

Lecturer
BZS
BZS
NP
DBA
VáGy
BZS
PF
HP
FZS
HÉ
VGy
VGY
BZS
SzöÁ