



УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ

МЕДИЦИНСКИ ФАКУЛТЕТ

Катедра за Медицинску Физику



Школска година	Предмет	Шифра предмета	Студијски програм	Циклус студија	Година студија	Семестар	Број студената	Број група за вјежбе
2025/26	Medical Physics	ISM22MP	Medicine (in english)	First	First	I		

ПЛАН И РАСПОРЕД ПРЕДАВАЊА

Седмица	Предавање	Тематска јединица	Дан	Датум	Вријеме	Мјесто одржавања	Ч	Наставник
I	P1	Basics of Systemology- the human organism as a system	Friday	3.10.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
II	P2	Biomechanics of the human locomotor system	Friday	10.10.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
III	P3	Biomechanics of fluids- cardiovascular system	Friday	17.10.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
IV	P4	Thermodynamics of the human organism	Friday	24.10.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
V	P5	Transport processes in the human organism	Friday	31.10.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
VI	P6	Bioelectrical processes in the human organism. Electrical signals in the body. Functional diagnostics.	Friday	7.11.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics

VII	P7	Bioelectrical processes in the human organism. Application of electricity and magnetism to the human body	Friday	14.11.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
VIII	P8	nMRI	Wednesday	19.11.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
IX	P9	Bioacoustics Mechanical oscillations and waves. The sound.	Friday	28.11.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
X	P10	Bioacoustics Ultrasound The human ear	Friday	5.12.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
XI	P11	Light in medicine - physics of the eye and vision. The electromagnetic nature of light Interaction of light and matter Physics of the eye and vision	Friday	12.12.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
XII	P12	Application of ionizing radiation in medicine Interaction of photon radiation with matter Radiation protection	Friday	19.12.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
XIII	P13	Medical aspects of the effect of ionizing radiation Instruments for radiation monitoring	Friday	26.12.25	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
XIV	P14	Radioactivity, detection of ionizing radiation and dosimetry	Monday	12.01.26	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics
XV	P15	CT, Radiotherapy Linac, Nuclear medicine PET CT	Friday	16.01.26	16.30-18.00	FM Amf	2	Assi Prof Goran Kolarevic, spec. of med. physics

П1, П2,, П15 – Предавање прво, Предавање друго, ..., Предавање петнаесто, Ч - Часова

ПЛАН И РАСПОРЕД ВЈЕЖБИ

Седмица	Вјежба	Тип вјежбе	Тематска јединица	Дан	Датум	Вријеме	Мјесто одржавања	Ч	Сарадник
I	V1	PV	Introduction	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
II	V2	PV	Units of measurement	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
III	V3	PV	Determination of gravitational acceleration	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
IV	V4	PV	Temperature measurement	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
V	V5	PV	Determination of torsional constant and shear modulus	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
VI	V6	PV	Hooke's Law checking	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
VII	V7	PV	Determination of viscosity coefficient	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
VIII	V8	PV	Determination of body density	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
IX	V9	PV	Determination of surface tension	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
X	V10	PV	Length measurement	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
XI	V11	PV	Determination of the speed of sound	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
XII	V12	PV	Blood pressure measurement	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
XIII	V13	PV	Determining the refractive index of light	Friday			Campus	1	Tatjana Ignjatic, MSc physicist

XIV	V14	PV	Determination of hydraulic resistance	Friday			Campus	1	Tatjana Ignjatic, MSc physicist
XV	V15	PV	Exit colloquium	Friday			Campus	1	Tatjana Ignjatic, MSc physicist

B1, B2,, B15 – Вјежба прва, Вјежба друга, ..., Вјежба петнаеста, ТВ – Теоријска вјежба, ПВ – Практична вјежба, Ч - Часова

ШЕФ КАТЕДРЕ:

Assi Prof Goran Kolarevic
