

Medicinski fakultet u Rijeci

**IZVEDBENI NASTAVNI PLAN  
2021/2022**

Za kolegij

**Physics of Medical Diagnostics**

Studij:	<b>Medical Studies in English (R)</b> Sveučilišni integrirani prijediplomski i diplomski studij
Katedra:	<b>Katedra za medicinsku fiziku i biofiziku</b>
Nositelj kolegija:	<b>izv. prof. dr. sc. Jurković Slaven, spec. med. fiz.</b>
Godina studija:	<b>3</b>
ECTS:	<b>1.00</b>
Stimulativni ECTS:	<b>0.00 (0.00%)</b>
Strani jezik:	<b>Mogućnost izvođenja na stranom jeziku</b>

## Podaci o kolegiju:

Physics of Medical Diagnostics is a course which gives students an insight into the physical principles required for the acquisition of acceptable diagnostic information. The main part of the course will be dedicated to application of ionizing radiation for imaging. Also, the introduction into physics principles of use non-ionizing radiation (ultrasound and magnetic resonance imaging) for imaging will be presented. The purpose of this course is to introduce students into physical principles of medical imaging and devices used for this purpose.

## Popis obvezne ispitne literature:

1. P. Allisy-Roberts and J. Williams: Farr's Physics for Medical Imaging 2nd edition, Elsevier, 2008.

## Popis dopunske literature:

1. D.R.Dance, S.Cristofides; A.D.A.Maidment, I.D.McLean, K.H.Ng: Diagnostic Radiology Physics-A Handbook for Teachers and Students, <http://www.pub.iaea.org/MTCD/Publications/PDF/Pub1564webNew-74666420.pdf>
2. D.L. Bailey, J.L. Humm, A. Todd-Pokropek, A. van Aswegen: Nuclear Medicine Physics-A Handbook for Teachers and Students, <http://www-pub.iaea.org/MTCD/publications/PDF/Pub1617web-1294055.pdf>
3. P. Fish: Physics and Instrumentation of Diagnostic Medical Ultrasound, John Wiley & Sons, 1996.
4. C.R. Hill, J.C. Bamber, G.R. ter Haar: Physical Principles of Medical Ultrasonics, John Wiley & Sons, 2004.

## Nastavni plan:

### Obveze studenata:

The attendance at lectures and seminars is mandatory. If necessary, a student can be absent from 30% of the classes of the overall course workload. Students' obligations are course attendance, active participation, preparation of the seminar and presentation in front of the group.

### Ispit (način polaganja ispita, opis pisanog/usmenog/praktičnog dijela ispita, način bodovanja, kriterij ocjenjivanja):

#### Students who: cannot take the final exam.

- They did not prepare a seminar before presenting it in front of the group and who have 30% or more unexcused absences from classes

Such a student is graded F (fail), cannot earn ECTS credits or take the final exam, that is, must re-enroll in the course the following academic year.

#### The final exam can be taken by students who:

- have create a seminar that was positively evaluated and successfully presented it front of the group.

**For the final exam It is enough to register the final exam through the STUDOMAT and if the previously mentioned conditions are met, in the ISVU system will be entered "passed".**

### Ostale napomene (vezane uz kolegij) važne za studente:

Professors and associates are available every day during working hours through e-mail addresses for all questions regarding classes.

Slaven Jurković, PhD, Associate Professor [slaven.jurkovic@uniri.hr](mailto:slaven.jurkovic@uniri.hr)

Gordana Žauhar, PhD, Full Professor [gordana.zauhar@uniri.hr](mailto:gordana.zauhar@uniri.hr)

Marijana Majetić, senior laboratory technician [marijana.majetic@uniri.hr](mailto:marijana.majetic@uniri.hr) - administrator

## **SATNICA IZVOĐENJA NASTAVE 2021/2022**

Physics of Medical Diagnostics

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**Popis predavanja, seminara i vježbi:**

**ISPITNI TERMINI (završni ispit):**

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