

Medicinski fakultet u Rijeci

## IZVEDBENI NASTAVNI PLAN 2023/2024

Za kolegij

### Toxicology

|                    |                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------|
| Studij:            | <b>Medical Studies in English (R)</b> (izborni)<br>Sveučilišni integrirani prijediplomski i diplomski studij |
| Katedra:           | <b>Zavod za temeljnu i kliničku farmakologiju s toksikologijom</b>                                           |
| Nositelj kolegija: | <b>prof. dr. sc. Mršić-Pelčić Jasenka, dr. med.</b>                                                          |
| Godina studija:    | <b>4</b>                                                                                                     |
| ECTS:              | <b>1.5</b>                                                                                                   |
| Stimulativni ECTS: | <b>0 (0.00%)</b>                                                                                             |
| Strani jezik:      | <b>Mogućnost izvođenja na stranom jeziku</b>                                                                 |

## Podaci o kolegiju:

The Toxicology course is an optional course in the fourth year of the Integrated Undergraduate and Graduate University Study in Medicine and consists of 25 hours of seminars (1.5 ECTS).

The aim of the course is to train students for active and professional involvement in the processes of monitoring, control and protection against the effects of toxic substances on the human body, as well as on other living beings, and for the prevention and treatment of poisoning; developing a critical approach to the toxicity of certain poisons and potentially toxic substances.

The content of the course is as follows:

Toxicology of drugs; Substances of addiction; Toxicology of food and drinking water: additives and contaminating substances in food and drinking water, drugs in veterinary medicine; Diagnosis and treatment of acute poisoning; Diagnosis and treatment of chronic poisoning; Manifestations of poisoning on target organs - diagnosis and therapy of poisoning: immunotoxicology; toxicology of the respiratory system, liver, kidneys, skin, eye, central nervous system, reproductive and cardiovascular systems; Urgent conditions in toxicology; Peculiarities of treatment of poisoning in children, pregnant women and the elderly; Poisonous plants and animals; Poisoning by marine organisms; Control of biological drugs.

## Popis obvezne ispitne literature:

Lu F.: Toxicology: Fundamentals, Target Organs and Risk Assessments, Taylor and Francis, 1996.

## Popis dopunske literature:

Timbrell JA: Introduction to toxicology, Taylor & Frances, 2002.

De Matteis F.: Molecular and Cellular Mechanisms of Toxicity, Crc Press Inc, 1995.

Casarett & Doulls Toxicology: Basic Science of Poisons, 6. izdanje, 2001.

## Nastavni plan:

### Seminari popis (s naslovima i pojašnjenjem):

#### **S1. Toxicology of drugs; Plant poisons; Animal poisons; Doping**

Toxicology of drugs; Plant poisons; Animal poisons; Doping

#### **S2. Hormone doping; Statin toxicity; Mushroom poisoning; Nanotoxicity**

Hormone doping; Statin toxicity; Mushroom poisoning; Nanotoxicity

#### **S3. Toxicity of cosmetics products; Disposal of waste drugs; The most common household poisonings; Additives and contaminants in food**

Toxicity of cosmetics products; Disposal of waste drugs; The most common household poisonings; Additives and contaminants in food

#### **S4. Treatment of anaphylactic shock; Phthalates - toxicity; Vaccines-adverse effects**

Treatment of anaphylactic shock; Phthalates - toxicity; Vaccines-adverse effects

#### **S5 Selected paper preparation and analysis**

Every student paper will be analyzed and discussed.

#### **S6. Selected paper preparation and analysis**

Every student's paper will be analyzed and discussed.

**Obveze studenata:**

Students are obliged to attend classes regularly and actively participate in them.

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

Written exam, final mark is formed based on the points obtained from the activities at the seminars and the written exam.

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

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## SATNICA IZVOĐENJA NASTAVE 2023/2024

### Toxicology

| <b>Seminari</b><br>(mjesto i vrijeme / grupa)                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>28.11.2023</b>                                                                                                                                                                                                                                                                     |
| S1. Toxicology of drugs; Plant poisons; Animal poisons; Doping: <ul style="list-style-type: none"><li>• ONLINE (18:00 - 21:00) <sup>[172]</sup><ul style="list-style-type: none"><li>◦ Tox</li></ul></li></ul>                                                                        |
| prof. dr. sc. Mršić-Pelčić Jasenka, dr. med. <sup>[172]</sup>                                                                                                                                                                                                                         |
| <b>29.11.2023</b>                                                                                                                                                                                                                                                                     |
| S2. Hormone doping; Statin toxicity; Mushroom poisoning; Nanotoxicity: <ul style="list-style-type: none"><li>• ONLINE (18:00 - 21:00) <sup>[172]</sup><ul style="list-style-type: none"><li>◦ Tox</li></ul></li></ul>                                                                 |
| prof. dr. sc. Mršić-Pelčić Jasenka, dr. med. <sup>[172]</sup>                                                                                                                                                                                                                         |
| <b>30.11.2023</b>                                                                                                                                                                                                                                                                     |
| S3. Toxicity of cosmetics products; Disposal of waste drugs; The most common household poisonings; Additives and contaminants in food: <ul style="list-style-type: none"><li>• ONLINE (16:00 - 21:00) <sup>[172]</sup><ul style="list-style-type: none"><li>◦ Tox</li></ul></li></ul> |
| prof. dr. sc. Mršić-Pelčić Jasenka, dr. med. <sup>[172]</sup>                                                                                                                                                                                                                         |
| <b>01.12.2023</b>                                                                                                                                                                                                                                                                     |
| S4. Treatment of anaphylactic shock; Phthalates - toxicity; Vaccines-adverse effects: <ul style="list-style-type: none"><li>• ONLINE (16:00 - 21:00) <sup>[172]</sup><ul style="list-style-type: none"><li>◦ Tox</li></ul></li></ul>                                                  |
| prof. dr. sc. Mršić-Pelčić Jasenka, dr. med. <sup>[172]</sup>                                                                                                                                                                                                                         |
| <b>07.12.2023</b>                                                                                                                                                                                                                                                                     |
| S5 Selected paper preparation and analysis: <ul style="list-style-type: none"><li>• ONLINE (15:00 - 19:30) <sup>[172]</sup><ul style="list-style-type: none"><li>◦ Tox</li></ul></li></ul>                                                                                            |
| prof. dr. sc. Mršić-Pelčić Jasenka, dr. med. <sup>[172]</sup>                                                                                                                                                                                                                         |
| <b>08.12.2023</b>                                                                                                                                                                                                                                                                     |
| S6. Selected paper preparation and analysis: <ul style="list-style-type: none"><li>• ONLINE (16:00 - 18:00) <sup>[172]</sup><ul style="list-style-type: none"><li>◦ Tox</li></ul></li></ul>                                                                                           |
| prof. dr. sc. Mršić-Pelčić Jasenka, dr. med. <sup>[172]</sup>                                                                                                                                                                                                                         |

### Popis predavanja, seminara i vježbi:

| <b>SEMINARI (TEMA)</b>                                                                                                                | <b>Broj sati</b> | <b>Mjesto održavanja</b> |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------|
| S1. Toxicology of drugs; Plant poisons; Animal poisons; Doping                                                                        | 4                | ONLINE                   |
| S2. Hormone doping; Statin toxicity; Mushroom poisoning; Nanotoxicity                                                                 | 4                | ONLINE                   |
| S3. Toxicity of cosmetics products; Disposal of waste drugs; The most common household poisonings; Additives and contaminants in food | 4                | ONLINE                   |

|                                                                                      |   |        |
|--------------------------------------------------------------------------------------|---|--------|
| S4. Treatment of anaphylactic shock; Phthalates - toxicity; Vaccines-adverse effects | 4 | ONLINE |
| S5 Selected paper preparation and analysis                                           | 6 | ONLINE |
| S6. Selected paper preparation and analysis                                          | 3 | ONLINE |

#### **ISPITNI TERMINI (završni ispit):**

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