**PHARMACOLOGY & TOXICOLOGY**

**(3rd year, 6th semester)**

**2019-2020.**

3rd February – 8th May 2020.

Lecture: Library Tuesday 09:45-11:15

Lab & Seminar: Library + Classroom Thursday 10:30-12:00

**Lecturers:**

Prof. Sonja Vučković, MD, PhD

Prof. Ljiljana Gojković-Bukarica, MD, PhD

Prof. Nina-Japundžić-Žigon, MD, PhD

Prof. Dragan Obradović, MD, PhD,

Prof. Zoran Todorović, MD, PhD

Prof. Miroslav Radenković, MD, PhD

Assist. Prof Nevena Divac, MD, PhD

Assoc. Prof. Gordana Dragović Lukić, MD, PhD, Course coordinator

Assoc. Prof. Zorica Nešić, MD, PhD

Assist. Prof Janko Samardžić. MD, PhD

Asist. Prof Katarina Savić Vujović, MD, PhD

Asist. Prof. Branislava Medić Brkić

Assist. Prof. Marko Stojanović

**Teaching Assistants:**

Dragana Srebro, MD, Phd

Miloš Đurić, MD

Vladimir Đokić, MD

Bojana Božić Cvijan, MD

Marija Matić, MD

Vladislav Pajović, MD

Maja Stojković, MD

Miloš Basaqilović, MD

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Date** | **Topic** | **Lecturer/Teaching Assistant** |
|  | **2020.** |  |  |
|  |  | ***Blood and tissue pharmacology*** |  |
| Tue | 4 Feb | **Lecture 1 (2 hrs)**: Heparin. Oral anticoagulants. Fibrinolytics and antifibrinolytics. Platelet aggregation inhibitors. | Doc. N. Divac |
| Thu  Thu  Tue | 6 Feb  6 Feb  11 Feb | **Seminar 1 (1 hr)**: Immunopharmacology  **Lab 1 (1 hr)** Drugs acting on blood coagulation - Computer simulation  **Lecture 2 (2 hrs):** Basic principles of cancer chemotherapy. Adverse drug reactions and toxicity of cytotoxic agents. | Doc. N. Divac  B. Božić  Doc. Dr Branislava Medić Brkić |
| Thu | 13 Feb | **Seminar 2 (1 hr)**: Agents used in anemias. | Doc. M. Stojanović |
| Thu | 13 Feb | **Lab 2 (1 hr)**: Drug induced blood disorders. | V. Đokić |
|  |  |  |  |
|  |  | ***Drugs affecting the respiratory system*** |  |
| Tue | 18 Feb | **Lecture 3 (2 hrs):** Drugs affecting the respiratory system (bronchodilators, anti-inflammatory agents). | Prof. S. Vučković |
| Thu | 20 Feb | **Seminar 3 (1 hr):** Antitussives. Oxygenotherapy. | Doc. Dr K. Savić Vujović |
| Thu | 20 Feb | **Lab 3 (1 hr)**: Drugs affecting smooth muscle contractility (respiratory system, program respiratory pharmacology). | B. Božić |
|  |  |  |  |
|  |  | ***Pharmacology of CNS*** |  |
|  |  |  |  |
| Tue | 25 Feb | **Lecture 4 (2 hrs)**: Psychopharmacology: introduction to psychotropic drugs. Antipsychotic drugs. | Prof. D. Obradović |
| Thu | 27 Feb | **Seminar 4 (1 hr)**: CNS stimulants and hallucinogens. | Doc. J. Samardžić |
| Thu | 27 Feb | **Lab 4 (1 hr)**: Psychotropic drugs. | B. Božić |
| Tue | 3 Mar | **Lecture 5 (2 hrs)**: Antidepressants. Anxiolytics. Sedatives. | Prof. D. Obradović |
| Thu | 5 Mar | **Seminar 5 (1 hr)**: Ethanol. | Doc. J. Samardžić |
| Thu | 5 Mar | **Lab 5 (1 hr)**: Psychotropic drugs. Experimental animal models of anxiety. | M. Đurić |
| Tue | 10 Mar | **Lecture 6 (2 hrs)**: Antiepileptics. Antiparkinsonian agents. | Doc. J. Samardžić |
| Thu | 12 Mar | **Seminar 6** **(1 hr)**: Pharmacodynamic and pharmacokinetics of general anaesthetic agents. | Prof. N. Divac |
| Thu | 12 Mar | **Lab 6 (1 hr)**: Convulsants and anticonvulsants drugs (video presentations). | V. Pajović |
| Tue | 17 Mar | **Lecture 7 (2 hrs)**: Pharmacology of pain, opiates and opioids. | Prof. S. Vučković |
| Thu | 19 Mar | **Seminar 7** **(1 hr)**: Pharmacodynamic and pharmacokinetics of local anaesthetic agents | Doc. J. Samardžić |
| Thu | 19 Mar | **Lab 7 (1 hr):** Analgesic drugs | D. Srebro |
|  |  |  |  |
|  |  | ***Drugs affecting GUT*** |  |
|  |  |  |  |
| Tue | 24 Mar | **Lecture 8 (2 hrs)**: Emetics & antiemetics. Drugs affecting gastric secretion. | Doc. J. Samardžić |
| Thu | 26 Mar | **Seminar 8 (1 hr)**: Drugs affecting gastrointestinal motility and secretion. | Prof. G. Dragović Lukić |
| Thu | 26 Mar | **Lab 8 (1 hr)**: Drugs affecting smooth muscle contractility (GUT). | M. Stojković |
|  |  |  |  |
|  |  | ***Toxicology*** |  |
|  |  |  |  |
| Tue | 31 Mar | **Lecture 9 (2 hrs)**: Basic principles of toxicology. | Prof. M. Radenković |
| Thu | 2 Apr | **Seminar 9 (1 hr):** Heavy metal intoxication and chelators. | Prof. M. Radenković |
| Thu  Tue  Thu  Thu | 2 Apr  7 Apr  9 Apr  9 Apr | **Lab 9 (1 hr)**:Poisoning with acids and alkalis  **Lectures 10 (2 hrs):** The most common drug and other supstances intoxication.  **Seminar 10 (1hr):** The treatment accidental and intentional overdose pearsons  **Lab (1hr):** The effect of drugs on blood pressure and heart rate in rats (computer simulations – program Virtual Rat) **.** | M. Basailović  Doc. dr M. Stojanović  Doc. dr B. Medić Brkić  M. Stojković |
|  |  | ***Pharmacology of hormones and vitamins*** |  |
|  |  |  |  |
| Tue | 14 Apr | **Lecture 11 (2 hrs)**: Introduction to pharmacology of hormones. Pharmacology of thyroid gland and antihyperthyroid agents. | Prof. Z. Todorović |
| Fri | 16 Apr | **Seminar 11 (1 hr)**: Hypothalamic and pituitary hormones (adenohypophysis). | Prof. Z. Nešić |
| Fri | 16 Apr | **Lab 11 (1 hr)**: Computer simulation of drug action. Drugs affecting uterus **Colloquium 2** | D. Srebro |
| Tue | 21 Apr | **Lecture 12 (2 hrs)**: Pharmacology of insulin and oral antidiabetics. | Prof. Z. Todorović |
| Thu  Thu | 23 Apr  23 Apr | **Seminar 12 (1 hr)**: Hypothalamic and pituitary hormones (neurohypophysis).  **Lab 12 (1 hr)**:Drugs causing hyper- and hypoglycemia and therapy | Prof. Z. Nešić  V. Đokić |
|  |  |  |  |
| Tue | 28 Apr | **Lecture 13 (2 hrs)**: Steroid hormones: glucocorticoids. mineralocorticoids. | Prof. Z. Todorović |
| Thu | 30 Apr | **Seminar 13 (1 hr)**: Drugs affecting bone mineral homeostasis. | Prof. Z. Todorović |
| Thu | 30 Apr | **Lab 13 (1 hr)**: The action of glucocorticoids on the immune system: Corticotherapy in sepsis (discussions) **Colloquium 2 - Re-test** | M. Đurić |
| Tue | 5 May  **From:**  **9:00-10:30** | **Lecture 14 (2 hrs):** Estrogens. Gestagens. Hormonal contraceptives. Anabolics. Antiandrogens. | Prof. Lj. Gojković Bukarica |
| Thu | 7 May  **From:**  **9:00-10:30** | **Seminar 14 (1 hr)**: Vitamins used in pharmacotherapy. | Doc. dr B Medić Brkić |
| Thu  Tue  Thu  Thu | 7 May  **From:**  **9:00-10:30**  5 May  7 May  7 May | **Lab 14 (1 hr):** Drugs and pregnancy.  **Lecture 15(2hrs)** Make up  **Seminar 15** (1hr) Make up  **Lab 15** (1 hr) Make up | M. Matić |