



# **INTEGRATED ACADEMIC PHARMACY STUDIES**

**THIRD YEAR OF STUDY**

academic 2024/2025.

**DISPENSING DRUGS IN PRACTICE**

Course:

## **DISPENSING DRUGS IN PRACTICE**

The course is evaluated with 5 ECTS credits. Classes of active teaching per week -3 hours (2 hours of lectures and 1 hour of work in a small group).

## TEACHERS AND ASSOCIATES:

	Name and surname	E-mail	Title
1.	Milena Jurisevic	milena.jurisevic13@gmail.com	Assistant professor
2.	Srdjan Stefanovic	sstefanovic@fmn.kg.ac.rs	Associate professor
3.	Olivera Kostic	olivera.kostic@fmn.kg.ac.rs	Associate professor
4.	Tamara Nikolic Turnic	tnikolict@gmail.com	Associate professor
5.	Radisa Pavlovic	rpavlovic@fmn.kg.ac.rs	Associate professor
6.	Aleksandra Stojanovic	vranicaleksandra90@gmail.com	Assistant professor
7.	Natasa Mijailovic	nacakg@gmail.com	Assistant professor
8.	Katarina Mihajlovic	katarina.mihajlovic@fmn.kg.ac.rs	Assistant professor
9.	Marko Ravic	markoravic@hotmail.com	Assistant
10.	Katarina Djordjevic	kacka96kg@gmail.com	Assistant
11.	Bozidar Pindovic	pindovic.bozidar@gmail.com	Assistant

## COURSE STRUCTURE:

Module	Module name	Week	Lectures	Work in a small group	Teacher-supervisor module
1	Elements, as well as the basics of writing/interpreting prescriptions and requirements. Medication dispensing systems in a stationary healthcare facility.	4	2	1	Milena Jurisevic
2	Methodological, professional, and expert approach to dispensing antidiabetic, corticosteroid, antiasthmatic, statin, or antianginal medications.	6	2	1	Milena Jurisevic
3	Methodological, professional, and expert approach to dispensing anticoagulant, antibiotic, antipsychotic, or antidepressant therapy.	5	2	1	Milena Jurisevic

## EVALUATION:

The student overcomes the course based on the points achieved in the pre-examination activities and the final exam. The score is equivalent to the number of gained points (table). Points are earned as follows:

Activity during classes (pre-exam activities): The student can acquire up to 30 points by answering 2 exam questions during each week's class, while working in a small group and, according to the demonstrated knowledge, receives 0-2 points. If at the end of the semester the student did not acquire more than 50% of the maximum amount of points (30), they are considered to not have passed the pre-exam activity.

Module	Module Name	MAXIMUM POINTS
		Activity during classes
1.	Elements, as well as the fundamentals of writing/interpreting prescriptions and requirements. Medication dispensing systems in a stationary healthcare facility. Dispensing medications to disabled individuals.	8
2.	Methodological, professional, and expert approach to dispensing antidiabetic, corticosteroid, antiasthmatic, statin, and antianginal medications.	12
3.	Methodological, professional, and expert approach to dispensing anticoagulant, antibiotic, antiulcer, antipsychotic, or antidepressant therapy.	10
$\Sigma$		30

Final Exam: In this way, the student can acquire up to 70 points. The student takes a final exam consisting of 70 questions, testing their knowledge of all the material covered during the course. If the student does not answer more than 50% of the exam correctly, they are considered to not have passed the final exam.

### Final grade is formed as follows:

In order for a student to pass the course, they must acquire a minimum of 51 points, pass the pre-exam activities in all modules, and pass the final exam (test).

The final grade will be formed according to the following table:

Number of points earned	Grade
0 - 50	5
51 - 60	6
61 - 70	7
71 - 80	8
81 - 90	9
91 - 100	10

## Literature:

TEXTBOOK TITLE	AUTHORS	PUBLISHER	LIBRARY
Pharmacology and Toxicology. Third Edition	Janković SM (editor)	Kragujevac: Medical Faculty, 2011.	Yes
Pharmacy Management 1st ed.	Desselle S, Zgarrick D (editors)	Appleton and Lange, 2007.	Yes
Non-Medical Prescribing in Healthcare Practice: A Toolkit for Students and Practitioners. 1st ed.	Brookes D, Smith A.(editors)	Palgrave Macmillan, 2006.	Yes
Handbook of Pharmacology and Toxicology	Janković SM (editor)	Kragujevac: Faculty of Medical Sciences, 2021.	Yes
Pharmacovigilance and Safe Drug Use	erzić B, Anđelković D, Meyboom R, Stanulović M. (editors).	Belgrade: Faculty of Pharmacy, 2006.	Yes
Medication Management in Hospitals	Janković SM.	Kragujevac: Medical Faculty, 2006.	Yes
Pharmacotherapy Guide 6	Ugrešić N (editor).	Belgrade: Agency for Medicines and Medical Devices of Serbia, 2016.	Yes
The Clinical Use of Drugs (Koda Kimble and Youngs Applied Therapeutics) 10th Edition	Allredge B, Corelli R, Ernst M, Guglielmo BJ, Jacobson P (Editors)	Wolters Kluwer Health, Lippincott Williams &Wilkins, 2013	/
Applied Therapeutics: The Clinical Use of Drugs	Zeind C, Carvalho M	Wolters Kluwer Health, 2018	/
Pharmacotherapy: A Pathophysiologic Approach, Eleventh Edition	DiPiro J, Yee G, Posey M., Haines S, Nolin T, Ellingrod V.	McGraw Hill, 2020	/

All lectures and necessary materials for work in small groups are available on the website of the Faculty of Medical Sciences: [www.medf.kg.ac.rs](http://www.medf.kg.ac.rs)

**Consultations:** Every Thursday during the semester, from 13:00 to 14:00, Faculty of Medical Sciences, Office Number 24.

## THE PROGRAM:

### MODULE 1: ELEMENTS AS WELL AS THE BASICS OF WRITTING/INTERPERTING PRESCRIPTINS AND REQUISITIONS. MEDICATION DISPENSING SYSTEMS IN A STATIONARY HEALTHCARE FACILITY

#### TEACHING UNIT 1 (FIRST WEEK):

Lectures 2 hours	Practical classes: 1 hour
Medication Dispensing Stages	Verification of identification data on the prescription

#### TEACHING UNIT 2 (SECOND WEEK):

Lectures 2 hours	Practical classes: 1 hour
Drug Dose Regimen. Medication Dispensing Errors and Prevention	Prevention of medication errors: detection and audit

#### TEACHING UNIT 3 (THIRD WEEK):

Lectures 2 hours	Practical classes: 1 hour
Verbal and non-verbal communication skills in pharmacy practice	Communication Strategies in Pharmacy-examples

#### TEACHING UNIT 4 (FOURTH WEEK):

Lectures 2 hours	Practical classes: 1 hour
Drug distribution systems in hospital Traditional medication dispensing system. Unit dose dispensing system.	Automatic dispensing systems Dispensing errors and safe medication storage systems

### MODULE 2: METHODOLOGICAL, PROFESSIONAL, AND EXPERT APPROACH TO DISPENSING ANTIDIABETIC, CORTICOSTEROID, ANTIASHTHATIC, STATIN, OR ANTIANGINAL MEDICATIONS.

TEACHING UNIT 5 (FIFTH WEEK):

Lectures 2 hours	Practical classes: 1 hour
Pharmacotherapy of the most common diseases of the ear, throat, and nose in primary healthcare.	Practical examples of dispensing medications to individuals with impaired hearing and/or vision.

TEACHING UNIT 6 (SIXTH WEEK):

Lectures 2 hours	Practical classes: 1 hour
Management of common forms of anemia nutrition and supplementation	Anemia Medication and Supplements

TEACHING UNIT 7 (SEVENTH WEEK):

Lectures 2 hours	Practical classes: 1 hour
Role of pharmacist in counseling Diabetes patients	Counseling practice of community pharmacists for diabetes mellitus patients

TEACHING UNIT 8 (EIGHTH WEEK):

Lectures 2 hours	Practical classes: 1 hour
Role of pharmacist in patient counseling regarding the use of corticosteroids	Pharmacist's role in management of rheumatoid arthritis

TEACHING UNIT 9 (NINTH WEEK):

Lectures 2 hours	Practical classes: 1 hour
Role of pharmacists in asthma care and management	Role of community pharmacists in educating asthmatic patients

TEACHING UNIT 10 (TENTH WEEK):

Lectures 2 hours	Practical classes: 1 hour
The pharmacist's role in counseling patients with Angina Pectoris	Counseling patients on statin therapy.

**MODULE 3: METHODOLOGICAL, PROFESSIONAL, AND EXPERT APPROACH IN DISPENSING ANTICAGULANT, ANTIBIOTIC, ANTIPSYCHOTIC, OR**

## **ANTIDEPRESSANT THERAPY. DISPENSING MEDICATIONS TO HANDICAPPED INDIVIDUALS.**

### **TEACHING UNIT 11 (ELEVENTH WEEK):**

Lectures 2 hours	Practical classes: 1 hour
The role of the pharmacist in anticoagulant management	Drug-related problems associated with direct oral anticoagulants

### **TEACHING UNIT 12 (TWELVE WEEK):**

Lectures 2 hours	Practical classes: 1 hour
Adverse effects of antibiotics	Prophylactic antibiotic use- clinical problem

### **TEACHING UNIT 13 (THIRTEENTH WEEK):**

Lectures 2 hours	Practical classes: 1 hour
Pharmacist's recommendation and dispense of medication in the management of gastrointestinal diseases	Clinical significance of prebiotics and probiotics.

### **TEACHING UNIT 14 (FOURTEENTH WEEK):**

Lectures 2 hours	Practical classes: 1 hour
Pharmacists' role in schizophrenia spectrum disorders and depression care	Adverse effects and contraindications of antipsychotic medications and antidepressants.

### **TEACHING UNIT 15 (FIFTEENTH WEEK):**

Lectures 2 hours	Practical classes: 1 hour
Pharmacotherapy of the most common genitourinary disorders	Dispensing medications and OTC products- practical examples



## **SCHEDULE OF LECTURES & PRACTICE**

**WEDNESDAY**

**09.30-11.30**

Hall at the  
pediatric clinic

## TEACHING SCHEDULE FOR THE COURSE DISPENSING DRUGS IN PRACTICE

module	week	type	the name of the method unit	teacher
1	1	L	Medication Dispensing Stages	Milena Jurisevic, <i>Lecturer</i>
		P	Verification of identification data on the prescription	Milena Jurisevic Katarina Djordjevic
	2	L	Drug Dose Regimen.Medication Dispensing Errors and Prevention	Milena Jurisevic, <i>Lecturer</i>
		P	Prevention of medication errors: detection and audit	Milena Jurisevic Katarina Djordjevic
	3	L	Verbal and non-verbal communication skills in pharmacy practice	Milena Jurisevic, <i>Lecturer</i>
		P	Communication strategies in pharmacy- examples	Milena Jurisevic Katarina Djordjevic
	4	L	Drug distribution systems in hospital. Traditional medication dispensing system. Unit dose dispensing system.	Milena Jurisevic, <i>Lecturer</i>
		P	Automatic dispensing systems Dispensing errors and safe medication storage systems	Milena Jurisevic Marko Ravic
	5	L	Pharmacotherapy of the most common diseases of the ear, throat, and nose in primary healthcare.	Milena Jurisevic, <i>Lecturer</i>
		P	Practical examples of dispensing medications to individuals with impaired hearing and/or vision.	Milena Jurisevic Marko Ravic
2	6	L	Management of common forms of anemia nutrition and supplementation	Katarina Mihajlovic
		P	Anemia Medication and Supplements	Katarina Mihajlovic Marko Ravic
	7	L	Role of pharmacist in counseling Diabetes patients	Olivera Kostic, <i>Lecturer</i>
		P	Counseling practice of community pharmacists for diabetes mellitus patients	Olivera Kostic Marko Ravic
	8	L	Role of pharmacist in patient counseling regarding the use of corticosteroids	Natasa Mijailovic, <i>Lecturer</i>
		P	Pharmacist's role in management of rheumatoid arthritis	Natasa Mijailovic Bozidar Pindovic
	9	L	Role of pharmacists in asthma care and management	Natasa Mijailovic, <i>Lecturer</i>
		P	Role of community pharmacists in educating asthmatic patients	Katarina Djordjevic Bozidar Pindovic

## TEACHING SCHEDULE FOR THE COURSE DISPENSING DRUGS IN PRACTICE

module	week	type	the name of the method unit	teacher
2	10	L	The pharmacist's role in counseling patients with Angina Pectoris	Radisa Pavlovic, <i>Lecturer</i>
		P	Counseling patients on statin therapy.	Radisa Pavlovic Bozidar Pindovic
3	11	L	The role of the pharmacist in anticoagulant management	Milena Jurisevic, <i>Lecturer</i>
		P	Drug-related problems associated with direct oral anticoagulants	Marko Ravic Bozidar Pindovic
	12	L	Adverse effects of antibiotics	Katarina Mihajlovic, <i>Lecturer</i>
		P	Prophylactic antibiotic use- clinical problem	Natasa Mijailovic Bozidar Pindovic
	13	L	Pharmacist's recommendation and dispense of medication in the management of gastrointestinal diseases	Aleksandra Stojanovic, <i>Lecturer</i>
		P	Clinical significance of prebiotics and probiotics.	Aleksandra Stojanovic Bozidar Pindovic
	14	L	Pharmacists' role in schizophrenia spectrum disorders and depression care	Tamara Nikolic Turnic, <i>Lecturer</i>
		P	Adverse effects and contraindications of antipsychotic medications and antidepressants.	Katarina Mihajlovic Tamara Nikolic Turnic
	15	L	Pharmacotherapy of the most common genitourinary disorders	Milena Jurisevic, <i>Lecturer</i>
		P	Dispensing medications and OTC products- practical examples	Milena Jurisevic Katarina Djordjevic
			<b>FINAL EXAM</b>	