



**INTEGRATED ACADEMICS
PHARMACY STUDIES**

FOURTH YEAR OF STUDY

Academic year 2024/2025.

CLINICAL PHARMACY 2

Subject:

CLINICAL PHARMACY 2

The course is valued at 6 ECTS credits. There are 5 hours of active teaching per week (2 hours of lectures and 3 hours of small group work).

TEACHERS AND ASSOCIATES:

RB	First and last name	Email address	Title
1.	Tamara Nikolic Turnic*	tnikolict@gmail.com	Associate Professor
2.	Olivera Kostic	olivera.kostic@fmn.kg.ac.rs	Associate Professor
3.	Radisa Pavlovic	rpavlovic@fmn.kg.ac.rs	Associate Professor
4.	Milena Jurisevic	milena.jurisevic13@gmail.com	Assistant professor
5.	Aleksandra Stojanovic	vranicaleksandra90@gmail.com	Assistant professor
6.	Natasha Mijailovic	nacakg@gmail.com	Assistant professor
7.	Marko Ravic	MarkoRavic@hotmail.com	Assistant
8..	Katarina Mihajlovic	Katarina.mih17@gmail.com	Assistant professor
9.	Katarina Djordjevic	kacka96kg@gmail.com	Assistant
10.	Bozidar Pindovic	pindovic.bozidar@gmail.com	Assistant

*Course leader

COURSE STRUCTURE:

Module	Module name	Sunday	Lectures per week	Weekly small group work	Module leader teacher
1.	Clinical pharmacy in the function of implementing rational pharmacotherapy	5	3	2	Prof. Dr. Tamara Nikolić Turnić
2.	Clinical pharmacy in the function of implementing rational pharmacotherapy	5	3	2	Prof. Dr. Tamara Nikolić Turnić
3.	Clinical pharmacy in the function of implementing rational pharmacotherapy	5	3	2	Prof. Dr. Tamara Nikolić Turnić
					$\Sigma 30+30=60$

RATE:

The final grade is formed based on the number of points earned through pre-exam activities and on the final exam. The grade is equivalent to the number of points earned (shown in the tables).

ACTIVITY DURING TEACHING:In this way, a student can earn up to 30 points by answering 2 exam questions from that week of classes in the last class of small group work, and according to the knowledge shown, they receive 0 - 2 points. If at the end of the semester the student does not achieve more than 50% of the points, they have not passed the pre-exam activity.

FINAL EXAM:In this way, a student can earn up to 70 points. The student takes a final test that has 70 questions and includes a test of knowledge from the entire material covered during the course. If the student does not earn more than 50% of correct answers, he/she has not passed the final exam.

The final grade is formed as follows:

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

number of points scored	Rating
0 – 50	5
51 – 60	6
61 – 70	7
71 – 80	8
81 – 90	9
91 – 100	10

LITERATURE:

MODULE	TEXTBOOK NAME	AUTHORS	PUBLISHER	LIBRARY	READING ROOM
Module 1, 2 and 3	Pharmacology and toxicology. 3rd edition	Jankovic S.	Faculty of Medicine, Kragujevac, 2011	There is	There is
Module 1, 2 and 3	Pharmacotherapeutic Guide. 6th Edition		Agency for Medicines and Medical Devices of Serbia, Belgrade 2016.	There is	/
Module 1, 2 and 3	Concepts in Clinical Pharmacokinetics	Joseph T. DiPiro, et al.	American Society of Health Systems Pharmacists. Inc., 2005.	There is	/
Module 1, 2 and 3	Fundamentals of clinical pharmacy	Jankovic S.	Faculty of Medicine, Kragujevac, 2010	There is	There is
Module 1, 2 and 3	Clinical Pharmacy and Therapeutics	Walker R, Whittlesea C.	Churchill Livingstone 5th ed, 2012.	There is	/
Module 1, 2 and 3	National guides to good clinical practice	Author group	Ministry of Health of the Republic of Serbia	/	/

**All lectures are available on the Faculty of Medical Sciences website: www.medf.kg.ac.rs
Consultations with teachers and associates: every Wednesday from 5:30 p.m. to 6:30 p.m. (office number 24).**

PROGRAM:

FIRST MODULE: CLINICAL PHARMACY IN THE FUNCTION OF IMPLEMENTING RATIONAL PHARMACOTHERAPY

UNIT 1 (FIRST WEEK):

3 classes of lectures	2 classes of practise
The role of the clinical pharmacist in clinical drug trials: critical assessment of the validity of the clinical study (double-blinding, randomization, intention-to-treat analysis).	Students are given a copy of a published clinical study; they are required to assess the validity and clinical significance.

UNIT 2 (SECOND WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in gastrointestinal tract disorders. Peptic disease. Inflammatory bowel disease. Constipation and diarrhea. Adverse effects of drugs on the hepatobiliary system.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 3 (THIRD WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in disorders of the cardiovascular system. Hypertension, Ischemic heart disease; Dyslipidemia.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 4 (FOURTH WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in hematological disorders. Anemias. Leukemias. Coagulation disorders.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 5 (FIFTH WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in respiratory disorders. Asthma. Chronic obstructive pulmonary disease. Respiratory infections.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

SECOND MODULE: CLINICAL PHARMACY IN THE FUNCTION OF IMPLEMENTING RATIONAL PHARMACOTHERAPY

UNIT 6 (SIXTH WEEK):

3 classes of lectures	2 classes of practise
Rational application of pharmacotherapy in neurological and psychiatric disorders. Pharmacotherapy of pain.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 7 (SEVENTH WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in infectious diseases 1.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 8 (EIGHTH WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in infectious diseases 2.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 9 (NINETH WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in endocrine disorders. Thyroid and parathyroid gland dysfunction. Diabetes mellitus. Menopause.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 10 (TENTH WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in rheumatic disorders. Rheumatoid arthritis and osteoarthritis. Gout and hyperuricemia.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

THIRD MODULE: CLINICAL PHARMACY IN THE FUNCTION OF IMPLEMENTING RATIONAL PHARMACOTHERAPY

UNIT 11 (ELEVENTH WEEK):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in renal disorders. Acute and chronic renal failure	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 12 (WEEK TWELFTH):

3 classes of lectures	2 classes of practise
Rational use of pharmacotherapy in urogenital tract disorders. Urogenital tract infections. Prostate diseases.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 13 (THIRTEENTH WEEK):

3 classes of lectures	2 classes of practise
Pharmacotherapy in neonatology and pediatrics.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 14 (WEEK FOURTEENTH):

3 classes of lectures	2 classes of practise
Chemotherapeutics. Clinical pharmacy of malignant diseases.	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created.

UNIT 15 (FIFTEENTH WEEK):

3 classes of lectures	2 classes of practise
Pharmacotherapy in geriatrics.	Pharmacotherapy in geriatrics.

LECTURES & PRACTICE SCHEDULE

TUESDAY

08:00 – 12:00

Hall 2- Dentistry

TEACHING SCHEDULE FOR THE SUBJECT CLINICAL PHARMACY 2

modul e	Sunday	type	name of the method unit	teacher
1	1	L	Clinical pharmacy of the new age. Personalized medicine.	Prof. Dr. Tamara Nikolić Turnić
	1	P	Practical examples of personalized medicine methods. Activity during the lesson	Prof. Dr. Tamara Nikolić Turnić Assist. Katarina Djordjevic Assist. Božidar Pindović
	2	L	Rational use of pharmacotherapy in gastrointestinal tract disorders. Peptic disease. Inflammatory bowel disease. Constipation and diarrhea. Adverse effects of drugs on the hepatobiliary system.	Prof. Dr. Tamara Nikolić Turnić
	2	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Assist. Katarina Djordjevic Assist. Marko Ravić Assist. Božidar Pindović
	3	L	Rational use of pharmacotherapy in disorders of the cardiovascular system. Hypertension, Ischemic heart disease; Dyslipidemia.	Assist. Prof. Natasa Mijailović
	3	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Assist. Prof. Natasa Mijailović Assist. Katarina Djordjevic Assist. Božidar Pindović
	4	L	Rational use of pharmacotherapy in hematological disorders. Anemias. Leukemias. Coagulation disorders.	Assist. Prof. Natasa Mijailović
	4	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Assist. Prof. Natasa Mijailović Assist. Marko Ravić Assist. Katarina Djordjevic
	5	L	Rational use of pharmacotherapy in respiratory disorders. Asthma. Chronic obstructive pulmonary disease. Respiratory infections.	Prof. Dr. Radiša Pavlović
	5	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Prof. Dr. Radiša Pavlović Assist. Katarina Djordjevic Assist. t Božidar Pindović
2	6	L	Rational application of pharmacotherapy in neurological and psychiatric disorders. Pharmacotherapy of pain.	Prof. Dr. Tamara Nikolić Turnić
	6	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Prof. Dr. Tamara Nikolić Turnić Assist. Marko Ravić Assist. Božidar Pindović

TEACHING SCHEDULE FOR THE SUBJECT CLINICAL PHARMACY 2

module	Sunday	type	name of the method unit	teacher
2	7	L	Rational use of pharmacotherapy in infectious diseases 1.	Prof. Dr. Olivera Kostić
	7	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” therapy monitoring plan should be created. Activity during class	Assist. Prof. Natasa Mijailović Assist. Katarina Djordjevic Assist. Božidar Pindović
	8	L	Rational use of pharmacotherapy in infectious diseases 2.	Assist. Prof. Milena Jurisevic
	8	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Assist. Prof. Katarina Mihajlović Assist. Katarina Djordjevic Assist. Marko Ravić
	9	L	Rational use of pharmacotherapy in endocrine disorders. Thyroid and parathyroid gland dysfunction. Diabetes mellitus. Menopause.	Assist. Prof. Katarina Mihajlović
	9	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Assist. Prof. Katarina Mihajlović Assist. Marko Ravić Assist. Božidar Pindović
	10	L	Rational application of pharmacotherapy in renal disorders. Acute and chronic renal failure.	Prof. Dr. Tamara Nikolić Turnić
	10	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Prof. Dr. Tamara Nikolić Turnić Assist. Katarina Djordjevic Assist. Katarina Djordjevic
3	11	L	Rational use of pharmacotherapy in rheumatic disorders. Rheumatoid arthritis and osteoarthritis. Gout and hyperuricemia.	Assist. Prof. Dr. Aleksandra Stojanović
	11	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Assist. Prof. Dr. Aleksandra Stojanović Assist. Marko Ravić Assist. Božidar Pindović
	12	L	Rational use of pharmacotherapy in urogenital tract disorders. Urogenital tract infections. Prostate diseases.	Prof. Dr. Tamara Nikolić Turnić
	12	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Assist. Katarina Djordjevic Assist. Božidar Pindović Assist. Marko Ravić

TEACHING SCHEDULE FOR THE SUBJECT CLINICAL PHARMACY 2

modul e	Sunday	type	name of the method unit	teacher
3	13	L	Pharmacotherapy in neonatology and pediatrics.	Prof. Dr. Tamara Nikolić Turnić
	13	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Prof. Dr. Tamara Nikolić Turnić Assist. Marko Ravić Assist. Božidar Pindović
	14	L	Chemotherapeutics. Clinical pharmacy of malignant diseases.	Prof. Dr. Tamara Nikolić Turnić
	14	P	The assistant assigns students several tasks with clinical problems for which a “Pharmacist's Care Plan” should be created. Activity during class	Assist. Katarina Djordjevic Assist. Božidar Pindović Assist. Marko Ravić
	15	L	Pharmacotherapy in geriatrics.	Prof. Dr. Tamara Nikolić Turnić
	15	P	The assistant assigns students several tasks with clinical problems for which a "Pharmacist's Care Plan" should be created. Activity during class	Assist. Marko Ravić Assist. Katarina Djordjevic Assist. Božidar Pindović
	And	EXAM (JUNE)		