

# INTEGRATED ACADEMIC STUDIES OF PHARMACY

FIFTH YEAR OF STUDIES

2023/2024 school year.

Subject:
PROFESSIONAL STUDENT PRACTICE
The subject is evaluated with 15 ESPB points. In total, there are 450 hours of active classes (30 classes of work in a small group in a pharmacy per week).

# **TEACHERS AND ASSOCIATES:**

RB	Name and surname	E-mail address	Vocation
1.	Marina Tomovic	marinapop@gmail.com	Full professor

## **COURSE STRUCTURE:**

vagitories and triturates.). Reception, records and storage of active and auxiliary substances.  Practicing in a pharmacy Division of work and responsibilities of employees, appearance, layout and purpose of rooms in the pharmacy. Acquaintance with pharmacy literature, reception and storage of drugs and medical devices  with special reference to drugs from the cold chain. Defecting the pharmacy and checking deadlines as well as certificates of drugs and medical devices. Keeping professional records (book of narcotics, book of deadlines, book of private prescriptions).  Training students on the software used in the pharmacy, training students to purchase drugs and medical devices under the supervision of pharmacists, determine the correctness of the prescribed drug, dispense the drug, identify problems related to the use of drugs, monitor and report adverse reactions to the drug, and perform administrative processing of prescriptions Develops communication skills with patients, pharmacists and	Module	Name of the module	Sunday	Lectures	Work in a small group	Teacher-leader
work and responsibilities of employees, appearance, layout and purpose of rooms in the pharmacy. Acquaintance with pharmacy literature, reception and storage of drugs and medical devices with special reference to drugs from the cold chain. Defecting the pharmacy and checking deadlines as well as certificates of drugs and medical devices. Keeping professional records (book of narcotics, book of deadlines, book of private prescriptions).  Training students on the software used in the pharmacy, training students to purchase drugs and medical devices under the supervision of pharmacists, determine the correctness of the prescribed drug, dispense the drug, identify problems related to the use of drugs, monitor and report adverse reactions to the drug, and perform administrative processing of prescriptions. Develops communication skills with patients, pharmacists and	1	Production of galenic and magisterial preparations (ointments, creams, body and face milks, lotions and tonics, vagitories and triturates.). Reception, records and storage of active and	5	/	150	prof. Ph.D. Marina Tomovic
Training students on the software used in the pharmacy, training students to purchase drugs and medical devices under the supervision of pharmacists, determine the correctness of the prescribed drug, dispense the drug, identify problems related to the use of drugs, monitor and report adverse reactions to the drug, and perform administrative processing of prescriptions . Develops communication skills with patients, pharmacists and	2	work and responsibilities of employees, appearance, layout and purpose of rooms in the pharmacy. Acquaintance with pharmacy literature, reception and storage of drugs and medical devices with special reference to drugs from the cold chain. Defecting the pharmacy and checking deadlines as well as certificates of drugs and medical devices. Keeping professional records (book of narcotics, book of deadlines, book of private	5	/	150	prof. Dr. Marina Tomović
40410151	3	Training students on the software used in the pharmacy, training students to purchase drugs and medical devices under the supervision of pharmacists, determine the correctness of the prescribed drug, dispense the drug, identify problems related to the use of drugs, monitor and report adverse reactions to the drug, and perform administrative processing of prescriptions. Develops communication	5	/	150	prof. Dr. Marina Tomović

## **ASSESSMENT:**

The student masters the subject in modules.

The student achieves the expected ESPB points after the professional practice diary has been verified by the mentor and subject manager, which confirms that the student has successfully completed the professional practice.

# Literature

Module	the name of the textbook	Authors	publisher	the library
	IV Yugoslav Pharmacopoeia			Has
Carrying out practice in the laboratory. Production of galenic and magisterial preparations (ointments, creams, body and face milks, lotions and tonics, vagitories and triturates.). Reception, records and storage of active and auxiliary substances.	V Yugoslav Pharmacopoeia			Has
	Master formulas			Has
Practicing practice in a pharmacy Division of work and responsibilities of employees, appearance, layout and purpose of rooms in the pharmacy. Acquaintance with pharmacy literature, reception and storage of drugs and medical devices with special reference to drugs from the cold chain. Defecting the pharmacy and checking deadlines as well as certificates of drugs and medical devices. Keeping professional records (book of narcotics, book of deadlines, book of private prescriptions).		/		
Training students on the software used in the pharmacy, training students to purchase drugs and medical devices under the supervision of pharmacists, determine the correctness of the prescribed drug, dispense the drug, identify problems related to the use of drugs, monitor and report adverse reactions to the drug, and perform administrative processing of prescriptions. Develops communication skills with patients, pharmacists and doctors.		/		

## THE PROGRAM

**FIRST MODULE:** Carrying out practice in the laboratory. Production of galenic and magisterial preparations (ointments, creams, body and face milks, lotions and tonics, vagitories and triturates.). Reception, records and storage of active and auxiliary substances.

TEACHING UNIT 1 (FIRST WEEK):				
lectures /	exercises  Acquaintance with professional literature, pharmaceutical calculations. Rooms and equipment in the laboratory. Acquaintance with the valid legal and professional regulations that regulate the production of master medicines. Keeping professional records (book of production of master medicines, laboratory diary).			
TEACHING UNIT 2 (SECOND WEEK):				
lectures /	exercises Preparation of dishes, utensils, packaging and creation of conditions for the production of magisterial medicines. Procurement, reception and storage of substances.			
TEACHING UNIT 3 (THIRD WEEK):				
lectures	exercises  Production, packaging and labeling of prescription			
/	drugs (checking doses and compatibility of existing substances).			
UNIT 4 (FOURTH WEEK):				
lectures	exercises			
	Production, packaging and labeling of prescription drugs (checking doses and compatibility of existing substances).			
UNIT 5 (FIFTH WEEK):				
lectures	exercises			
	Production, packaging and labeling of prescription drugs (checking doses and compatibility of existing substances).			

**SECOND MODULE:** Division of work and responsibilities of employees, appearance, layout and purpose of rooms in the pharmacy. Acquaintance with pharmacy literature, reception and storage of drugs and medical devices with special reference to drugs from the cold chain. Defecting the pharmacy and checking deadlines as well as certificates of drugs and medical devices. Keeping professional records (book of narcotics, book of deadlines, book of private prescriptions...).

UNIT 6 (SIXTH WEEK):	
lectures	exercises
	Layout and purpose of rooms in the pharmacy. Acquaintance with pharmacy literature (drug register), division of labor and responsibilities of employees. Legal and professional responsibility of pharmacists. Keeping professional records (book of narcotics, private prescriptions). Checking deadlines and certificates of drugs and medical devices.
UNIT 7 (SEVENTH WEEK):	
lectures /	exercises Keeping professional records (book of narcotics, private prescriptions, appointment book), receipt and filing of drugs and medical devices with special reference to drugs from the cold chain. Defection of the pharmacy. Procedure for disposing of medicines and disposal of pharmaceutical waste.
UNIT 8 (EIGHTH WEEK):	
lectures	exercises Reception and storage of medicines and medical devices with special reference to medicines from the cold chain. Defection of the pharmacy. Acquaintance of students with dietary products as well as possible drug-dietary product and drug-food interactions.
UNIT 9 (NINTH WEEK):	
lectures /	exercises Receiving and storing medicines, defecting the pharmacy and checking deadlines. Acquaintance of students with dietary products and medical devices available at the pharmacy. Monitoring and reporting of adverse drug reactions.
UNIT 10 (TENTH WEEK):	
lectures	exercises Receiving and storing medicines, defecting the pharmacy and checking deadlines. Acquaintance of students with dietary products and medical devices available at the

interactions.

pharmacy. Monitoring and reporting of adverse drug

reactions, as well as possible drug-dietary and/or drug-food

**THIRD MODULE:** Training students on the software used in the pharmacy, training students to purchase drugs and medical devices under the supervision of pharmacists, determine the correctness of the prescribed drug, dispense the drug, identify problems related to the use of drugs, monitor and report adverse reactions to the drug, and perform administrative processing of prescriptions. Develops communication skills with patients, pharmacists and doctors.

#### UNIT 11 (ELEVENTH WEEK):

lectures

#### exercises

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Training on the software used in the pharmacy (processing of invoices and delivery notes that follow traffic, ...), implementation of the procurement of drugs and medical devices under the supervision of a pharmacist.

#### UNIT 12 (Twelfth Week):

lectures

#### exercises

Acquaintance of the student with the prescription form and the regulations governing this area. Determining the correctness of the prescription in terms of dispensing mode, dosage, pharmaceutical form and required quantities. Issuance of drugs with a prescription, without a prescription from the group of narcotic drugs and psychoactive substances. Identification of problems related to the use of medicines, processing of prescriptions. Development of communication skills with patients, colleagues and doctors.

#### UNIT 13 (WEEK THIRTEEN):

lectures

### exercises

Communication with the patient, informing the patient how and what the medicine is used for, what are the possible side effects of the medicine. Administration of drugs in children, pregnant women and elderly patients, possible interactions with simultaneously applied drugs/food. What can happen in the event of improper use or sudden discontinuation of medication. Modification of therapy in agreement with the doctor (development of communication with colleagues and doctors). Training of patients for adequate application of therapy (use of pumps, inhalers, insulin...). Proper use of herbal and homeopathic therapy, as well as dietary supplement products in combination with or without medication. How to link a patient to a specific pharmacy/pharmacist.

#### UNIT 14 (FOURTEENTH WEEK):

lectures

#### exercises

Communication with the patient, informing the patient how and what the medicine is used for, what are the possible side effects of the medicine. Administration of drugs in children, pregnant women and elderly patients, possible interactions with simultaneously applied drugs/food. What can happen in the event of improper use or sudden discontinuation of medication. Modification of therapy in agreement with the doctor (development of communication with colleagues and doctors). Training of patients for adequate application of therapy (use of pumps, inhalers, insulin...). Proper use of herbal and homeopathic

/

therapy, as well as dietary supplement products in combination with or without medication. How to link a patient to a specific pharmacy/pharmacist.

#### UNIT 15 (FIFTEENTH WEEK):

lectures

exercises

Communication with the patient, informing the patient how and what the medicine is used for, what are the possible side effects of the medicine. Administration of drugs in children, pregnant women and elderly patients, possible interactions with simultaneously applied drugs/food. What can happen in the event of improper use or sudden discontinuation of medication. Modification of therapy in agreement with the doctor (development of communication with colleagues and doctors). Training of patients for adequate application of therapy (use of pumps, inhalers, insulin...). Proper use of herbal and homeopathic therapy, as well as dietary supplement products in combination with or without medication. How to link a patient to a specific pharmacy/pharmacist.

# LECTURE SCHEDULE

# **GREAT HALL (S3)**

# WEDNESDAY

## PRACTICE SCHEDULE

## **PHARMACY**

In agreement with mentors

Schedule of classes and module tests

module	Sunday	method unit name	A teacher
	1		
	1	Acquaintance with professional literature, pharmaceutical calculations. Rooms and equipment in the laboratory. Acquaintance with the valid legal and professional regulations that regulate the production of master medicines. Keeping professional records (book of production of master medicines, laboratory diary).	Mentors from Pharmacy
	2		
	2	Preparation of dishes, utensils, packaging and creation of conditions for the production of magisterial medicines.  Procurement, reception and storage of substances.	Mentors from Pharmacy
1	3		
1	3	Production, packaging and labeling of prescription drugs (checking doses and compatibility of existing substances).	Mentors from Pharmacy
	4		
	4	Production, packaging and labeling of prescription drugs (checking doses and compatibility of existing substances).	Mentors from Pharmacy
	5		
	5	Production, packaging and labeling of prescription drugs (checking doses and compatibility of existing substances).	Mentors from Pharmacy
2	6	/	
	6	Layout and purpose of rooms in the pharmacy. Acquaintance with pharmacy literature (drug register), division of duties and responsibilities of employees. Legal and professional responsibility of pharmacists. Keeping professional records (book of narcotics, private prescriptions). Checking deadlines and certificates of drugs and medical devices.	Mentors from Pharmacy
	7		

module	Sunday	method unit name	A teacher
	7	Keeping professional records (book of narcotics, private prescriptions, appointment book), receipt and filing of drugs and medical devices with special reference to drugs from the cold chain. Defection of the pharmacy. Procedure for disposing of medicines and disposal of pharmaceutical waste.	Mentors from Pharmacy
	8		
	8	Reception and storage of medicines and medical devices with special reference to medicines from the cold chain.  Defection of the pharmacy. Acquaintance of students with dietary products as well as possible drug-dietary product and drug-food interactions.	Mentors from Pharmacy
	9		
	9	Receiving and storing medicines, defecting the pharmacy and checking deadlines. Acquaintance of students with dietary products and medical devices available at the pharmacy. Monitoring and reporting of adverse drug reactions.	Mentors from Pharmacy
	10		
	10	Receiving and storing medicines, defecting the pharmacy and checking deadlines. Acquaintance of students with dietary products and medical devices available at the pharmacy. Monitoring and reporting of adverse drug reactions, as well as possible drug-dietary and/or drug-food interactions.	Mentors from Pharmacy
	11		
3	11	Training on the software used in the pharmacy (processing of invoices and delivery notes that follow the turnover,), implementation of the procurement of drugs and medical devices under the supervision of pharmacists.	Mentors from Pharmacy
	12		

module	Sunday	method unit name	A teacher
	12	Acquaintance of the student with the prescription form and the regulations governing this area. Determining the correctness of the prescription in terms of dispensing mode, dosage, pharmaceutical form and required quantities. Issuance of drugs with a prescription, without a prescription from the group of narcotic drugs and psychoactive substances. Identification of problems related to the use of medicines, processing of prescriptions. Development of communication skills with patients, colleagues and doctors.	Mentors from Pharmacy
	13	//	
	13	Communication with the patient, informing the patient how and what the medicine is used for, what are the possible side effects of the medicine. Administration of drugs in children, pregnant women and elderly patients, possible interactions with simultaneously applied drugs/food. What can happen in the event of improper use or sudden discontinuation of medication. Modification of therapy in agreement with the doctor (development of communication with colleagues and doctors). Training of patients for adequate application of therapy (use of pumps, inhalers, insulin). Proper use of herbal and homeopathic therapy, as well as dietary supplement products in combination with or without medication. How to link a patient to a specific pharmacy/pharmacist.	Mentors from Pharmacy
	14		
3	14	Communication with the patient, informing the patient how and what the medicine is used for, what are the possible side effects of the medicine. Administration of drugs in children, pregnant women and elderly patients, possible interactions with simultaneously applied drugs/food. What can happen in the event of improper use or sudden discontinuation of medication. Modification of therapy in agreement with the doctor (development of communication with colleagues and doctors). Training of patients for adequate application of therapy (use of pumps, inhalers, insulin). Proper use of herbal and homeopathic therapy, as well as dietary supplement products in combination with or without medication. How to link a patient to a specific pharmacy/pharmacist.	Mentors from Pharmacy

module	Sunday	method unit name	A teacher	
	15			
	15	Communication with the patient, informing the patient how and what the medicine is used for, what are the possible side effects of the medicine. Administration of drugs in children, pregnant women and elderly patients, possible interactions with simultaneously applied drugs/food. What can happen in the event of improper use or sudden discontinuation of medication. Modification of therapy in agreement with the doctor (development of communication with colleagues and doctors). Training of patients for adequate application of therapy (use of pumps, inhalers, insulin). Proper use of herbal and homeopathic therapy, as well as dietary supplement products in combination with or without medication. How to link a patient to a specific pharmacy/pharmacist.	Mentors from Pharmacy	
	EXAM (June deadline)			