INTRODUCTION TO PHARMACEUTICAL PRACTICE

INTEGRATED ACADEMIC PHARMACY STUDIES

SECOND YEAR OF STUDY

academic 2024/2025.

Course:

INTRODUCTION TO PHARMACEUTICAL PRACTICE

The course is evaluated with 5 ECTS credits. It consists of 4 hours of active teaching per week (2 hours of lectures, 1 hour of other active classes 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.	Olivera Kostic	olivera.kostic@fmn.kg.ac.rs	Associate professor
3.	Tamara Nikolic Turnic	tnikolict@gmail.com	Associate professor
4.	Radisa Pavlovic	rpavlovic@fmn.kg.ac.rs	Associate professor
5.	Aleksandra Stojanovic	vranicaleksandra90@gmail.com	Assistant professor
6.	Natasa Mijailovic	nacakg@gmail.com	Assistant professor
7.	Katarina Mihajlovic	katarina.mihajlovic@fmn.kg.ac.rs	Assistant professor
8.	Marko Ravic	markoravic@hotmail.com	Assistant
9.	Katarina Djordjevic	kacka96kg@gmail.com	Assistant
10.	Bozidar Pindovic	pindovic.bozidar@gmail.com	Assistant

COURSE STRUCTURE:

Module	Module name	Week	Lectures	Other active classes	Work in a small group	Teacher-supervisor module
1	Introduction to pharmacy	5	2	1	1	Milena Jurisevic
2	Medication therapy management	5	2	1	1	Milena Jurisevic
3	Perspectives in pharmacy practice	5	2	1	1	Milena Jurisevic
						Σ 30+15+15=60

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: The student can gain up to 30 points by taking 2 exam question from that week, answering and receiving 0-2 points in accordance with the demonstrated knowledge.

Final exam: The student can gain up to 70 points. The student answers 5 exam questions (oral examination) (each question 0-14 points).

Module		MAXIMUM POINTS		
		Activity during classes	**Final exam**	**Σ**
1	Introduction to pharmacy	10		
2	Medication therapy management	10		
3	Perspectives in pharmacy practice	10		
	Final exam (oral examination)		70	**70**
Σ		30	70	**100**

Final grade is formed as follows:

In order to pass the course, student must gain a minimum of 51 points.
To pass the module, the student must achieve more than 50% of the maximal number of points for the module.
To pass the Final exam (oral examination), the student must achieve more than more 50% points.

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

Grading system		
Grade	**Total No of points**	**Description**
10	91-100	Excellent
9	81-90	Exceptionally good
8	71-80	Very good
7	61-70	Good
6	51-60	Passing
5	< 51	Failing

Literature:

Title	Authors	Publisher	LIBRARY
The Science and Practice of Pharmacy.	Troy,B.David (editor). Remington:	Philadelphia:Lippincot Williams&Wilkins. 2006.	
Basic and Clinical Pharmacology.	Katzung B.	New York:McGraw-Hill,Inc. 2004.	
Hospital Pharmacy.	Stephens, Martin	London:Pharmaceutical Press. 2003.	
Pharmaceutical practice.	A.J.Winfield.	Edinburgh: Churchill Livingstone. 1998..	
. Drug Information: A Guide for Pharmacists,	Malone P, Malone M, Park S	6th Edition. McGraw Hill. 2017	

THE PROGRAM:

MODULE 1: INTRODUCTION TO PHARMACY

TEACHING UNIT 1 (FIRST WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Introduction to pharmacy Brief history of pharmacy	Introduction to pharmacy Brief history of pharmacy

TEACHING UNIT 2 (SECOND WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Organization of health care system in Republic of Serbia and European Union	Organization of health care system in Republic of Serbia and European Union

TEACHING UNIT 3 (THIRD WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Community pharmacy, clinical pharmacy and hospital pharmacy	Role of pharmacist in healthcare delivery

TEACHING UNIT 4 (FOURTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Good pharmacy practice in community pharmacy settings	Principles of communications pharmacist- patient

TEACHING UNIT 5 (FIFTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Good pharmacy practice in hospital pharmacy settings	New dimensions of pharmacy practice and care

MODULE 2: MEDICATION THERAPY MANAGEMENT

TEACHING UNIT 6 (SIXTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Medicines and their preparation	Calculations in pharmacy practice

TEACHING UNIT 7 (SEVENTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
OTC medicine	OTC medicine

TEACHING UNIT 8 (EIGHTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Basics of radiopharmacy, preparing of cytotoxic drugs and radiopharmaceuticals.	Basics of radiopharmacy, preparing of cytotoxic drugs and radiopharmaceuticals.

TEACHING UNIT 9 (NINTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Biotherapeutics	MAB, biogenerics, biobetters, biosimilar

TEACHING UNIT 10 (TENTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Basics of therapeutic drug monitoring	Basics of therapeutic drug monitoring

MODULE 3: PERSPECTIVES IN PHARMACY PRACTICE

TEACHING UNIT 11 (ELEVENTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Organization of preclinical and clinical trials	Organization of preclinical and clinical trials

TEACHING UNIT 12 (TWELVE WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Randomized clinical trials and evidence based medicine	Randomized clinical trials and evidence based medicine

TEACHING UNIT 13 (THIRTEENTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Introduction to pharmacoeconomics, pharmacogenomic and pharmacoepidemiology	Introduction to pharmacoeconomics, pharmacogenomic and pharmacoepidemiology

TEACHING UNIT 14 (FOURTEENTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Introduction to pharmacovigilance and drug safety	Introduction to pharmacovigilance and drug safety

TEACHING UNIT 15 (FIFTEENTH WEEK):

Lectures 2 hours and 1 hour of other active classes	Practical classes: 1 hour
Repetition and consolidation of previous material	Repetition and consolidation of previous material

SCHEDULE OF LECTURES & PRACTICE

FRIDAY
14.30-17.30
Hall at the pediatric clinic

TEACHING SCHEDULE FOR THE COURSE INTRODUCTION TO PHARMACEUTICAL PRACTICE

module	week	type	the name of the method unit	teacher
1	1	L/OAC	Introduction to pharmacy Brief history of pharmacy	Milena Jurisevic, *Lecturer*
		P	Introduction to pharmacy Brief history of pharmacy	Marko Ravic
	2	L/OAC	Organization of health care system in Republic of Serbia and European Union	Olivera Kostic, *Lecturer*
		P	Organization of health care system in Republic of Serbia and European Union	Marko Ravic
	3	L/OAC	Community pharmacy, clinical pharmacy and hospital pharmacy	Natasa Mijailovic, *Lecturer*
		P	Role of pharmacist in healthcare delivery	Marko Ravic
	4	L/OAC	Good pharmacy practice in community pharmacy settings	Milena Jurisevic, *Lecturer*
		P	Principles of communications pharmacist- patient	Marko Ravic
	5	L/OAC	Good pharmacy practice in hospital pharmacy settings	Aleksandra Stojanovic, *Lecturer*
		P	New dimensions of pharmacy practice and care	Marko Ravic
2	6	L/OAC	Medicines and their preparation	Katarina Mihajlovic, *Lecturer*
		P	Calculations in pharmacy practice	Katarina Djordjevic
	7	L/OAC	OTC medicine	Aleksandra Stojanovic, *Lecturer*
		P	OTC medicine	Katarina Djordjevic
	8	L/OAC	Basics of radiopharmacy, preparing of cytotoxic drugs and radiopharmaceuticals	Katarina Mihajlovic, *Lecturer*
		P	Basics of radiopharmacy, preparing of cytotoxic drugs and radiopharmaceuticals	Katarina Djordjevic
	9	L OAC	Biotherapeutics	Natasa Mijailovic, *Lecturer*
		P	MAB, biogenerics, biobetters, biosimilar	Katarina Djordjevic
	10	L OAC	Basics of therapeutic drug monitoring	Olivera Kostic, *Lecturer*

TEACHING SCHEDULE FOR THE COURSE INTRODUCTION TO PHARMACEUTICAL PRACTICE

module	week	type	the name of the method unit	teacher
		P	Basics of therapeutic drug monitoring	Katarina Djordjevic
3	**11**	**L OAC**	Organization of preclinical and clinical trials	Tamara Nikolic Turnic, *Lecturer*
		P	Organization of preclinical and clinical trials	Bozidar Pindovic
	12	**L OAC**	Randomized clinical trials and evidence based medicine	Tamara Nikolic Turnic, *Lecturer*
		P	Randomized clinical trials and evidence based medicine	Bozidar Pindovic
	13	**L OAC**	Introduction to pharmacoeconomics, pharmacogenomic and pharmacoepidemiology	Radisa Pavlovic, *Lecturer*
		P	Introduction to pharmacoeconomics, pharmacogenomic and pharmacoepidemiology	Bozidar Pindovic
	14	**L OAC**	Introduction to pharmacovigilance and drug safety	Radisa Pavlovic, *Lecturer*
		P	Introduction to pharmacovigilance and drug safety	Bozidar Pindovic
	15	**L OAC**	Repetition and consolidation of previous material	Milena Jurisevic, *Lecturer*
		P	Repetition and consolidation of previous material	Bozidar Pindovic
			FINAL EXAM	