

**CURRICULUM – 1st year
2022-2023**

UNIVERSITY	“GEORGE EMIL PALADE” UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE AND TECHNOLOGY OF TÂRGU MUREŞ	SPECIALISATION	PHARMACY LR, LM
FACULTY	FACULTY OF PHARMACY	TITLE	PHARMACIST
FIELD OF STUDY	HEALTH	DURATION	5 YEARS
LEVEL OF REGULATION	SECTORIAL	ECTS	60+2 / YEAR - 300+4 / COMPLETION OF STUDIES

No.	Educational activities Disciplines	Code/ Type of disciplines*	1 st Semester								2 nd Semester								Total per academic year			
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)				Lect.	PA/ Sem.	Ind. study	ECTS
			Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assessm ent				
1.	General and inorganic chemistry	FAR101-114/FD	4	4	5	E	4	6	5	E	-	-	-	-	-	-	-	-	56	70	124	10
2.	Pharmaceutical physics	FAR103-115/DD	2	4	3	E	3	3	4	E	-	-	-	-	-	-	-	-	35	49	91	7
3.	Informatics and biostatistics applied in pharmacy	FAR116-117/CD	4	4	4	E	2	2	2	V	-	-	-	-	-	-	-	-	42	42	66	6
4.	Pharmaceutical calculations	FAR107/SD	2	-/2	3	V	-	-	-	-	-	-	-	-	-	-	-	-	14	-/14	47	3
5.	General organic chemistry	FAR118-119/FD	-	-	-	-	-	-	-	-	4	6	5	E	4	6	4	E	56	84	85	9
6.	Physical chemistry	FAR120-121/DD	-	-	-	-	-	-	-	-	4	6	5	E	4	6	4	E	56	84	85	9
7.	Introduction to pharmaceutical terminology	FAR106/SD	-	-	-	-	-	-	-	-	2	-	3	V	-	-	-	-	14	-	61	3
8.	First aid	FAR110/DS	-	-	-	-	-	-	-	-	2	-	2	V	-	-	-	-	14	-	36	2
9.	Analytical chemistry and instrumental analysis	FAR108/DD	-	-	-	-	-	-	-	-	-	-	-	-	4	6	5	E	28	42	55	5
10.	Modern languages	FAR111/CD	-	-/4	2	-	-	-/4	2	V	-	-	-	-	-	-	-	-	-	-/56	44	4
11.	Physical education	FAR112/CD	-	4	1	-	-	-	-	-	-	4	1	V	-	-	-	-	-	56	(6)	2
12.	Integrated professional practice (2 weeks in the localities of residence) 30 hours (6 hours x 5 days)/week	FAR113/SD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	V	-	60	(10)	2
Grand Total			12	16/6	17+1	3E;1V	10	12/4	13	2E;2V	12	16	15+1	2E;3V	12	18	15	3E;1V	322	494/70	664	60+2
TOTAL HOURS/CREDITS			30 hours/ week; 30+1 ECTS								29 hours/ week; 30+1 ECTS								886			

Ratio theory/ practical activity – 1 : 1,75

*FD– fundamental discipline; SD – specialty discipline; DD – domain discipline; CD – complementary discipline

E – exam; V – verification ; Lect.- Lecture; PA – practical activities; Sem – Seminar; ECTS – Transferable European Credits; Ind. study – independent study

RECTOR,
Prof. univ. dr. Leonard Azamfirei

VICERECTOR,
Prof. univ. dr. Klara Brînzaniuc

Prof. univ. dr. Cristina-Oana Mărginean

DEAN,
Prof. univ. dr. Daniela-Lucia Muntean

CHIEF SECRETARY,
Ec. Simona Biriş

**CURRICULUM – 2nd year
2022-2023**

UNIVERSITY	“GEORGE EMIL PALADE” UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE AND TECHNOLOGY OF TÂRGU MUREŞ	SPECIALISATION	PHARMACY LR, LM
FACULTY	FACULTY OF PHARMACY	TITLE	PHARMACIST
FIELD OF STUDY	HEALTH	DURATION	5 YEARS
LEVEL OF REGULATION	SECTORIAL	ECTS	60+2 / YEAR - 300+4 / COMPLETION OF STUDIES

No	Educational activities Disciplines	Code/ Type of disciplines *	1 st Semester								2 nd Semester								Total per academic year					
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)				Lect.	PA/ Sem.	Ind. study	ECTS		
			Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assessm ent						
1.	Molecular and Cell Biology	FAR205/ FD	4	4	4	E	-	-	-	-	-	-	-	-	-	-	-	-	28	28	44	4		
2.	Chemistry of environmental factors	FAR219/ SD	4	4	3	E	-	-	-	-	-	-	-	-	-	-	-	-	28	28	19	3		
3.	Public health	FAR220/ DD	2	-	2	V	-	-	-	-	-	-	-	-	-	-	-	-	14	-	36	2		
4.	Descriptive biochemistry	FAR221/ DD	-	-	-	-	4	4	5	E	-	-	-	-	-	-	-	-	28	28	69	5		
5.	Analytical chemistry and instrumental analysis	FAR201- 217/DD	-	-	-	-	4	6	5	E	4	6	6	E	-	-	-	-	56	84	135	11		
6.	Anatomy	FAR222/ FD	-	-	-	-	4	4	4	E	-	-	-	-	-	-	-	-	28	28	44	4		
7.	Genetics	FAR223/ FD	-	-	-	-	4	2	3	V	-	-	-	-	-	-	-	-	28	14	33	3		
8.	Physiology and pathophysiology	FAR224- 225/FD	-	-	-	-	-	-	-	-	4	4	4	E	2	2	2	E	42	42	66	6		
9.	Pharmaceutical botany	FAR226- 227/DD	-	-	-	-	-	-	-	-	4	4	4	E	4	4	4	E	56	56	88	8		
10.	Communication techniques and skills	FAR206/ SD	-	-	-	-	-	-	-	-	2	2	2	V	-	-	-	-	14	14	22	2		
11.	Technical-medical products	FAR210/ SD	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	V	14	-	36	2		
12.	Pharmaceutical deontology	FAR209/ SD	-	-	-	-	-	-	-	-	-	-	-	-	2	-/2	2	V	14	-/14	22	2		
13.	Modern languages	FAR211/ CD	-	-/4	2	-	-	-	-	-	-	-	-	-	-	-/4	2	V	-	-/56	44	4		
14.	Physical education	FAR212/ CD	-	4	1	-	-	-	-	-	-	-	-	-	-	4	1	V	-	56	(6)	2		
15.	Integrated professional practice (2 weeks in the localities of residence) 30 hours (6 hours x 5 days)/week	FAR213/ SD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	V	-	60	(10)	2		
16.	Optional discipline**	-	2	-	2	V	-	-	-	-	-	-	-	-	-	-	-	-	14	-	36	2		
GRAND TOTAL			12	12/4	13+1	2E;2V	16	16	17	3E;1V	14	16	16	3E;1V	10	10/6	14+1	2E;5V	364	438/70	678	60+2		
TOTAL HOURS/CREDITS			30 hours / week; 30+1 ECTS								28 hours/ week; 30+1 ECTS								872					
** Optional discipline / a discipline of choice from:																								
Pack 1																								
Medical psychology		FAR214/DS																						
Art history		FAR215/CS																						

Ratio theory/ practical activity – 1 : 1,39

*FD– fundamental discipline; SD – specialty discipline; DD – domain discipline; CD – complementary discipline

E – exam; V – verification ; Lect.- Lecture; PA – practical activities; Sem – Seminar; ECTS – Transferable European Credits; Ind. study – independent study

RECTOR,

Prof. univ. dr. Leonard Azamfirei

VICERECTOR,

Prof. univ. dr. Klara Brînzaniuc

DEAN,

Prof. univ. dr. Daniela-Lucia Muntean

CHIEF SECRETARY,

Ec. Simona Biriş

Prof. univ. dr. Cristina-Oana Mărginean

**CURRICULUM – 3rd year
2022-2023**

UNIVERSITY			“GEORGE EMIL PALADE” UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE AND TECHNOLOGY OF TÂRGU MUREŞ								SPECIALISATION								PHARMACY LR, LM					
FACULTY			FACULTY OF PHARMACY								TITLE								PHARMACIST					
FIELD OF STUDY			HEALTH								DURATION								5 YEARS					
LEVEL OF REGULATION			SECTORIAL								ECTS								60 / YEAR - 300+4 / COMPLETION OF STUDIES					
No	Educational activities Disciplines	Code/ Type of disciplines*	1 st Semester								2 nd Semester								Total per academic year					
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)				Lect.	PA/ Sem.	Ind. study	ECTS		
			Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assessm ent						
1.	Pharmaceutical technology	FAR304-312/SD	4	6	5	E	4	6	5	E	-	-	-	-	4	6	4	E	84	126	140	14		
2.	Pharmacognosy and phytochemistry	FAR316-317-318	4	-	3	E	4	6	5	E					4	6	4	E	84	84	132	12		
3.	Bio pharmacy and pharmacokinetics	FAR319/DS	4	4	4	C	-	-	-	-	-	-	-	-	-	-	-	-	28	28	44	4		
4.	Plant microscopy	FAR320/DD	2	2	2	C	-	-	-	-	-	-	-	-	-	-	-	-	14	14	22	2		
5.	Biochemistry	FAR321/DD	-	-	-	-	4	4	4	E	-	-	-	-	-	-	-	-	28	28	44	4		
6.	Medical semiology	FAR305/DD	-	-	-	-	-	-	-	-	2	2	2	E	-	-	-	-	14	14	22	2		
7.	Pharmacology	FAR302-313/SD	-	-	-	-	-	-	-	-	4	2	3	E	-	-	-	-	28	14	33	3		
8.	Toxicology	FAR323/SD	-	-	-	-	-	-	-	-	4	6	4	E	-	-	-	-	28	42	30	4		
9.	Clinical laboratory	FAR307/SD	-	-	-	-	-	-	-	-	2	4	3	V	-	-	-	-	14	28	33	3		
10.	Applied organic chemistry	FAR324/DF	-	-	-	-	-	-	-	-	2	-	2	V	-	-	-	-	14	-	36	2		
11.	Principles of nutrition. Nutraceuticals	FAR325/SD	-	-	-	-	-	-	-	-	2	-	2	V	-	-	-	-	14	-	36	2		
12.	Pharmaceutical and therapeutic chemistry	FAR301/SD	-	-	-	-	-	-	-	-	-	-	-	-	4	6	4	E	28	42	30	4		
13.	Integrated professional practice (2 weeks in the localities of residence) 30 hours (6 hours x 5 days)/week	FAR308/SD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	V	-	60	(10)	2		
14.	Optional subject**	-	-	-	-	-	2	-	2	V	-	-	-	-	-	-	-	-	14	-	36	2		
GRAND TOTAL			14	12	14	2E;2V	14	16	16	3E;1V	16	14	16	3E;3V	12	18	14	3E;1V	392	480	628	60		
TOTAL HOURS/CREDITS			28 hours /week; 30 ECTS								30 hours / week; 30 ECTS								872					
** Optional disciplines / a discipline of choice from:																								
Immunology		FAR309/DD																						
Veterinary medicines		FAR310/SD																						

Ratio theory/ practical activity – 1 : 1,23

*FD– fundamental discipline; SD – specialty discipline; DD – domain discipline; CD – complementary discipline

E – exam; V – verification; PA – practical activities, Sem. – seminar, Ind. study – independent study, ECTS – Transferable European Credits

RECTOR,
Prof. univ. dr. Leonard Azamfirei

VICERECTOR,
Prof. univ. dr. Klara Brînzaniuc

Prof. univ. dr. Cristina-Oana Mărginean

DEAN,
Prof. univ. dr. Daniela-Lucia Muntean

CHIEF SECRETARY,
Ec. Simona Biriş

**CURRICULUM – 4th year
2022-2023**

UNIVERSITY	“GEORGE EMIL PALADE” UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE AND TECHNOLOGY OF TÂRGU MUREŞ	SPECIALISATION	PHARMACY LR, LM
FACULTY	FACULTY OF PHARMACY	TITLE	PHARMACIST
FIELD OF STUDY	HEALTH	DURATION	5 YEARS
LEVEL OF REGULATION	SECTORIAL	ECTS	60 / YEAR - 300+4 / COMPLETION OF STUDIES

No	Educational activities Disciplines	Code/ Type of disciplines*	1 st Semester								2 nd Semester								Total per academic year			
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)				Lect.	PA/ Sem.	Ind. study	ECTS
			Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assessm ent				
1.	Pharmaceutical technology	FAR401-414/SD	4	6	5	E	-	-	-	-	4	6	5	E	-	-	-	-	56	84	110	10
2.	Pharmaceutical and therapeutic chemistry	FAR403-415/SD	4	6	5	E	-	-	-	-	4	6	5	E	-	-	-	-	56	84	110	10
3.	Biopharmacy and pharmacokinetics	FAR406/SS	4	4	3	V	-	-	-	-	-	-	-	-	-	-	-	-	28	28	19	4
4.	Public health	FAR407/DD	2	-	2	V	-	-	-	-	-	-	-	-	-	-	-	-	14	-	36	1
5.	Pharmacology	FAR402-416/SD	-	-	-	-	4+2	6	6	E	-	-	-	-	4+2	6	6	E	84	84	132	12
6.	Toxicology	FAR404-417/SD	-	-	-	-	4	6	5	E	-	-	-	-	4	6	4	E	56	84	85	9
7.	Pharmaceutical marketing	FAR405/SD	-	-	-	-	2	-/2	2	E	-	-	-	-	-	-	-	-	14	-/14	22	2
8.	Pharmaceutical scientific research methodology	FAR409/CD	-	-	-	-	-	-	-	-	2	4	3	V	-	-	-	-	14	28	33	3
9.	Chemistry of environmental factors	FAR408/SD	-	-	-	-	-	-	-	-	-	-	-	-	4	4	3	E	28	28	19	3
10.	Dermopharmacy and cosmetology	FAR410/SD	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	V	14	14	22	2
11.	Integrated professional practice (4 weeks in laboratories and industry) 30 hours (6 hours x 5 days)/week	FAR411/SD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	V	-	120	(70)	2
12.	Optional discipline**	-	-	-	-	-	2	-	2	V	-	-	-	-	-	-	-	-	14	-	36	2
GRAND TOTAL			14	16	15	2E;2V	14	12/2	15	3E;1V	10	16	13	2E;1V	16	18	17	3E;2V	378	554/14	554	60
TOTAL HOURS/CREDITS			29 hours / week; 30 ECTS								30 hours / week; 30 ECTS								946			
** Optional discipline / a discipline of choice from:																						
Pharmacology of extreme ages and pharmacovigilance		FAR412/SD																				
Homeopathic medicine		FAR413/SD																				

Ratio theory/ practical activity – 1 : 1,50

*FD– fundamental discipline; SD – specialty discipline; DD – domain discipline; CD – complementary discipline

E – exam; V – verification; PA – practical activities, Sem. – seminar, Ind. study – independent study, ECTS – Transferable European Credits

RECTOR,
Prof. univ. dr. Leonard Azamfirei

VICERECTOR,
Prof. univ. dr. Klara Brînzaniuc

Prof. univ. dr. Cristina-Oana Mărginean

DEAN,
Prof. univ. dr. Daniela-Lucia Muntean

CHIEF SECRETARY,
Ec. Simona Biriş

**CURRICULUM – 5th year
2022-2023**

UNIVERSITY	“GEORGE EMIL PALADE” UNIVERSITY OF MEDICINE, PHARMACY, SCIENCE AND TECHNOLOGY OF TÂRGU MUREȘ	SPECIALISATION	PHARMACY LR, LM
FACULTY	FACULTY OF PHARMACY	TITLE	PHARMACIST
FIELD OF STUDY	HEALTH	DURATION	5 YEARS
LEVEL OF REGULATION	SECTORIAL	ECTS	60 / YEAR - 300+4 / COMPLETION OF STUDIES

No	Educational activities Disciplines	Code/ Type of disciplines*	1 st Semester								2 nd Semester								Total per academic year			
			1 st Module (7 weeks)				2 nd Module (7 weeks)				3 rd Module (7 weeks)				4 th Module (7 weeks)				Lect.	PA/ Sem.	Ind. study	ECTS
			Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assess ment	Lect.	PA/ Sem.	ECTS	Type of Assessm ent	Lect.	PA/ Sem.	ECTS	Type of Asses sment				
1.	Management and entrepreneurship	FAR514/ SD	4	4	3	E	-	-	-	-	-	-	-	-	-	-	-	-	28	28	19	3
2.	Drug analysis	FAR504/ SD	4+2	6	5	E	-	-	-	-	-	-	-	-	-	-	-	-	42	42	41	5
3.	Pharmacology and pharmacotherapy	FAR505/ SD	4	4	4	E	-	-	-	-	-	-	-	-	-	-	-	-	28	28	44	4
4.	Phytotherapy	FAR506/ SD	4	-	2	V	-	-	-	-	-	-	-	-	-	-	-	-	28	-	22	2
5.	Drug industry and biotechnology	FAR501/ SD	-	-	-	-	4+2	6	5	E	-	-	-	-	-	-	-	-	42	42	41	5
6.	Clinical Pharmacy	FAR502/ SD	-	-	-	-	4	4	5	E	-	-	-	-	-	-	-	-	28	28	69	5
7.	Pharmaceutical legislation	FAR515/ SD	-	-	-	-	2	-/2	2	E	-	-	-	-	-	-	-	-	14	-/14	22	2
8.	Emergency Medicine	FAR507/ DD	-	-	-	-	4	-	2	V	-	-	-	-	-	-	-	-	28	-	22	2
9.	Pharmaceutical counseling and care	FAR508/ SD	-	-	-	-	-	-	-	-	4	2	3	V	-	-	-	-	28	14	33	3
10.	Principles of nutrition. Nutraceuticals	FAR509/ SD	-	-	-	-	-	-	-	-	2	-	2	V	-	-	-	-	14	-	36	2
11.	Online pharmacy	FAR516/ SD	-	-	-	-	-	-	-	-	1	-	2	V	-	-	-	-	7	-	43	2
12.	Specialized internship in the university center, in community pharmacies and hospital	FAR510/ SD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	E	-	784***	(209)	23
13.	Optional discipline**	-	2	-	2	V	-	-	-	-	-	-	-	-	-	-	-	-	14	-	36	2
GRAND TOTAL			20	14	16	3E;2V	16	10/2	14	3E;1V	7	2	7	-E;3V	-	-	23	1E;-V	301	950/14	219	60
TOTAL HOURS/CREDITS			31 hours / week; 30 ECTS								4,5 hours / week; 30 ECTS								1281			
** Optional discipline / a discipline of choice from:																						
Pharmacogenomics		FAR511/SD																				
Biological drugs		FAR512/SD																				
Ethics and academic integrity		FAR513/CD																				

Elaboration of the bachelor thesis: 56 hours in the first and second semesters; **Ratio theory/ practical activity** – 1 : 3,20 (calculated with specialized internship); ***FD**– fundamental discipline; **SD** – specialty discipline; **DD** – domain discipline; **CD** – complementary discipline **E** – exam; **V** – verification; **PA** – practical activities, **Sem.** – seminar, **Int.** – internship, **Pr.** – project, **Ind. study** – independent study, **ECTS** – Transferable European Credits; *** 768 hours = (14 weeks x 32 ore = 448 hours, 8 weeks x 40 hours = 320 hours); (32 hours = 4 days/week x 8 hours /day; 40 hours = 5 days/week x 8 hours /day)

RECTOR,
Prof. univ. dr. Leonard Azamfirei

VICERECTOR,
Prof. univ. dr. Klara Brînzaniuc

Prof. univ. dr. Cristina-Oana Mărginean

DEAN,
Prof. univ. dr. Daniela-Lucia Muntean

CHIEF SECRETARY,
Ec. Simona Biriș