

Study program Pharmacy
field of study Pharmacy
 RECOMMENDED STUDY PLAN
 for the academic year 2023/2024

COMPULSORY SUBJECTS

1st section of the study

Compulsory subjects	Guarantor	Number of lessons WS			Form of control	Number of lessons SS			Form of control	Nr. of credits
		L	S	P		L	S	P		
History and Organization of Pharmacy	Babica	28	0	0	E					3
Biophysics	Kuchařová	28	0	14	C+E					4
Mathematics	Duintjer Tebbens	14	14	0	C+E					2
Basics of Pharmacy Practice	Smejkalová	28	0	0	C					2
General and Inorganic Chemistry	Roh	28	20	0	C+E					5
Cell Biology	Svobodová	28	0	0	E					4
Practical classes from Cell Biology	Svobodová					0	3	11	C	1
Organic Chemistry I	Pour	28	20	0	C+E					5
Principles of Dosimetry and Radiation Protection	Smutná	14	0	0	C					1
First Aid	Truhlář	0	6	8	C					1

ELECTIVE SUBJECTS INCLUDED IN AREAS OF SPECIALIZATION

Area of Specialization: **Pharmaceutical Analysis**

Doc. Štěřbová

Guarantor /Study Consultant:

Doc. Sklenářová

Subject	Guarantor	Recommended year	Semester	L	S	P	Form of Control	Nr of Credits
Special Methods of Instrumental Analysis – Lessons, min. 5 students	Sklenářová	3	WS	28	0	0	C	2
Special Methods of Instrumental Analysis – Practical Classes, min. 5 students	Sklenářová	3	WS	0	6	36	C+E	4
Bioanalysis of Drugs, BD (CL 15) *	Kučera	4	WS	28	12	16	C+E	5
				Lessons in Total			Credits in Total	
				56	18	52	11	

*CL – incl. students study program
Pharmaceutical Sciences

Area of Specialization:
Guarantor /Study Consultant:

Pharmaceutical Chemistry
prof. M. Doležal

Subject	Guarantor	Recommended year	Semester	L	S	P	Form of Control	Number of Credits
Technology of Synthetics Drugs (CL 40)	Doležal M.	3	SS	28	0	14	C+E	3
Technology of Natural Drugs (CL min. 5, max 20)	Suchánková	3	SS	28	0	14	C+E	3
Advanced Organic Chemistry	Pour	3	WS	0	42	0	C+E	3
Basics of Molecular Modelling of Drugs	Zitko	4	WS	14	14	0	C+E	3
				Lessons in Total			Credits in Total	
				70	56	28	12	

Area of Specialization:

Clinical Pharmacy

Guarantor /Study Consultant:

prof. J. Vlček

doc. Fialová

Subject	Guarantor	Recommended year	Semester	L	S	P	Form of Control	Nr of Credits
Clinical- Pharmaceutical Care	Vlček	4	SS	0	56	0	C+E	6
				Lessons in Total			Credits in Total	
				0	56	0	6	

Area of Specialization:

Drugs of Natural Origin

Guarantor /Study Consultant:

prof. Cahlíková

doc. Siatka

Subject	Guarantor	Recommended year	Semester	L	S	P	Form of Control	Nr of Credits
Technology of Natural Drugs (CL min 5, max 20)	Suchánková	3	SS	28	0	14	C+E	3
Biotechnology	Siatka	3	SS	28	14	0	C+E	3
Toxicity of Natural Substances – min 5 students	Chlebek	4	SS	42	0	0	E	3
Phytopharmaceuticals	Šafratová	4	WS	28	0	0	E	3
				Lessons in Total			Credits in Total	
				126	14	14	12	

Area of Specialization: Pharmaceutical Technology
Guarantor /Study Consultant: doc. Šklubalová

Subject	Guarantor	Recommended year	Semester	L	S	P	Form of Control	Nr of Credits	
Industrial Production of Pharmaceutical Preparations (CL=5)	Šklubalová	4	SS	10	10	40	C+E	4	
Development of Pharmaceutical Products (CL=5)	Šklubalová	4	WS	0	32	0	C+E	4	
Selected methods of Pharmaceutical Technology (CL=5)	Mužíková	4	SS	0	14	28	C+E	4	
						Lessons in Total		Credits in Total	
				10	56	68	12		

ELECTIVE SUBJECTS NOT INCLUDED IN AREAS OF SPECIALIZATION

Elective subjects not included in areas of specialization	Guarantor	WS			Form of Control	SS			Form of Control	Nr of Credits	Recommended year
		L	S	P		L	S	P			
Immunopharmacology (CL=30)	Rathouská					28	14	0	C+E	3	3
Medicinal Plants Production (CL=10)	Hradiská Breitrová					28	0	14	C+E	3	3
Advanced Separation Methods (min. 5 students)	Nováková L.					14	14	0	C+E	3	3
Pharmacokinetics (CL 24, incl. students in Czech L)	Červený					14	0	14	C+E	3	3
Experimental Pharmacodynamics (CL=16, incl. students in Czech L.)	Carazo					14	0	28	C+E	3	4
Radiopharmacy	Trejtner	28	14	14	E					4	4
Cosmetology for Pharmacists	Kováčik	28	0	0	E					2	4
Pharmacoeconomics and Health Technology Assessment – min. 5 students	Klimeš	0	14	0	E					2	4
Gene Therapy	Miletín	14	14	0	E					2	4
Mass Spectrometry (min 5 students)	Nováková L.	28	14	14	E					4	4
Extemporaneous Preparation in Hospital Pharmacy (CL 3)	Šklubalová					0	28	12	C+E	4	4
Research Project II ¹⁾	Štaud				C				C	6	4
Introduction to Integrative Medicine (min. 5 students)	Pokladníková					0	14	0	C+E	2	4
Interpretation of Selected Laboratory Results	Rozsivalová	0	14	0	E					2	4
Current Strategies in Pharmacotherapy	Hofman	14	0	0	E					2	4

* incl. students study program Pharmaceutical Sciences and Farmacie

¹⁾ Credits in winter and summer semesters are granted by the vice-dean for science based on the presentation of results of the project at the Students Scientific Conference (usually in April)

OPTIONAL SUBJECTS

Optional Subjects	Guarantor	WS			Form of Control	SS			Form of Control	Nr of Credits	Recommended year
		P	S	C		P	S	C			
Physical Training and Sports I	Bezouška	0	0	28	C	0	0	28	C	2	1
Professional Language Preparation I ¹⁾	Novická	0	28	0	C	0	28	0	C	2	1
English Language for Pharmacists	Novická	0	28	0	C	0	28	0	C	2	1
Exercises in General Chemistry	Matouš	0	14	0	C					1	1
Summer Sports Course ²⁾	Bezouška							1 week	C	2	1
Constitution of Organic Compounds	Vinšová					0	14	0	C	1	1
Exercises in Organic Chemistry	Vinšová					0	14	0	C	1	1
Selected Chapters from the History of Pharmacy – min 5 students	Babica					14	3	0	C	1	1
Applied Computer Technology	Duintjer Tebbens					0	21	0	C	1	1
Selected Methods of Laboratory Technique (CL=24)	Kitson					0	0	28	C	1	2
Physical Training and Sports II	Bezouška	0	0	28	C	0	0	28	C	2	2
Professional Language Preparation II ¹⁾	Novická	0	28	0	C	0	28	0	C	2	2
Introduction to Applied Bioinformatics	Matoušková					0	28	0	C+E	2	3
Phytochemical Methods (CL=12)	Cahlíková	14	0	28	E					2	3
Xenobiochemistry	Wsól	28	14	0	E					3	3
Xenobiochemistry – practical classes	Wsól					0	0	28	C	2	3
Methods of Organic Structure	Matouš P.					0	28	0	C	2	3

Optional Subjects	Guarantor	WS			Form of Control	SS			Form of Control	Nr of Credits	Recommended year
Elucidation (CL=30),											
Winter Sports Course	Bezouška			1 week	C					1	3
Physical Training and Sports III	Bezouška	0	0	28	C	0	0	28	C	2	3
Current Trends in the Development of Chemical Drugs	Kučerová M.					14	0	0	C	1	3
Research Project I ³⁾	Štaud								C	2	3

- 1) The Czech Language is optional but passing the exam is compulsory! The duration of the course is 4 semesters. Students can register for the course only for the whole year, which means in the 1st and/or both semesters of the 2nd section of studies
- 2) the course is held in July
- 3) Credit is granted by the vice-dean for science based on the presentation of the results of the project at the Students Scientific Conference (usually in April)

CL = capacity limit

Conditions of FSE for students who started their studies before the academic year 2019/2020:

Parts of FSE:

1) FSE – comprehensive exam from Pharmacognosy, Pharmaceutical Chemistry, Pharmaceutical Analysis, Pharmacology, Pharmaceutical Technology, and Social Pharmacy

2) Diploma Thesis Defense

It is possible to pass parts of FSE only after meeting the conditions of Article 8 of Organizational Rules of Study and obtaining 300 credits

Conditions of FSE for students who started their studies in the academic year 2019/2020 and later:

Parts of FSE	Conditions for taking parts of FSE	Recommended Section of Study
FSE 1 – Pharmacognosy	Pharmacognosy II - exam	3WS
FSE 2 – Pharmaceutical Analysis	Pharmaceutical Analysis II - exam	3WS
FSE 3 – Pharmacology	Pharmacology II - exam	3 SS
FSE 4 – Pharmaceutical Chemistry	Pharmaceutical Chemistry II - exam	3 SS
FSE 5 – Pharmaceutical Technology	Pharmaceutical Technology II - exam	4 WS
FSE 6 – Clinical Pharmacy (optional)	– Clinical – Pharmaceutical Care - exam	4 SS
FSE 7 – 1) Pharmacotherapy and Pharmaceutical Care and Social Pharmacy	It is possible to pass parts of FSE only after meeting the conditions of Article 8 of Organizational Rules of Study at the Faculty of Pharmacy, Charles University, obtaining 300 credits, and after passing FSE 1 – 5 (or FSE 6)	5 SS
FSE 8 – Diploma Thesis Defense		5 SS