Ministry of Higher Education and Scientific Research Al-Kitab University College of Pharmacy Academic program description



Academic Program and Course Description Guide

2025 – 2024

Form of Academic program description

University name: Al-Kitab University College /Institute: College of Pharmacy

Name of the academic or professional program: Bachelor of Pharmacy Final certificate name: Bachelor of Pharmacy Academic system: Semester Decrepitation preparation date:1-10-2024 File completion date:1-10-2024



9

Signature: Scientific Associate Name: Dr Nasir Ibrahim Khatab Date :1-10-2024

Signature: -Scientific Associate name: Dr Omeed Omar Darweesh Date:1-10-2024

The file checked by: -Department of Quality Assurance and University Performance Name of the Director of the Quality Assurance and University: Date: Signature:

Approved by the Dean ا.م.د شوان داود حسين

1. Program vision

In Al- Kitab Pharmacy, we strive to provide optimal and best education inorder to graduate competent pharmacists capable of providing appropriate health care to improve the health condition in government medical institutions and private medical institutions in Iraq and abroad.

We look forward to being among the pioneers at the local and global levels in the field of developing pharmaceutical education and scientificresearch, and seeking a bright future in enhancing medical and humanitarian services.

2. Program message

The College of Pharmacy at Al-Kitab University is an educational institution whose goal is to improve human health by graduating qualifiedpharmacists who are able to be leaders in any environment as pharmacists and pharmacy scientists. The college provides a high-quality curriculum that develops thinking in critical times and problem solving.

The goal of our college is to provide the best pharmaceutical information and the latest educational methods and train pharmacists to participate effectively in providing health services to the community.

3. Program Goals

The Faculty of Pharmacy at Al-Kitab University aims to train students to beleaders in any environment as pharmacists and pharmaceutical scientists. The college provides a highquality curriculum that develops thinking in critical times, problem solving, and effective leadership skills. The main meaning of our college's mission is pharmaceutical and social research

and clinical, as well as transferring the outputs of this research to the health care,

service. The Faculty of Pharmacy program at our university also aims to

- 1. Providing the highest levels of knowledge, skills, and encouragement to students. the College of Pharmacy using the latest educational methods.
- 2. Providing the basics of pharmacy and pharmaceutical information to students through academic courses.
- **3**. Demonstrate knowledge of medications focusing on correcting their prescription. How it works, ways to take it, doses, and side effects
- 4. Preparing a generation of qualified pharmacists, they are qualified to work in government health institutions, private health institutions, community pharmacies, pharmaceutical laboratories, and pharmaceutical factories. In addition to companies that market medicines.
- 5. Encouraging and developing the role of the pharmacist to be a vital and effective part of the health care team.
- 6. We seek to improve the quality of education, scientific research, and pharmaceutical practice to achieve the best standards
- 7. We seek to make the College of Pharmacy at Al-Kitab University distinguished among local and international colleges.
- 8. Effective contribution to spreading health awareness and culture in society

4. Program accreditation

The program does not have program accreditation

5. Other external influences

Practice sites- Office research - extracurricular activities - volunteer activities - other

Program structure Number of courses Study unit percentage Institution 8 10 5.5 % Basic requirements 55 169 94.4% Basic college 55 169 94.4% Basic requirements Satisfied summer training / / / / Other Program description Name of the course or course Course Year/level Practical theoretical Name of the course or course Course Year/level 18 24 Analytical chemistry 111 First year/first Institution English 114 First year/first Anatony 127 Histology 128 human rights 129 First year/second Semester 22 31 Democracy 211 Microbiology 1 212 Computer Science 1 213 Physical pharmacy 1 214 Second year/first semester	6. Program	stru	cture							
structure courses Basic Institution 8 10 5.5 % Basic college 55 169 94.4% Basic requirements Satisfied summer training / / / / Other Program description Name of the course or course Course or course code Year/level Practical theoretical Itie science 113 Hathematics and biostatistics 114 18 24 Analytical chemistry 115 First year/ first semester Principles of pharmacy practice Principles of pharmacy practice First year/ second semester English Anatomy 127 First year/ second semester Medicianal Chemistry 1 1210 First year/ second semester 22 31 Democracy 211 Microbiology 1 212 Second year/ first semester 22 31 Democracy 213 Physical pharmacy 1 214 Physical pharmacy 1 214 Physical pharmacy 1 214 Second year/ first semester	Program Numbe		Number	r of	Study unit p		rcentage			
Institution requirements 8 10 5.5 % Basic College requirements 55 169 94.4% Basic College requirements 55 169 94.4% Basic / / / / Other Program description Course course or course Year/level Practical theoretical Name of the course or course Course code Year/level 18 24 Analytical chemistry 111 First year/first Isolatistics Indicial terminology 115 First year/first Principles of pharmacy practice 116 First year/second First year/second English Anatomy 127 First year/second First year/second 22 31 Democracy 211 First year/second Microbiology 1 212 Organic Chemistry 2 213 Physical pharmacy 1 214 Physiology 1 215 Computer Science 2 215 Second year/first senester	structure courses									
Institution 8 10 5.5 % Date requirements 55 169 94.4% Basic college 55 169 94.4% Basic / / / / Other Program description Satisfied summer training Credit hours Name of the course or course code Or or course code Year/level Practical theoretical Mathematics and 114 First year/first semester 18 24 Analytical chemistry 111 First year/first semester Principles of pharmacy 116 First year/second semester Semester Principles of pharmacy 116 First year/second semester Anatomy 127 Histology 128 Medical physics 1210 First year/second semester Medical physics 1210 Second year/first semester 22 31 Democracy 211 Microbiology 1 212 Organic Chemistry 2 213 Physiology 1 215 Computer Science 2 215	T		Q		10	I	5 5 0/	Rasic		
requirements Gollege 55 169 94.4% Basic college statisfied summer training / / Other Program description Credit hours Name of the course or course code Year/level Practical theoretical Mame of the course or course code Year/level Practical theoretical Course code Year/level 18 24 Analytical chemistry 111 113 First year/ first semester Principles of pharmacy practice 116 Frinciples of pharmacy 116 First year/ second semester Physiology 128 Iuman rights 120 First year/ second semester 22 31 Democracy 211 Microbiology 1 212 22 31 Democracy 211 Second year/ first semester Physical pharmacy 1 214 Physiology 1 215 Second year/ first semester <td>Institution</td> <td></td> <td>ð</td> <td></td> <td>10</td> <td></td> <td>5.5 %</td> <td>Dasic</td>	Institution		ð		10		5.5 %	Dasic		
College requirements 55 169 94.4% Basic Satisfied summer training / / / / Other Program description Name of the course or course or course Course or course code Year/level Practical theoretical Analytical chemistry 111 First year/first semester 18 24 Analytical chemistry 111 First year/first semester Mathematics and biostatistics 113 Mathematics and biostatistics First year/first semester Principles of pharmacy practice English Anatomy 127 Histology 128 Medical physics 1210 Medical physics 1210 First year/second semester 22 31 Democracy 211 Microbiology 1 212 Second year/first semester 22 31 Democracy 211 Microbiology 1 212 Second year/first semester Physiology 1 215 Computer Science 2 55	requirements	5								
requirements satisfied summer training / / / Other Program description Credit hours Name of the course or course or course code Satisfied Vear/level Practical theoretical Name of the course or course code Year/level Practical theoretical Analytical chemistry 111 Life science 113 Mathematics and 114 First year/ first 18 24 Analytical chemistry 115 First year/ first semester 18 24 Analytical chemistry 115 First year/ first medical terminology 115 Principles of pharmacy 116 Principles of pharmacy 127 Histology 128 human rights 129 Medicial physics 1210 Medicial physics 1210 First year/ second semester 22 31 Democracy 211 Microbiology 1 212 Computer Science 1 214 Physical pharmacy 1 214 Second yea	College		55		169		94.4%	Basic		
Satisfied summer training / / / Other Program description Credit hours Name of the course or course code Course course code Practical theoretical Analytical chemistry 111 18 24 Analytical chemistry 111 Life science 113 Mathematics and 114 biostatistics medical terminology 115 First year/ first Principles of pharmacy 116 practice First year/ second Principles of pharmacy 127 Histology 128 human rights 129 Medical physics 1210 Medical physics 1210 Semester 22 31 Democracy 211 Microbiology 1 212 Organic Chemistry 2 213 Physical pharmacy 1 214 Physical pharmacy 1 214 Physical pharmacy 1 214 Second year/ first semester	requirements	5								
/ / / Other Program description Name of the course or course course Course or course code Year/level Practical theoretical Name of the course or course code Year/level Year/level 18 24 Analytical chemistry 111 First year/first Mathematics and biostatistics 113 First year/first First year/first medical terminology 115 First year/first Semester Principles of pharmacy practice 116 First year/second Semester Anatomy 127 Histology 128 First year/second Medical physics 1210 Medical physics 1210 Medical physics 1210 Semester Semester 22 31 Democracy 211 Second year/first semester Physical pharmacy 1 214 Physiology 1 215 Second year/first semester				Sa	atisfied			summer training		
Program description Name of the course or course or course Course or course code Year/level Practical theoretical Analytical chemistry 111 Image: code First year/first 18 24 Analytical chemistry 111 First year/first Mathematics and biostatistics 114 First year/first First year/first Principles of pharmacy practice 116 First year/second First year/second Anatomy 127 Histology 128 First year/second Medical physics 1210 First year/second Second year/second 22 31 Democracy 211 Second year/first senester 22 31 Democracy 213 Physical pharmacy 1 214 Physical pharmacy 1 214 Second year/first senester	/			/	/	/		Other		
Credit hoursName of the course or courseCourse or course codeYear/levelPracticaltheoreticalAnalytical chemistry1111824Analytical chemistry111Life science113Mathematics and biostatistics114Principles of pharmacy practice116Principles of pharmacy practice116Anatomy127Histology128human rights129Medical physics1210Medical physics1210Medicial Chemistry 11211Pharmaceutical accounts1212Computer Science 1213Physiology 1212Organic Chemistry 2213Physiology 1214Physiology 1215Computer Science 2215	Program des	cript	ion			1				
Practicaltheoreticalor course code1824Analytical chemistry111Life science113Mathematics and biostatistics114Biostatistics115Principles of pharmacy practice116Principles of pharmacy Intervence116First year/ firstSemester116Principles of pharmacy Intervence116First year/ firstSemester116Principles of pharmacy Principles of pharmacyHistology128human rights129Histology1210Medicinal Chemistry 11211Pharmaceutical accounts1212Computer Science 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2215	Credit	t hou	rs	Name o	f the course or		Course	Year/level		
PracticaltheoreticalCourse code1824Analytical chemistry111Life science113Mathematics and biostatistics114Mathematics and biostatistics114Principles of pharmacy practice116Principles of pharmacy practice116Principles of pharmacy practice116First year/ first semesterAnatomy127Histology128human rights129Medical physics1210Medical chemistry 11211Pharmaceutical accounts1212Computer Science 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2215				course			or			
Practicaltheoreticalcode1824Analytical chemistry111Life science113Mathematics and114biostatistics114medical terminology115Principles of pharmacy116practiceEnglishAnatomy127Histology128human rights129Medical physics1210Medical chemistry 11211Pharmaceutical accounts1212Computer Science 152231Democracy21Microbiology 1212Organic Chemistry 2213Physiology 1215Computer Science 25				•••••••			course			
1824Analytical chemistry111 Life science113 Mathematics and114 BiostatisticsMathematics and biostatistics114First year/ first semesterPrinciples of pharmacy practice116 Principles of pharmacyFirst year/ first semesterAnatomy127 Histology128 human rightsFirst year/ second semesterMedical physics1210 Medicial Chemistry 1First year/ second semester2231Democracy211 Microbiology 1Second year/ first semester2231Democracy211 Microbiology 1Second year/ first semester121 Organic Chemistry 2213 Physical pharmacy 1Second year/ first semester	Practical	the	oretical				code			
1824Analytical chemistry111 Life science111 Life science111 Life science111 Life science111 Life science111 Life science113 Mathematics and114 biostatisticsFirst year/ first semesterMathematics and biostatistics114 Principles of pharmacy practice115 Principles of pharmacy practiceFirst year/ first semesterAnatomy127 Histology128 human rights129 Medical physicsFirst year/ second semesterMedical physics1210 Pharmaceutical accountsFirst year/ second semester2231Democracy211 Microbiology 1Second year/ first semester2231Democracy213 Physical pharmacy 1Second year/ first semester	10						111			
Life science113Mathematics and biostatistics114BiostatisticsFirst year/ first semesterPrinciples of pharmacy practice116Principles of pharmacy practice116EnglishAnatomyAnatomy127Histology128human rights129Medicial physics1210Medicial Chemistry 11211Pharmaceutical accounts1212Computer Science 1Second year/ first2231Democracy21Microbiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2Exercise	18		24	Analyti	cal chemistry		111			
Mathematics and biostatistics114 listFirst year/ first semesterPrinciples of pharmacy practice116 practiceFirst year/ first semesterEnglish				Life sci	ence		113	_		
DiostatisticsInst year/ firstmedical terminology115Principles of pharmacy116practiceEnglishAnatomy127Histology128human rights129Medical physics1210Medicinal Chemistry 11211Pharmaceutical accounts1212Computer Science 1212Organic Chemistry 2213Microbiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2215				Mathen	natics and stics		114	First yoor/first		
InterferenceInterferenceInterferencePrinciples of pharmacy practice116Principles of pharmacy practice116EnglishInterferenceAnatomy127Histology128human rights129Medical physics1210Medicinal Chemistry 11211Pharmaceutical accounts1212Computer Science 1Interference2231DemocracyMicrobiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2Interference				medical	sucs I terminology		115	somostor		
2231Democracy2112231Democracy211Microbiology 1212Organic Chemistry 2213Physical pharmacy 1214Physical pharmacy 1215Computer Science 2215				Princin	les of pharmacy		115	schiester		
EnglishIAnatomy127Histology128human rights129Medical physics1210Medicinal Chemistry 11211Pharmaceutical accounts1212Computer Science 1211Microbiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2215				practice	e		110			
Anatomy127Histology128human rights129First year/ secondMedical physics1210Medicinal Chemistry 11211Pharmaceutical accounts1212Computer Science 1211Microbiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2110				English						
Histology128human rights129Medical physics1210Medicinal Chemistry 11211Pharmaceutical accounts1212Computer Science 1211Microbiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2215				Anatom	ny		127			
human rights129Medical physics1210Medicinal Chemistry 11211Pharmaceutical accounts1212Computer Science 1				Histolo	gy		128			
Medical physics1210 Medicinal Chemistry 1semesterMedicinal Chemistry 11211 Pharmaceutical accountssemesterPharmaceutical accounts1212 Computer Science 1semester2231Democracy 				human	rights		129	First year/ second		
Medicinal Chemistry 11211Pharmaceutical accounts1212Computer Science 112122231DemocracyMicrobiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2125				Medica	l physics		1210	semester		
Pharmaceutical accounts1212Computer Science 1Computer Science 12231DemocracyMicrobiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2215				Medicin	nal Chemistry 1		1211	_		
2231Democracy211Microbiology 1212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2215				Pharma	aceutical accounts		1212	_		
22 31 Democracy 211 Microbiology 1 212 Organic Chemistry 2 213 Physical pharmacy 1 214 Physiology 1 215 Computer Science 2 215			• •	Compu	ter Science I		A11			
Microbiology I212Organic Chemistry 2213Physical pharmacy 1214Physiology 1215Computer Science 2217	22		31	Democi			211	_		
Organic Chemistry 2215Second year/ firstPhysical pharmacy 1214semesterPhysiology 1215Computer Science 2Computer Science 2215				Wherebiology 1 212 Organia Chamistry 2 212						
Physical pharmacy 1 214 semester Physiology 1 215 215 Computer Science 2 215			Physics	l nharmaev 1	213	Second year/ first				
Computer Science 2				Physica	ngv 1	215	semester			
				Compu	ter Science 2	-				
Microbiology 2 227				Microb	iology 2					

4

		Organic chemistry 3	228	
		Pharmacology 1	229	
		Physical pharmacy 2	2210	Second year/
		Physiology 2	2211	second semester
		Computer Science 3		second semester
18	31	Biochemistry 1	311	
	• -	Organic pharmaceutical	312	
		chemistry	012	
		History of diseases	313	Third year/ first
		Pharmaceuticals 1	314	semester
		Pharmacology 2	315	semester
		Biochemistry 2	326	
		Pharmacy ethics	327	
		Pharmaceutical organic	328	
		chemistry 1	520	
		Pharmaceuticals 2	329	Inird year/ second
		Pharmacology 3	3210	semester
		Pharmaceuticals 1	3211	
16	28	Rionharmaceuticals	411	
10	20	Clinical nharmacy	412	
		Organic pharmacoutical	412	
		chemistry 2	413	Fourth year/ first
		Dharmacouticals 2	111	semester
		Dublic Hoolth	414	
		Clinical pharmacy 2	413	
		Conoral toxicology	420	
		Industrial pharmacy 1	427	
		Organia pharmacoutical	420	Fourth year/
		chemistry 3	429	second semester
		Pharmaceuticals 3	4210	
		communication skills	4211	
		English		
18	26	Applied therapeutics 1	511	
		Clinical chemistry	512	
		Clinical training	513	
		Clinical toxicology	514	semester
		Industrial pharmacy 2	515	semester
		Organic pharmaceutical chemistry 4	516	
		Graduation Project	517	
		Advanced pharmaceutical	528	
		allalysis	520	
		Applied inerapeutics 2	5210	Fifth year/ second
		Drug dosage design	5210	semester
		Hospital training	5211	
		Pharmaceutical economics	5212	
		Monitoring therapeutic medications	5213	
		Pharmaceutical	5214	
		biotechnology		

nowledge	
 Qualifying the student to practice the teaching profession and assume responsibility for education Enabling the student to keep up with the methods of teaching pharmacy Providing the student with the special skills needed in dialogues and discussions Enabling the student to prepare an analysis and evaluation of patients' conditions and the extent to which they benefit from the medications prescribed .to them 	 Knowledge, numbers of competent cadres capable of diagnosing and prescribing appropriate medications to treat medical . conditions In the health sector Comprehension: Enabling the studen to understand physiological diseases and the causes of their occurrence, thus identifying ways to treat them and thus being able toprepare qualified cadres for service . in the government sector Application: enabling the student to translate scientific theoretical concepts into practical procedures Analysis: enabling the student to prepare an analysis and evaluation of
cills	patients' conditions and the extent to which they benefit from prescribed medications
atement of learning outcomes	Subject-specific skills
 Enabling the student to write scientific research Enabling the student to teach scientific Subjects Enables the student to understand the of basic of pharmacy Enabling the student to conduct scientific discussions and dialogues within his 	Appropriate and sufficient qualification - 1.to bear the responsibility and burdens of the profession as pharmacists, whether in government sectors, pharmacies, teachers, or researchers 2. Practice enables the student to applythe acquired science and pharmaceutical skills he learned during his studies Within jurisdiction 3.Mastery, development and advancement of skills and abilities 4. Creativity: The student's ability to provide medical services and advice to other colleagues from the medical staff and patients

Ethics	
1 Dealing with patients with the athics of the	The pharmacist maintains the privacy of
pharmacy profession	the patient and makes the security and
	safety of the patient and the community the
	first
	The pharmacy student and the pharmacist
2. Teamwork with other colleagues within the	deal with his classmates and colleagues in
health care team in the work environment	a team spirit goal of the pharmacy
	profession
8.Teaching and learning strategies	
• Presentations	
 Interactive discussions 	
Brainstorming	
• Small groups	
• Research	
• Flipped classroom s	
Panel discussions	
• Field visits to institutions and entities associated	with the work of the pharmacist
• Voluntary work, seminars, workshops and exhibit	tion
9. Evaluation methods	
• Individual and group assignments and reports	
• Daily and weekly exams	
• Assessment of practical skills	
• Mid-term and final exams	
Graduation projects	

10. Faculty members					
Academic Rank	Specialization F		Special Requirements/Skills (if applicable	Num tead	ber of the ching staff
	General	Special		Staff	Lecturer
Professor	1	2		3	0
Assistant Professor	6	6		11	1
Lecturer	4	15		16	3
Assistant Lecturer	5	26		29	2

Professional development

Orienting new faculty members

- Teaching methods course
- Teaching validity course

Professional development for faculty members

Workshops, seminars and courses in:

- The methods and strategies of pharmaceutical education
- The basis for assessments and exam design
- Interactive education strategies
- Foundations and methods for updating and developing the curriculum

11.Acceptance standard

The student who is accepted into Iraqi universities and institutes is required to be Iraqi nationality

1-Possession of an Iraqi secondary school certificate, supported by certification from the General Directorate of Education in the governorate,

or an equivalent certificate the student must be born in 1995 onwards

2-High school GPA and physical health as approved by the Ministry of higher Education and Scientific Research

12.The most important sources of information about the program

• The College of Pharmacy, University of Al-kitab website, in Arabic and English

- University of Al-kitab website
- Website of the Ministry of higher Education and Scientific Research
- University of Al-kitab College of Pharmacy page on social networking sites
- The announcement boards and signs installed in the halls of the college
- Official documentation

13.Program development plan

- Incorporate Active Learning Strategies
- Expand the use of technology in education
- Foster Research and Inquiry
- Develop Practical Skills
- Encourage Interdisciplinary Collaboration
- Professional Development for Faculty
- Further Student-Centered Approach

	Curriculum Skills Map																
	Required program Learning outcomes																
Year / Level	ar / Course Course Tit			e Title Basic or optional Knowledge						sk	ills		Ethics				
					A1	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	C4	
First	Phpchl 8-111	Anal Cher	ytical nistry	Basic	V	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V					
semester	Phpchl	Human	Biology	Basic	V	V	V	V	V	V	V	V	V	V	\checkmark	V	
	Phpchl	Mathem Biosta	atics and atistics	Basic	V	V	\checkmark	\checkmark	V	V	V	V	V	V	V	V	
	Phpchl	Me Termi	dical nology	Basic	\checkmark	\checkmark	\checkmark	\checkmark									
	Phpchl	Princ pharmac	iple of y practice	Basic	V	V	V	V					V	V	V	V	
First year\	Phpchl	Human	Anatomy	Basic	V	\checkmark		\checkmark									
semester	Phpchl	Human I	Histology	Basic	V	V		V									
	Phpchl	Humar	Rights	Basic	V	V		V									
	Phpchl	Medical	physics	Basic	\checkmark												
	Phpchl	Organic C	Chemistry I	Basic	V	V	V	V	V	\checkmark	V	V	V	\checkmark	V	\checkmark	
	Phpchl	Pharma Calcu	ceutical lations	Basic	V	V	V	V	V	V	V	V	V	V	V	\checkmark	
		Compute	r Sciences I	Basic	V	V	V	V	V	V	V	V	V	V	V	V	
Second year\first	Phpchl	Mec microb	dical iology I	Basic	V	V	V	V	V	V	V	V	V	V	V	V	
Semester	Phpchl	Organic	Chemistry II	Basic	V	V	V	V	V	V	V	V	V	V	V	V	
	Phpchl	Physical	Pharmacy I	Basic	V	V	V	V	V	V	V	V	V	V	V	V	
	Phpchl	Physi	ology l	Basic	V	V	V	V	V	V	V	V	V	V	V	V	
		Compute	r Sciences	Basic	\checkmark		\checkmark										
Second year\second	Phpchl	Meo Microb	dical iology II	Basic	1	1	1	1	1	1	1	√ ,	1	1	√	1	
semester	Phpchl	Organic	Chemistry II	Basic	٧	N	N	N	٧	٦	٧	٦	٦	N	٧	N	
	Phpchl	Physical	pharmacy II	Basic	√ √	√ 	√ 	√ 	√ 	√ 	√ 						
	Phpchi	Pharmac	cognosy i	Basic	N	N	N	N	N	N	N						

	Phpchl	Physiology II	Basic	V	V	V	V	√	V	V	V	V	V	V	V
		Computer Sciences III	Basic	1	1	√	V	V	1	V	V	\checkmark	V	1	V
Third year \	Phpchl	Biochemistry I	Basic	\checkmark	V	V	V	V	V	V	V	V	V	V	\checkmark
First semester	Phpchl	Inorganic pharmaceutical Chemistry	Basic	V	V	V	V	V	V	V	V	V	V	V	V
		Pathophysiology	Basic	V	V	V	V	V	V	V	V				
	Phpchl	Pharmaceutical Technology I	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	Phpchl	Pharmacognosy II	Basic	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				
Third year	Phpchl	Biochemistry II	Basic	V	\checkmark	V	\checkmark	\checkmark		V	\checkmark	\checkmark	V	V	\checkmark
semester	Phpchl	Pharmacy Ethics	Basic	\checkmark	V	\checkmark									
	Phpchl	Organic pharmaceutical Chemistry I	Basic	V	V	V	V	V	V	V	V				
	Phpchl	Pharmaceutical Technology II	Basic	\checkmark	V	V	V	V	V	V	V	V	\checkmark	V	\checkmark
	Phpchl	Pharmacognosy III	Basic	\checkmark											
	Phpchl	Pharmacology I	Basic	V	\checkmark	\checkmark	V	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Fourth	Phpchl	Biopharmaceutics	Basic	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	V	V	V	V	V
semester	Phpchl	Clinical pharmacy I	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	Phpchl	Organic pharmaceutical Chemistry II	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	Phpchl	Pharmacology II	Basic	\checkmark											
	Phpchl	Public health	Basic	V	\checkmark										
Fourth year\second semester	Phpchl	Clinical pharmacy II	Basic	V	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	V	V
	Phpchl	General Toxicology	Basic	\checkmark											
	Phpchl	Industrial Pharmacy I	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	Phpchl	Organic pharmaceutical Chemistry III	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	Phpchl	Pharmacology III	Basic	\checkmark											
		Communication skills	Basic	V	V	V	V	V	V	V	V	V	V	V	
Fifth\ first semester	Phpchl	Applied therapeutics I	Basic	V	V	V	V	V	V	V	V	V	V	V	V

	Phpchl	Clinical Chemistry	Basic	V	V	V	V	V	V	V	V	V	\checkmark	\checkmark	\checkmark
	Phpchl	Clinical Laboratory Training	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	Phpchl	Clinical Toxicology	Basic	V	V	V	V	V	\checkmark	V	V	V	\checkmark	V	\checkmark
	Phpchl	Industrial Pharmacy II	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	PhpchI	Organic pharmaceutical Chemistry	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	Phpchl	Graduation Project	Basic	V	V	V	V	V	\checkmark	V	V	V	\checkmark	V	\checkmark
second semester	Phpchl	Advance pharmaceutical Analysis	Basic	V	V	V	1	V	V	V	V	V	V	V	V
	Phpchl	Applied therapeutics II	Basic	\checkmark	V	V	V	V	V	\checkmark	V	V	V	V	\checkmark
	Phpchl	Dosage Form Design	Basic	\checkmark	V	V	V	\checkmark	V	V	V	V	V	V	\checkmark
	Phpchl	Hospital Training	Basic	\checkmark	V	\checkmark	\checkmark	\checkmark							
	Phpchl	Pharmacoeconomic	Basic	V	V	V	V	V	V	V	V	V	V	V	V
	Phpchl	Therapeutic Drug Monitoring (TDM)	Basic	\checkmark	V	\checkmark	V	\checkmark							
		Pharmaceutical Biotechnology	Basic	V	V	V	V	V	V	V	V	√	V	V	V