

### Faculty of Pharmacy Course plan

- The bachelor of pharmacy degree is awarded after successful completion of (165) credit hours.
- The requisite credit hours for the degree are distributed as follows:

Courses	Credit hours	
<b>University Requirements</b>	<b>27</b>	<b>12 Obligatory</b>
		<b>15 Elective</b>
<b>Faculty Requirements</b>	<b>32</b>	<b>32 Obligatory</b>
<b>Core requirements</b>	<b>106</b>	<b>97 Obligatory</b>
		<b>9 Elective</b>
<b>Total</b>		<b>165</b>

(1) **Faculty Requirements:** (32) Obligatory credit hours, that includes:

Course No.	Course title	Credit hours	Weekly hours		Pre-requisite
			Theory	Practical	
CHEM 103	General Chemistry for Medical Students	3	3	-	-
CHEM 107	General Chemistry Practical for Medical Students	1	-	3	CHEM 103 or concurrent
BIO 111	General Biology for Medical Students	3	3	-	-
BIO 112	General biology Practical for Medical Students	1	-	3	BIO 111 or concurrent
MATH 101	Calculus	3	3	-	-
PHYS 101	General Physics (1)	3	3	-	-
CS 110	Programming in a Selected Language	3	-	3	-
BIO 201	Human Anatomy and physiology	3	3	-	BIO 111
CHEM 215	Organic Chemistry	3	3	-	CHEM 103
PHAR 230	Physiology for Pharmacy	3	3	-	BIO 201
PHAR 231	Pathophysiology for Pharmacy	3	3	-	PHAR 230
STAT 203	Biostatistics	3	3	-	MATH 101

**(2) Core Requirements:** (106) credit hours:

- **Obligatory Core Requirements:** (97) credit hours, distributed as follows:

Course No.	Course title	Credit hours	Weekly Hours		Pre-requisite
			Theory	Practical	
PHAR 210	Pharmaceutical organic Chemistry	3	3	-	CHEM 215
PHAR 211	Pharmaceutical organic Chemistry lab	1	-	3	PHAR 210 or Concurrent
PHAR 212	Biochemistry	3	3	-	PHAR 210
PHAR 213	Pharmaceutical Analytical Chemistry	3	3	-	CHEM 215
PHAR 214	Pharmaceutical Analytical Chemistry Practical	1	-	3	PHAR 213 or Concurrent
PHAR 215	Physical Pharmacy	3	3	-	CHEM 103 + MATH 101
PHAR 216	Physical Pharmacy Practical	1	-	3	PHAR 215 or Concurrent
PHAR 220	Pharmaceutical Calculations and Compounding	3	3	-	PHAR 215
PHAR 221	Pharmaceutical Calculations and Compounding Practical	1	-	3	PHAR 220 or Concurrent
PHAR 310	Phytotherapy and Phytochemistry	3	3	-	PHAR 210
PHAR 311	Phytotherapy and Phytochemistry Practical	1	-	3	PHAR 310 or Concurrent
PHAR 312	Pharmaceutical Instrumental Analysis	3	3	-	PHAR 210 + PHAR 213
PHAR 313	Pharmaceutical Instrumental Analysis Practical	1	-	3	PHAR 312 or Concurrent
PHAR 315	Clinical Biochemistry	3	3	-	PHAR 212
PHAR 320	Pharmaceutical Technology	3	3	-	PHAR 220
PHAR 321	Pharmaceutical Technology Practical	1	-	3	PHAR 320 or Concurrent
PHAR 322	Principles of Business for Pharmacy	2	2	-	PHAR 332
PHAR 330	Pharmaceutical Microbiology	3	3	-	PHAR 230
PHAR 331	Pharmaceutical Microbiology Practical	1	-	3	PHAR 330 or Concurrent
PHAR 332	Pharmacology (1)	3	3	-	PHAR 231
PHAR 333	Pharmacology (2)	3	3	-	PHAR 232
PHAR 410	Medicinal Chemistry (1)	3	3	-	PHAR 233
PHAR 411	Medicinal Chemistry (2)	2	2	-	PHAR 410
PHAR 412	Medicinal Chemistry (2) Practical	1	-	3	PHAR 411 or Concurrent
PHAR 420	Biopharmaceutics and Pharmacokinetics	3	3	-	PHAR 320 + PHAR 212
PHAR 421	Case Studies in Pharmacokinetics	1	-	3	PHAR 420 or Concurrent
PHAR 422	Pharmacoepidemiology and Pharmacoconomics	2	2	-	PHAR 322
PHAR 423	Cosmetic Preparations	2	2	-	PHAR 320
PHAR 430	Pharmaceutical Practical Training (8 weeks)	6	-	40	Completion of 120 Credit Hours
PHAR 431	Therapeutics (1)	3	3	-	PHAR 333
PHAR 432	Therapeutics (2)	3	3	-	PHAR 331
PHAR 532	Toxicology	3	3	-	PHAR 333 + PHAR 330
PHAR 533	Immunology and Vaccines	2	2	-	PHAR 333

PHAR 440	Pharmaceutical Marketing	3	3	-	PHAR 422
PHAR 441	Natural Products and Alternative Medicine	3	3	-	PHAR 311
PHAR 510	Drug Design	3	3	-	PHAR 411
PHAR 520	Drug Delivery Systems	2	2	-	PHAR 420
PHAR 523	Advanced Pharmaceutical Technology	3	3	-	PHAR 320
PHAR 530	Clinical Therapeutics	3	3	-	PHAR 432
PHAR 540	Pharmaceutical Biotechnology	3	3	-	PHAR 330
PHAR 541	Research and Development in Pharmacy	3	3	-	PHAR 420

- **Elective Core Requirements:** Students have to choose courses equivalent to (9) credit hours from the Faculty of Pharmacy elective courses as follows:

Course No.	Course title	Credit hours	Weekly hours		Pre-requisite
			Theory	Practical	
PHAR 314	Selected Topics in Analytical Chemistry and Instrumental Analysis	3	3	-	PHAR 312
PHAR 413	Seminar in Pharmacy	1	-	-	PHAR 433
PHAR 424	Pharmaceutical Regulatory Affairs and Quality Control	3	3	-	PHAR 322
PHAR 425	Health policy and Drug Trading Requirements	3	3	-	PHAR 440
PHAR 433	Pharmacogenetics	2	2	-	PHAR 333
PHAR 434	Pharmaceutical Care	3	3	-	PHAR 333
PHAR 435	Non-prescription Drugs	2	2	-	PHAR 333
PHAR 442	Drug Stability	3	3	-	PHAR 330
PHAR 443	Pharmaceutical Informatics	2	2	-	PHAR 431
PHAR 444	Drug Legislations	3	3	-	PHAR 422
PHAR 445	Pharmaceutical Intellectual Properties	3	3	-	PHAR 322
PHAR 446	Communication Skills In Pharmacy	2	2	-	PHAR 440
PHAR 521	Accounting and Health Management	3	3	-	PHAR 523
PHAR 522	Selective Topics in Pharmacy	3	3	-	PHAR 411
PHAR 524	Advanced Pharmacoeconomics	3	3	-	PHAR 520
PHAR 531	Advanced Pharmaceutical Biotechnology	2	2	-	PHAR 540
PHAR 542	Pharmaceutical Ethics and Legislation	2	2	-	PHAR 322
PHAR 543	Health Services Marketing	2	2	-	PHAR 322