

Doctor of Pharmacy (PHARM-D)

Curriculum Plan and Model

PHARM-D Course Distribution		
	No. of courses	Credit Hours
UM for University Mandatory	6	24
Discipline Related courses	41	156
Compulsory Courses (core)	6	18
	53	198

Semester Plan

Semester 1

Code	Course title	Cr. Hr.	Pre-Requisite
ENG 300	English-A (Functional English)	2	—
PHARM 310	Pharmaceutics-IA (Physical Pharmacy)	3+1	—
PHARM 311	Pharmaceutical Chemistry-IA (Organic)	3+1	—
PHARM 312	Pharmaceutical Chemistry-IIA (Biochemistry)	3+1	—
PHARM 313	Physiology-A	3+1	—
PHARM 314	Anatomy & Histology	3+1	—
	Total	(17+5)=22	

Semester 2

Code	Course title	Cr. Hr.	Pre-Requisite
ENG 301	English-B (Communication & Writing skills)	4	English-A (Functional English)
PHARM 315	Pharmaceutics-IB (Physical Pharmacy)	3+1	Pharmaceutics-IA (Physical Pharmacy)
PHARM 316	Pharmaceutical Chemistry-IB (Organic)	3+1	Pharmaceutical Chemistry-IA (Organic)
PHARM 317	Pharmaceutical Chemistry-IIB (Biochemistry)	3+1	Pharmaceutical Chemistry-IIA (Biochemistry)
PHARM 318	Physiology-B	3+1	Physiology-A
	Total	16+4=20	--

Semester 3

Code	Course title	Cr. Hr.	Pre-Requisite
IS 402	Islamic Studies	3	—
PHARM 410	Pharmaceutics-IIA (Dosage Form Science)	3+1	—
PHARM 411	Pharmaceutics-III A (Pharmaceutical Microbiology & Immunology)	3+1	—
PHARM 412	Pharmacology and Therapeutics-IA	3+1	—
PHARM 413	Pharmacognosy-IA (Basic)	3+1	—
PHARM 414	Pharmacy Practice-IA (Pharmaceutical Mathematics)	3	
	Total	(18+4)=22	

Semester 4

Code	Course title	Cr. Hr.	Pre-Requisite
PS 403	Pakistan Studies	2+0	—
PHARM 415	Pharmaceutics-IIB (Dosage Form Science)	3+1	Pharmaceutics-IIA (Dosage Form Science)
PHARM 416	Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology)	3+1	Pharmaceutics-III A (Pharmaceutical Microbiology & Immunology)
PHARM 417	Pharmacology and Therapeutics-IB	3+1	—
PHARM 418	Pharmacognosy-IB (Basic)	3+1	Pharmacognosy-IA (Basic)
PHARM 419	Pharmacy Practice-IB (Bio-statistics)	3	—
	Total	(17+4)=21	

Semester 5

Code	Course title	Cr. Hr.	Pre-Requisite
PHARM 510	Pharmacy Practice-IIA (Dispensing Pharmacy)	3+1	—
PHARM 511	Pharmaceutical Chemistry-III A (Pharmaceutical Analysis)	3+1	—
PHARM 512	Pharmacology and Therapeutics-IIA	3+1	
PHARM 513	Pharmacognosy -IIA (Advanced)	3+1	
PHARM 514	Pathology	3+1	
	Total	(15+5)=20	

Semester 6

Code	Course title	Cr. Hr.	Pre-Requisite
PHARM 515	Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy)	3+0	—
PHARM 516	Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis)	3+1	Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis)
PHARM 517	Pharmacology and Therapeutics-IIB	3+1	Pharmacology and Therapeutics-IIA
PHARM 518	Pharmacognosy-IIB (Advanced)	3+1	Pharmacognosy -IIA (Advanced)
PHARM 519	Pharmacy Practice-III (Computer and its Applications in Pharmacy)	3+1	—
	Total	(15+4)=19	—

Semester 7

Code	Course title	Cr. Hr.	Pre-Requisite
PHARM 610	Pharmacy Practice-IVA (Hospital Pharmacy)	3+0	—
PHARM 611	Pharmacy Practice-VA (Clinical Pharmacy)	3+1	—
PHARM 612	Pharmaceutics-IVA (Industrial Pharmacy)	3+1	—
PHARM 613	Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics)	3+1	—
PHARM 614	Pharmaceutics-VIA (Pharmaceutical Quality Management)	3+1	—
	Total	(15+4)=19	—

Semester 8

Code	Course title	Cr. Hr.	Pre-Requisite
PHARM 615	Pharmacy Practice-IVB (Hospital Pharmacy)	3+0	Pharmacy Practice-IVA (Hospital Pharmacy)
PHARM 616	Pharmacy Practice-VB (Clinical Pharmacy)	3+1	Pharmacy Practice-VA (Clinical Pharmacy)
PHARM 617	Pharmaceutics-IVB (Industrial Pharmacy)	3+1	Pharmaceutics-IVA (Industrial Pharmacy)
PHARM 618	Pharmaceutics-VB (Biopharmaceutics & Pharmacokinetics)	3+1	Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics)
PHARM 619	Pharmaceutics-VIB (Pharmaceutical Quality Management)	3+1	Pharmaceutics-VIA (Pharmaceutical Quality Management)
	Total	(15+4)=19	

Semester 9

Code	Course title	Cr. Hr.	Pre-Requisite
PHARM 710	Pharmaceutics-VIIA (Pharmaceutical Technology)	3+1	—
PHARM 711	Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II)	3+1	—
PHARM 712	Pharmacy Practice-VIIA (Forensic Pharmacy)	3+0	—
PHARM 713	Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing)	3+0	—
PHARM 714	Pharmaceutical Chemistry-IVA (Medicinal Chemistry)	3+1	—
	Total	(15+3)=18	—

Semester 10

Code	Course title	Cr. Hr.	Pre-Requisite
PHARM 715	Pharmaceutics- VIIB (Pharmaceutical Technology)	3+1	Pharmaceutics-VIIA (Pharmaceutical Technology)
PHARM 716	Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II)	3+1	Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II)
PHARM 717	Pharmacy Practice-VIIB (Forensic Pharmacy)	3+0	Pharmacy Practice-VIIA (Forensic Pharmacy)
PHARM 718	Pharmacy Practice-VIIIB (Pharmaceutical Management & Marketing)	3+0	Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing)
PHARM 719	Pharmaceutical Chemistry-IVB (Medicinal Chemistry)	3+1	Pharmaceutical Chemistry-IVA (Medicinal Chemistry)
	Total	(15+3)=18	

Compulsory Courses

Code	Course title	Cr. Hr.	Pre-Requisite
ENG 300	English-A (Functional English)	2	—
ENG 301	English-B (Communication & Writing skills)	4	English-A (Functional English)
IS 402	Islamic Studies	3	—
PS 403	Pakistan Studies	2+0	—
PHARM 419	Pharmacy Practice-IB (Bio-statistics)	3	—
PHARM 519	Pharmacy Practice-III (Computer and its Applications in Pharmacy)	3+1	—
	Credit Hours	(17+1)=18	

University Mandatory Courses

Code	Course title	Cr. Hr.	Pre-Requisite
PHARM 313	Physiology-A	3+1	-
PHARM 318	Physiology-B	3+1	Physiology-A
PHARM 314	Anatomy & Histology	3+1	
PHARM 514	Pathology	3+1	
PHARM 312	Pharmaceutical Chemistry-IIA (Biochemistry)	3+1	—
PHARM 317	Pharmaceutical Chemistry-IIB (Biochemistry)	3+1	Pharmaceutical Chemistry-IIA (Biochemistry)
	Credit Hours	(18+6)=24	

Discipline Related Courses

Code	Course title	Cr.Hr.	Pre-Requisite
PHARM 310	Pharmaceutics-IA (Physical Pharmacy)	3+1	PHARM 310
PHARM 311	Pharmaceutical Chemistry-IA (Organic)	3+1	PHARM 311
PHARM 315	Pharmaceutics-IB (Physical Pharmacy)	3+1	Pharmaceutics-IA (Physical Pharmacy)
PHARM 316	Pharmaceutical Chemistry-IB (Organic)	3+1	Pharmaceutical Chemistry-IA (Organic)
PHARM 410	Pharmaceutics-IIA (Dosage Form Science)	3+1	PHARM 410
PHARM 411	Pharmaceutics-IIIA (Pharmaceutical Microbiology & Immunology)	3+1	PHARM 411
PHARM 412	Pharmacology and Therapeutics-IA	3+1	PHARM 412
PHARM 413	Pharmacognosy-IA (Basic)	3+1	PHARM 413
PHARM 414	Pharmacy Practice-IA (Pharmaceutical Mathematics)	3+0	--
PHARM 415	Pharmaceutics-IIB (Dosage Form Science)	3+1	Pharmaceutics-IIA (Dosage Form Science)
PHARM 416	Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology)	3+1	Pharmaceutics-IIIA (Pharmaceutical Microbiology & Immunology)
PHARM 417	Pharmacology and Therapeutics- IB	3+1	—
PHARM 418	Pharmacognosy-IB (Basic)	3+1	Pharmacognosy-IA (Basic)
PHARM 510	Pharmacy Practice-IIA (Dispensing Pharmacy)	3+1	—
PHARM 511	Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis)	3+1	—
PHARM 512	Pharmacology and Therapeutics-IIA	3+1	
PHARM 513	Pharmacognosy -IIA (Advanced)	3+1	
PHARM 515	Pharmacy Practice-IIB (Community,	3+0	—

	Social & Administrative Pharmacy)		
PHARM 516	Pharmaceutical Chemistry-III B (Pharmaceutical Analysis)	3+1	Pharmaceutical Chemistry-III A (Pharmaceutical Analysis)
PHARM 517	Pharmacology and Therapeutics-IIB	3+1	Pharmacology and Therapeutics-II A
PHARM 518	Pharmacognosy-IIB (Advanced)	3+1	Pharmacognosy -II A (Advanced)
PHARM 610	Pharmacy Practice-IVA (Hospital Pharmacy)	3+0	—
PHARM 611	Pharmacy Practice-VA (Clinical Pharmacy)	3+1	—
PHARM 612	Pharmaceutics-IVA (Industrial Pharmacy)	3+1	—
PHARM 613	Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics)	3+1	—
PHARM 614	Pharmaceutics-VIA (Pharmaceutical Quality Management)	3+1	—
PHARM 615	Pharmacy Practice-IVB (Hospital Pharmacy)	3+0	Pharmacy Practice-IVA (Hospital Pharmacy)
PHARM 616	Pharmacy Practice-VB (Clinical Pharmacy)	3+1	Pharmacy Practice-VA (Clinical Pharmacy)
PHARM 617	Pharmaceutics-IVB (Industrial Pharmacy)	3+1	Pharmaceutics-IVA (Industrial Pharmacy)
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PHARM 619	Pharmaceutics-VIB (Pharmaceutical Quality Management)	3+1	Pharmaceutics-VIA (Pharmaceuti Quality Management)
PHARM 710	Pharmaceutics-VIIA Pharmaceutical Technology)	3+1	—
PHARM 711	Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II)	3+1	—
PHARM 712	Pharmacy Practice-VIIA (Forensic Pharmacy)	3+0	—
PHARM 713	Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing)	3+0	—
PHARM 714	Pharmaceutical Chemistry-IVA (Medicinal Chemistry)	3+1	—
PHARM 715	Pharmaceutics- VII B (Pharmaceutical Technology)	3+1	Pharmaceutics-VIIA Pharmaceutical Technology)
PHARM 716	Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II)	3+1	Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II)
PHARM 717	Pharmacy Practice-VIIB (Forensic Pharmacy)	3+0	Pharmacy Practice-VIIA (Forensic Pharmacy)

PHARM 718	Pharmacy Practice-VIIIB (Pharmaceutical Management & Marketing)	3+0	Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing)
PHARM 719	Pharmaceutical Chemistry-IVB (Medicinal Chemistry)	3+1	Pharmaceutical Chemistry-IVA (Medicinal Chemistry)
	Total	156	