

Descriptors		Knowledge	Skills										Competencies				
Domains with PLOs of the program		Foundational Knowledge	Essentials for Practice and Care				Approach to Practice and Care						Pharmaceutical product expert	Personal and Professional Development			
Course Number	Course Name	Learner	Caregiver	Manager	Promoter	Provider	Problem Solver	Educator	Advocate	Collaborator	Includer	Communicator	Manufacturer	Self-aware	Leader	Innovator	Professional
1203102	Medical terminology	Yes															Yes
1203251	Biochemistry (1)	Yes					Yes										
1203253	Biochemistry (2)	Yes															Yes
532201	Anatomy and histology for Pharmacy	Yes															Yes
1203302	First Aid				Yes												
1203363	Pharmacology (1)	Yes	Yes	Yes				Yes				Yes	Yes				
1203364	Pharmacology (2)																
1203402	Pharmacology (3)	Yes	Yes	Yes				Yes				Yes	Yes				
1203303	Pharmacotherapy : A Pathophysiologic Approach	Yes	Yes	Yes				Yes				Yes					
1203365	Pharmacology-practical	Yes						Yes				Yes					
1203503	Pharmacy informatics	Yes	Yes	Yes				Yes				Yes					

1203505	Case studies in therapeutics (3)	Yes						Yes									
1203506	Therapeutics (4)	Yes															Yes
1203507	Case studies in therapeutics (4)	Yes						Yes									
1203513	Pharmaceutical promotion and marketing (1)	Yes				Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes		
1203514	Pharmaceutical marketing and promotion (2)	Yes						Yes		Yes	Yes	Yes	Yes	Yes	Yes		
1203515	Pharmaceutical intellectual property	Yes											Yes				
1203516	Pharmacy practice (3)	Yes	Yes	Yes				Yes		Yes		Yes		Yes			Yes
1203518	Pharmaceutical Literature evaluation	Yes							Yes								
1203519	Pharmaceutical Nutrition and diet therapy					Yes		Yes		Yes	Yes						Yes

1203562	Toxicology	Yes	Yes					Yes		Yes						
1203563	Nonprescription drugs	Yes	Yes					Yes								
1203573	Seminar in Biopharmaceutics and clinical pharmacy	Yes	Yes					Yes			Yes		Yes			Yes
1203577	Clinical pharmacokinetics	Yes	Yes			Yes										Yes
1203601	Internal medicine clerkship (1)	Yes	Yes	Yes		Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	
1203602	Internal medicine clerkship (2)					Yes				Yes		Yes		Yes		Yes
1203603	Pediatric clerkship	Yes	Yes	Yes		Yes		Yes		Yes		Yes		Yes		Yes
1203604	Geriatric and Psychiatric Clerkship	Yes	Yes	Yes				Yes		Yes	Yes	Yes			Yes	Yes
1203605	Obstetrics and Gynecology Clerkship	Yes	Yes					Yes		Yes	Yes	Yes		Yes	Yes	Yes
1203606	Surgery Clerkship	Yes	Yes	Yes		Yes		Yes		Yes	Yes	Yes		Yes		Yes
1203607	Clinical pharmacokinetics Clerkship	Yes	Yes	Yes		Yes				Yes						Yes

1203608	Ambulatory care clerkship	Yes	Yes	Yes		Yes		Yes		Yes	Yes	Yes		Yes		Yes
1203610	Research project	Yes						Yes		Yes		Yes				Yes
1213302	Immunology and Genetics	Yes												Yes		Yes
1213552	Parapharmaceuticals	Yes								Yes						Yes
1213563	Selected topics in clinical toxicology	Yes	Yes							Yes		Yes		Yes		Yes
1201201	Pharmaceutical chemical analysis	Yes											Yes	Yes	Yes	
1201204	Pharmaceutical analysis – Practical	Yes										Yes	Yes		Yes	
1201215	Pharmaceutical organic chemistry (1)	Yes													Yes	
1201315	Pharmaceutical instrumental analysis	Yes														Yes
1201301	Phytotherapy and chemistry of Natural products (1)	Yes						Yes		Yes						Yes

1201302	Phytotherapy and chemistry of Natural products (2)	Yes										Yes	Yes	Yes			
1201390	Chemistry of medicinal plants	Yes						Yes		Yes							Yes
1201401	Medicinal Chemistry (1)																
1201402	Medicinal chemistry (2)				Yes		Yes										
1201414	Complementary and alternative medicine	Yes	Yes			Yes		Yes					Yes	Yes			
1201515	Medicinal Chemistry (3)	Yes						Yes				Yes		Yes		Yes	
1201524	Applied chromatography									Yes		Yes	Yes	Yes			
1201531	Poisonous and hallucinogenic plants	Yes	Yes					Yes		Yes				Yes			Yes
1201571	Seminar in pharmaceutical sciences	Yes												Yes		Yes	

1211212	Pharmaceutical organic chemistry-practical	Yes										Yes	Yes		Yes		
1202134	Physicochemical principles of pharmacy	Yes															Yes
1202230	Pharmaceutical calculations and compounding	Yes															Yes
1202234	Pharmaceutical calculations and compounding-practical	Yes	Yes	Yes								Yes	Yes				
1202235	Physical pharmacy	Yes											Yes	Yes	Yes		
1202341	Pharmaceutical microbiology (1)	Yes												Yes			Yes
1202381	Pharmaceutical Statistics	Yes					Yes					Yes					
1202441	Pharmaceutical Microbiology (2)	Yes												Yes			Yes
1202442	Pharmaceutical Microbiology - practical	Yes											Yes	Yes			

1202517	Pharmacy regulations and ethics	Yes						Yes		Yes	Yes			Yes			Yes	
1202532	Selected Topics in Physical Pharmacy	Yes						Yes				Yes	Yes	Yes				
1202533	Pharmaceutical radioisotopes	Yes	Yes					Yes				Yes	Yes					
1202536	Cosmetics science	Yes												Yes				Yes
1202572	Seminar in pharmaceuticals and pharmaceutical technology	Yes										Yes		Yes				Yes
1212331	Pharmaceutical technology (1)	Yes		Yes								Yes	Yes					
1212332	Pharmaceutical technology-practical (1)	Yes		Yes								Yes	Yes		Yes			
1200401	Pharmaceutical field training (1)	Yes	Yes	Yes								Yes		Yes				Yes
1210402	Pharmaceutical field training (2)	Yes	Yes	Yes								Yes		Yes				Yes