

PharmD Program Study Plan

Level (1) Semester (1)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 101	Pharmaceutical Analytical Chemistry-I	2	1	3	Registration	--
PC 102	Pharmaceutical Organic Chemistry-I	2	1	3	Registration	--
PT 101	Pharmacy Orientation	1	---	1	Registration	--
PG 101	Medicinal Plants	2	1	3	Registration	--
MD 101	Medical Terminology	1	---	1	Registration	--
NP 101	Information Technology	1	1	2	Registration	--
MS 101	Mathematics	1	---	1	Registration	--
NP 102	Human Rights and Fighting Corruption	1	---	1	Registration	--
URE 1	University requirement elective	1	---	1	Registration	--
	Total	12	4	16		

Level (1) Semester (2)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 203	Pharmaceutical Analytical Chemistry-II	2	1	3	Pharmaceutical Analytical Chemistry-I	PC 101
PC 204	Pharmaceutical Organic Chemistry-II	2	1	3	Pharmaceutical Organic Chemistry-I	PC 102
PG 202	Pharmacognosy-I	2	1	3	Medicinal Plants	PG 101
PT 202	Physical Pharmacy	2	1	3	Registration	--
PB 201	Cell Biology	1	1	2	Registration	--
MD 202	Anatomy	1	--	1	Registration	--
MD 203	Histology	1	1	2	Registration	--
MD 204	Psychology	1	---	1	Registration	--
	Total	12	6	18		

Level (2) Semester (3)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 305	Pharmaceutical Analytical Chemistry-III	2	1	3	Pharmaceutical Analytical Chemistry-II	PC 203
PC 306	Pharmaceutical Organic Chemistry-III	2	1	3	Pharmaceutical Organic Chemistry-II	PC 204
PT 303	Pharmaceutics-I	2	1	3	Physical Pharmacy	PT 202
PG 303	Pharmacognosy-II	2	1	3	Medicinal Plants	PG 101
NP 303	Scientific Writing and communication skills	2	1	3	Registration	--
MD 305	Physiology and Pathophysiology	2	1	3	Registration	--
	Total	12	6	18		

Level (2) Semester (4)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 407	Instrumental Analysis	2	1	3	Pharmaceutical Analytical Chemistry-III	PC 305
PB 402	Biochemistry-I	2	1	3	Registration	--
PT 404	Pharmaceutics-II	2	1	3	Physical Pharmacy	PT 202
MD 406	Pathology	1	1	2	Histology	MD 203
PM 401	General Microbiology and Immunology	2	1	3	Registration	--
URE 2	University requirement elective	1	---	1	Registration	--
	Total	10	5	15		

Level (3) Semester (5)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PB 503	Biochemistry-II	2	1	3	Biochemistry-I	PB 402
PM 502	Pharmaceutical Microbiology	2	1	3	General Microbiology and Immunology	PM 401
PG 504	Phytochemistry-I	2	1	3	Pharmacognosy-II	PG 303
PT 505	Pharmaceutics-III	2	1	3	Physical Pharmacy	PT 202
PM 503	Parasitology & Virology	2	1	3	General Microbiology and Immunology	PM 401
PO 501	Pharmacology-I	2	1	3	Physiology & Pathophysiology	MD 305
	Total	12	6	18		

Level (3) Semester (6)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PO 602	Pharmacology-II	2	1	3	Pharmacology-I	PO 502
PB 604	Clinical Biochemistry	2	1	3	Biochemistry-II	PB 503
PT 606	Biopharmaceutics and Pharmacokinetics	2	1	3	Pharmaceutics-I	PT 303
PG 605	Phytochemistry-II	2	1	3	Phytochemistry-I	PG 504
PT 607	Pharmaceutics-IV	2	1	3	Physical Pharmacy	PT 202
PC 608	Medicinal Chemistry-I	2	1	3	Pharmaceutical Organic Chemistry-III	PC 306
	Total	12	6	18		

Level (4) Semester (7)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PP 701	Clinical Pharmacokinetics	2	1	3	Biopharmaceutics and Pharmacokinetics	PT 606
PC 709	Medicinal Chemistry-II	2	1	3	Medicinal Chemistry-I	PC 608
PO 703	Pharmacology-III	2	1	3	Pharmacology-II	PO 602
PG 706	Phytotherapy and Aromatherapy	2	1	3	Phytochemistry-II	PG 605
PM 704	Medical Microbiology	2	1	3	Pharmaceutical Microbiology	PM 502
PT 708	Pharmaceutical Technology-I	2	1	3	Pharmaceutics-IV	PT 607
PE---	Elective	1	1	2	Registration	--
	Total	13	7	20		

Level (4) Semester (8)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 810	Medicinal Chemistry-III	2	--	2	Medicinal Chemistry- I	PC 608
PO 804	Basic and clinical toxicology	2	1	3	Pharmacology-III	PO 703
PO 805	Drug Information	1	1	2	Pharmacology-III	PO 703
PP 802	Hospital Pharmacy	1	1	2	Pharmacology-III	PO 703
PT 809	Pharmaceutical Technology-II	2	1	3	Pharmaceutical Technology-I	PT 708
PP 803	Community Pharmacy Practice	2	1	3	Pharmacology-III	PO 703
PE ---	Elective	1	1	2	Registration	--
	Total	11	6	17		

Level (5) Semester (9)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PM 905	Biotechnology	2	--	2	Pharmaceutical Microbiology	PM 502
PP 904	Clinical Pharmacy-I	2	1	3	Pharmacology-III	PO 703
PC 911	Drug Design	2	--	2	Medicinal Chemistry- I	PC 608
PM 906	Public Health	2	--	2	Medical Microbiology	PM 705
PG 907	Applied & Forensic Pharmacognosy	2	--	2	Phytochemistry-II	PG 605
PT 910	Good Manufacturing Practice	2	--	2	Pharmaceutical Technology-II	PT 809
PO 906	Biostatistics	1	-	1	Registration	--
NP 904	Marketing & Pharmacoeconomics	2	--	2	Registration	--
PE ---	Elective	1	1	2	Registration	--
	Total	16	2	18		

Level (5) Semester (10)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 012	Quality Control of Pharmaceuticals	2	1	3	Instrumental Analysis Pharmaceutical Microbiology	PC 407 PM 502
MD 007	First Aid	1	--	1	Pharmacology-III	PO 703
PP 005	Drug interaction	2	--	2	Pharmacology-III	PO 703
PT 011	Advanced Drug Delivery Systems	2	--	2	Pharmaceutics-IV	PT 607
PP 006	Clinical Pharmacy-II & Pharmacotherapeutics	1	1	2	Clinical Pharmacy-I	PP 904
PP 007	Clinical Research, Pharmacoepidemiology & Pharmacovigilance	1	1	2	Clinical Pharmacy-I	PP 904
NP 005	Pharmaceutical Legislations and Regulatory Affairs & Professional Ethics	1	--	1	Registration	--
NP 006	Entrepreneurship	1	1	2	Registration	--
PE ---	Elective	1	1	2	Registration	--
	Total	12	5	17		

PharmD (Clinical Pharmacy) Program Study Plan

Level (1) Semester (1)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 101	Pharmaceutical Analytical Chemistry-I	2	1	3	Registration	--
PC 102	Pharmaceutical Organic Chemistry-I	2	1	3	Registration	--
PT 101	Pharmacy Orientation	1	-	1	Registration	--
PG 101	Medicinal Plants	2	1	3	Registration	--
MD 101	Medical Terminology	1	-	1	Registration	--
NP 101	Information Technology	1	1	2	Registration	--
MS 101	Mathematics	1	---	1	Registration	--
NP 102	Human Rights and Fighting Corruption	1	-	1	Registration	--
URE--	University Elective-I	1	---	1	Registration	--
Total		12	4	16		

Level (1) Semester (2)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Code		
PC 203	Pharmaceutical Analytical Chemistry-II	2	1	3	Pharmaceutical Analytical Chemistry-I	PC 101
PC 204	Pharmaceutical Organic Chemistry-II	2	1	3	Pharmaceutical Organic Chemistry-I	PC 102
PB 201	Cell Biology	1	1	2	Registration	--
MD 202	Anatomy	1	---	1	Registration	--
MD 203	Psychology	1	---	1	Registration	--
MD 204	Physiology and pathophysiology	2	---	2	Registration	--
PT 202	Physical Pharmacy	2	1	3	Registration	--
PG 202	Pharmacognosy I	2	1	3	Medicinal Plants	PG 101
	Total	13	5	18		

Level (2) Semester (3)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 305	Pharmaceutical Organic Chemistry-III	2	1	3	Pharmaceutical Organic Chemistry-II	PC 204
PB302	Biochemistry-I	2	1	3	Registration	--
PG 303	Pharmacognosy-II	2	1	3	Medicinal Plants	PG 101
PO 301	Basic Pharmacology	2	1	3	Registration	--
MD 305	Histology	1	1	2	Registration	--
PT 303	Pharmaceutical dosage forms-I	2	1	3	Physical Pharmacy	PT 202
URE--	University Elective-II	1	---	1	Registration	--
	Total	12	6	18		

Level (2) Semester (4)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 406	Instrumental Analysis	2	1	3	Pharmaceutical Analytical Chemistry-II	PC 203
PO 402	Pharmacology –I	2	1	3	Basic Pharmacology	PO 301
PM 401	General Microbiology and Immunology	2	1	3	Registration	--
MD 406	Pathology	2	--	2	Registration	--
PT 404	Pharmaceutical Dosage Forms-II	2	1	3	Physical Pharmacy	PT 202
PB 403	Biochemistry-II	2	1	3	Biochemistry I	PB 302
NP 403	Scientific writing and Communication skills	1	---	1	Registration	--
NP 404	Pharmacy Legislation and practice ethics	1	--	1	Registration	--
	Total	14	5	19		

Level (3) Semester (5)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PO 503	Pharmacology-II	2	1	3	Pharmacology –I	PO 402
PM 502	Pharmaceutical Microbiology and Antimicrobials	2	1	3	General Microbiology and Immunology	PM 401
PM 503	Parasitology & Virology	2	1	3	General Microbiology and Immunology	PM 401
PT 505	Pharmaceutical Dosage Forms-III	2	1	3	Physical Pharmacy	PT 202
PG 504	Phytochemistry-I	2	1	3	Pharmacognosy-II	PG 303
PP 501	Community Pharmacy Practice	2	1	3	Pharmacology –I	PO 402
	Total	12	6	18		

Level (3) Semester (6)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PO 604	Pharmacology-III	2	1	3	Pharmacology-II	PO 503
PG 605	Phytochemistry-II	2	1	3	Phytochemistry-I	PG 504
PT 606	Pharmaceutical Technology	2	1	3	Pharmaceutical Dosage Forms-III	PT 505
PP 602	Hospital Pharmacy	2	1	3	Pharmacology –I	PO 402
PP 603	Clinical Pharmacy Practice	2	1	3	Pharmacology-II	PO 503
MD 607	First Aid and Basic Life Support (BLS)	1	1	2	Registration	--
	Total	11	6	17		

Level (4) Semester (7)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 707	Medicinal Chemistry-I	2	1	3	Pharmaceutical Organic Chemistry-III	PC 305
PO 705	Drug Information	1	1	2	Pharmacology-III	PO 604
PT 707	Advanced Drug Delivery Systems	2	-	2	Pharmaceutical Dosage Forms-III	PT 505
PT 708	Biopharmaceutics and Pharmacokinetics	2	1	3	Pharmaceutical dosage forms III	PT 505
PM 704	Medical Microbiology	2	1	3	Pharmaceutical Microbiology and Antimicrobials	PM 502
PC 708	Quality Control of Pharmaceuticals	1	1	2	Instrumental Analysis	PC 406
PE --	Elective course	1	1	2	Registration	--
	Total	11	6	17		

Level (4) Semester (8)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PC 809	Medicinal Chemistry-II	2	1	3	Medicinal Chemistry I	PC 707
PP 804	Management of Endocrine and Renal Disorders	2	1	3	Pharmacology III	PO 604
PP 805	Management of Oncological Diseases and Radiopharmacy	2	1	3	Pharmacology III	PO 604
PP 806	Clinical Pharmacokinetics	2	1	3	Biopharmaceutics and Pharmacokinetics	PT 708
PB 804	Clinical Biochemistry	2	1	3	Biochemistry II	PB 403
PM 805	Public Health and Preventive Medicine	2	--	2	Medical Microbiology	PM 704
PE ---	Elective Course	1	1	2	Registration	--
	Total	13	6	19		

Level (5) Semester (9)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PO 906	Basic & clinical Toxicology	2	1	3	Pharmacology-III	PO 604
PP 907	Management of Neuropsychiatric Diseases	2	1	3	Pharmacology-III	PO 604
PM 906	Biotechnology	2	--	2	Pharmaceutical Microbiology and Antimicrobials	PM 502
PG 906	Phytotherapy	2	--	2	Phytochemistry-II	PG 605
PB 905	Clinical Nutrition	2	--	2	Biochemistry-II	PB 403
NP 905	Marketing &Pharmacoeconomics	2	--	2	Registration	--
NP 906	Entrepreneurship	1	---	1	Registration	--
PE --	Elective Course	1	1	2	Registration	--
	Total	14	3	17		

Level (5) Semester (10)

Course Code	Course Title	Credit Hours			Prerequisite	Code
		Lecture	Practical/ Tutorial	Total		
PP 008	Management of Critical Care Patients	1	1	2	Pharmacology-III	PO 604
PP 009	Management of Dermatological, Reproductive and Musculoskeletal Diseases	2	1	3	Pharmacology-II	PO 503
PP 010	Management of Pediatric Diseases	2	1	3	Pharmacology-III	PO 604
PP 011	Management of Cardiovascular Diseases	2	1	3	Pharmacology-III	PO 604
PP 012	Management of Gastrointestinal Diseases	2	1	3	Pharmacology-III	PO 604
PP 013	Management of Respiratory Diseases	1	1	2	Pharmacology-III	PO 604
PP 014	Clinical Research and Pharmacovigilance	1	--	1	Drug information	PO 705
PE --	Elective Course	1	1	2	Registration	--
	Total	12	7	19		