



**Clinical Pharmacy (PHAR)**

**First Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
ARAB200	Arabic Language and Literature	3		
CULT200	Introduction to Arab - Islamic Civilization	3		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
CHEM200	General Chemistry	3		CHEM200L
CHEM200L	General Chemistry Lab	1		CHEM200
BIOL200L	General Biology I Lab	1		BIOL200
BIOL200	General Biology I	3		BIOL200L
ENGL150	English Composition & Rhetoric	3		
CSCI100	Basic Computing Skills	3	ELC103	

**Summer Semester**

Code	Title	Credits	Prerequisites	Corequisites
ENGL200	Advanced English Composition & Rhetoric	3	ENGL150	
CHEM250	Organic Chemistry I	3	CHEM200 - ENGL150	
CHEM205	Quantitative Analysis	2	CHEM200	CHEM250 - CHEM205L
HUMN210	Human Rights - Global Perspective	3		
CHEM205L	Quantitative Analysis Lab	1		CHEM205
BIOL360	Human Physiology & Anatomy	4	BIOL200	BIOL360L
BIOL360L	Human Physiology & Anatomy Lab	1	BIOL200	BIOL360
<b>Total</b>		<b>17</b>		

**Second Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
CHEM300L	Organic Chemistry Lab	1	CHEM250 - ENGL150	CHEM300
CHEM300	Organic Chemistry II	3	ENGL150 - CHEM250	CHEM300L
BIOL385	Microbiology	3	BIOL200 - ENGL200	BIOL385L
ENGL250	Technical writing	3	ENGL200	
PHAR200	Introduction to Drug Information	2	ENGL200	
BIOL385L	Microbiology Lab	1	ENGL200 - BIOL200	BIOL385

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
MATH245	Statistics for Health Sciences	3		PHAR300
BMED445	Pathophysiology	4	BIOL360 - ENGL200	
ENGL350	English Communication Skills	3	ENGL200	
PHAR250	Pharmacy Practice, History & Ethics	3	ENGL200 - PHAR200	PHAR300
PHAR300	Pharmaceutical Calculations	2	ENGL200 - PHAR200	PHAR250

**Summer Semester**

Code	Title	Credits	Prerequisites	Corequisites
PHAR400	Medical Chemistry I	3	CHEM300	
PHAR405L	Pharmaceutical Analysis & Biotechnology Lab	1	CHEM300	PHAR405
PHAR420	Physical Pharmacy	3	ENGL350 - PHAR250 - PHAR300	

PHAR405	Pharmaceutical Analysis & Biotechnology	2	CHEM300	PHAR405L
BIOC310	Medical Biochemistry	4	BIOL200 - CHEM250 - CHEM300	
Total		13		
<b>Third Year</b>				
<b>Fall Semester</b>				
Code	Title	Credits	Prerequisites	Corequisites
PHAR465	Interpretations of Lab Data	3	BMED445	
PHAR450	Medicinal Chemistry II	3	PHAR400	
PHAR410	Drug Dosage Forms I	3	PHAR300	
PHAR455	Physical Assessment in Pharmacy Practice	3	PHAR300 - PHAR250 - ENGL350	
<b>Spring Semester</b>				
Code	Title	Credits	Prerequisites	Corequisites
PHAR470L	Drug Dosage Form II Lab	1		PHAR470
PHAR510	Biopharmaceutics & Pharmacokinetics	4	PHAR410	
PHAR425	Pharmacognosy & Herbal Medicine	3	PHAR410	
PHAR505	Pharmacology I	3	PHAR400 - PHAR450	
PHAR470	Drug Dosage Form II	3	PHAR410	PHAR470L
<b>Summer Semester</b>				
Code	Title	Credits	Prerequisites	Corequisites
PHAR555	Pharmacology II	3	PHAR505	
PHAR520	Therapeutics II (Pulmonary/Rheumatology)	3	PHAR505	PHAR555
PHAR515	Therapeutics I (Neurology/Psychiatry)	3	PHAR505	PHAR555
PHAR460	Pharmacy Management & Drug Marketing	3	PHAR300 - PHAR455	
Total		12		
<b>Fourth Year</b>				
<b>Fall Semester</b>				
Code	Title	Credits	Prerequisites	Corequisites
PHAR575	Pharmacology III	3	PHAR555	
PHAR590	Clinical Immunology	2		PHAR575
PHAR565	Therapeutics III	3	PHAR555	PHAR575
PHAR570	Therapeutics IV	3	PHAR555	PHAR575
<b>Spring Semester</b>				
Code	Title	Credits	Prerequisites	Corequisites
	Elective	3		
PHAR620	Therapeutics VI	3	PHAR575	
PHAR615	Therapeutics V	3	PHAR575	
PHAR585	Pharmacy Seminar	1	PHAR575	
<b>Summer Semester</b>				
Code	Title	Credits	Prerequisites	Corequisites
	Elective	3		
PHAR610	Toxicology	3	PHAR575	
PHAR630	Therapeutics VII	3	PHAR575	
PHAR560	Pharmacogenomics	3	PHAR505 - PHAR555	
Total		12		
<b>Fifth Year</b>				
<b>Fall Semester</b>				
Code	Title	Credits	Prerequisites	Corequisites
PHAR650	Pharmacy Dispensing Lab	2	PHAR630	PHAR606 - PHAR480
PHAR480	Pharmacy Practice Experience I (PPEI)	6	PHAR455 - PHAR300 - PHAR250	PHAR606 - PHAR650
PHAR606	Non Prescription Drugs	3		PHAR650 - PHAR480

<b>Spring Semester</b>				
<b>Code</b>	<b>Title</b>	<b>Credits</b>	<b>Prerequisites</b>	<b>Corequisites</b>
PHAR640	Clinical Pharmacy	3	PHAR480	PHAR580
PHAR656	Pharmacy Law	1		PHAR580
PHAR625	Pharmacoeconomics	3	PHAR575	PHAR580
PHAR580	Pharmacy Practice Experience II (PPE II)	6	PHAR575	PHAR640
Total		13		

### **Major Elective Courses**

<b>Code</b>	<b>Title</b>	<b>Credits</b>	<b>Prerequisites</b>	<b>Corequisites</b>
PHAR500	Pharmacy Elective I	3	PHAR575	
PHAR550	Pharmacy Elective II	3	PHAR575	