



# Drug Discovery and Development Pathway

## General Education Requirements

Course	Requirement	Hours
<b>GENED 1201</b>	GE Launch Seminar	1
<b>ENG 1110</b>	Foundations: Writing & Information Literacy	3
<i>Fulfilled by major</i>	Foundations: Mathematical & Quantitative Reasoning	4-5
<i>See course catalog</i>	Foundations: Literary, Visual, & Performing Arts	3
<i>See course catalog</i>	Foundations: Historical & Cultural Studies	3
<i>Fulfilled by major</i>	Foundations: Natural Sciences	4-5
<i>See course catalog</i>	Foundations: Social & Behavioral Sciences	3
<i>See course catalog</i>	Foundations: Race, Ethnicity & Gender Diversity	3
<i>See course catalog</i>	Themes: Citizenship for a Diverse & Just World	4-6
<i>See course catalog</i>	Themes: Choice Theme	4-6
<b>GENED 4001</b>	GE Reflection Seminar	1

## Science & Math Requirements

Course	Title	Hours	Prerequisites
<b>MATH 1150 or MATH 1148+1149</b>	Pre-Calculus College Algebra & Trigonometry	5 4+3	<a href="#">See course catalog</a>
<b>STAT 1450, 2450 or 2480</b>	Statistics (algebra-based or calculus-based); or, Statistics for the Life Sciences	3 3	Varies based on selection; <a href="#">see course catalog</a>
<b>CHEM 1210</b>	General Chemistry I	5	<a href="#">See course catalog</a>
<b>CHEM 1220</b>	General Chemistry II	5	CHEM 1210
<b>BIO 1113</b> 1113.01 or 1113.02	Biological Sciences: Energy Transfer & Development	4-5	<a href="#">See course catalog</a>
<b>CHEM 2510</b>	Organic Chemistry I	4	CHEM 1220
<b>CHEM 2540</b>	Organic Chemistry I Lab	2	CHEM 2510 (concurrent)
<b>CHEM 2520</b>	Organic Chemistry II	4	CHEM 2510
<b>PHR 3100</b>	Human Physiology & Disease	4	BIO 1113 <u>and</u> CHEM 1210

## BSPS Core Requirements

Course	Hours	Title	Term	Prerequisites
<b>PHR 1100</b>	1	Pharmaceutical Sciences Survey	AU, SP	None
<b>PHR 2100</b>	0.5	Career Development in Pharmaceutical Sciences I	AU only	None
<b>PHR 2101</b>	0.5	Career Development in Pharmaceutical Sciences II	SP only	PHR 2100
<b>PHR 2530</b>	2	Introduction to Pharmaceutical Sciences Research	SP only	None
<b>PHR 2500</b>	3	Drug Discovery, Development, and Delivery	ALL	None
<b>PHR 3110</b>	3	Drugs, Data, and Discourse	AU, SP	ENG 1110 or equiv.
<b>PHR 3500</b>	2	Pharmacoethics: Dilemmas and Decision-making	AU, SP	None
<b>PHR 3200</b>	5	Biochemistry for Pharmaceutical Sciences	AU, SP	CHEM 2520
<b>PHR 4600</b>	3	Pharmaceutical Sciences Lab	AU, SP	PHR 3200 (co); CHEM 2540
<b>PHR 4000</b>	5	Molecules to Medicines I	AU, SP	PHR 3200
<b>PHR 4610</b>	4	Experimental Techniques in Drug Discovery	AU only	PHR 3200 or equiv.
<b>PHR 4010</b>	5	Molecules to Medicines II	AU, SP	PHR 4000 & PHR 3100

## Drug Discovery and Development Pathway, cont.

### Additional BSPS Coursework

<b>Choice Sciences</b>	Complete 14 credit hours
<b>Pharmacy Electives</b>	Complete 10 credit hours

### Sample Curriculum Plan

Autumn			Spring		
PHR 1100	1	Survey	MATH 1150**	5	Pre-Calculus
PHR 2500	3	Drug Dis/Dev/Delivery	CHEM 1220*	5	Gen. Chem. II
CHEM 1210*	5	Gen. Chem. I	ENG 1110.xx	3	GE WIL
GE	3	LVPA	PHR 2530	2	Intro to Pharm Sci Research
PHR 2100	.5	Career Devo I	GENED 1201	1	Launch Seminar
GE	3	Social/Beh. Sci			
	15.5			16	

Autumn			Spring		
CHEM 2510*	4	Organic Chemistry I	CHEM 2520*	4	Organic Chemistry II
CHEM 2540	2	O-Chem I Lab	--	4	Choice Science
PHR 3110	3	Drugs, Data, & Discourse	GE	3	REGD
PHR 3500	2	Pharmacoethics	GE	3	Historical/Cultural Studies
BIO 1113.01	4	Biology	PHR ____	2	BSPS Elective
PHR ____	2	BSPS Elective			
	17			16	

Autumn			Spring		
PHR 3200*	5	Biochemistry	PHR 4000*	5	Molecules to Medicines
PHR 4600	3	Pharm. Sci. Lab	PHR 3100*	4	Physiology
GE	3	Citizenship Div/Just World	PHR ____	3	BSPS Elective
--	3	Choice Science	GE	3	Health & Wellbeing
			PHR 2101	.5	Career Devo II
	14			15.5	

Autumn			Spring		
PHR 4010*	5	Molecules to Medicines II	GE	3	Citizenship Div/Just World
PHR 4610*	4	Experimental Tech. Drug Dis.	--	4	Choice Science
GE	3	Health & Wellbeing	PHR ____	3	BSPS Elective
--	3	Choice Science	STAT 2480	3	Stats. Life Sci.
			GENED 4001	1	Reflection Seminar
	15			14	

**\* Keep in semester shown. Moving these may affect timeline to degree.**

**\*\*MATH 1150 and CHEM 1210 enrollment may depend on Math Placement.**