



Drug Discovery and Development Pathway

Science & Math Requirements

Course	Title	Hours	Prerequisites
MATH 1150 or MATH 1148+1149	Pre-Calculus or higher; or, College Algebra & Trigonometry	5 4+3	See course catalog
PHR 2314	Quantitative Foundations in Pharm Sci <i>only required for students needing MATH 1148</i>	2	MATH 1148 (corequisite)
STAT 1450, 2450 or 2480	Statistics (algebra-based or calculus-based); or, Statistics for the Life Sciences	3 3	Varies based on selection; see course catalog
CHEM 1210	General Chemistry I	5	See course catalog
CHEM 1220	General Chemistry II	5	CHEM 1210
BIO 1113 1113.01 or 1113.02	Biological Sciences: Energy Transfer & Development	4-5	See course catalog
CHEM 2510	Organic Chemistry I	4	CHEM 1220
CHEM 2540	Organic Chemistry I Lab	2	CHEM 2510 (concurrent)
CHEM 2520	Organic Chemistry II	4	CHEM 2510
PHR 3100	Human Physiology & Disease	4	BIO 1113 <u>and</u> CHEM 1210

BSPS Core Requirements

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

General Education Requirements

Course	Requirement	Hours
GENED 1201	GE Launch Seminar	1
ENG 1110	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

GE continued

See course catalog	Themes: Citizenship for a Diverse & Just World	4-6
See course catalog	Themes: Choice Theme	4-6
GENED 4001	GE Reflection Seminar	1
See course catalog	<u>Civic Literacy</u> <i>not required for students admitted SU26 or prior</i>	3

Additional BSPS Coursework

Choice Sciences	Complete 14 credit hours
Pharmacy Electives	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
Civic Literacy	3	Civic Literacy	PHR 2101	.5	Career Devo II
	17			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.