# PHARMACEUTICAL SCIENCES CONCENTRATION (B.H.S.)

PLEASE NOTE: Application to or awarding of the Bachelor of Health Science with a concentration in pharmaceutical sciences degree retroactively or after a subsequent higher level degree in this discipline has been conferred is not permitted.

The Eugene Applebaum College of Pharmacy and Health Sciences has established a combined undergraduate and graduate program. Qualified senior students may enroll simultaneously in the undergraduate Bachelor of Health Science with a concentration in pharmaceutical sciences degree program and the graduate Doctor of Pharmacy (Pharm.D.) degree program and apply a maximum of thirty-three credits toward both the undergraduate and graduate degree.

Those who are enrolled in this program may expect to complete the B.H.S. pharmaceutical sciences concentration and the Pharm.D. degrees in seven years of full-time study.

NOTE: The B.H.S. pharmaceutical sciences concentration does not qualify the holder for licensure as a pharmacist. The Pharm.D. degree is required to qualify the holder for licensure as a pharmacist.

#### **Admission Requirements**

All applicants must satisfy the undergraduate admission (http://bulletins.wayne.edu/undergraduate/general-information/admission/) requirements to the University. Admission to the Doctor of Pharmacy degree program (see below) prior to the beginning of the senior year is required for completion of the B.H.S. pharmaceutical sciences concentration program. Admission to the Pharm.D. program is highly competitive. Students should refer to the Graduate Bulletin for admission and course requirements for the Pharm.D. degree.

### **Program Administration**

The Office of Student Affairs in the Eugene Applebaum College of Pharmacy and Health Sciences will certify completion of the B.H.S. pharmaceutical sciences concentration/Pharm.D. program. When students complete requirements for the B.H.S. pharmaceutical sciences concentration, they will complete an application for graduation with accompanying fee in order for the graduation audit to be completed prior to degree certification. Information about applying for degree can be found online (http://reg.wayne.edu/students/graduation.php).

The B.H.S. pharmaceutical sciences concentration degree requires completion of a minimum of 120 credits consisting of courses prerequisite to admission to the Pharm.D. program and courses that comprise the first year of that program. This curriculum is outlined below as science prerequisites, non-science prerequisites, General Education Requirements (http://bulletins.wayne.edu/undergraduate/general-information/general-education/), and First Professional Year requirements.

All course work for the B.H.S. pharmaceutical sciences concentration must be completed in accordance with the academic procedures of the University (http://bulletins.wayne.edu/undergraduate/general-information/academic-regulations/) and the College (http://bulletins.wayne.edu/undergraduate/college-pharmacy-health-sciences/academic-regulations/) governing undergraduate scholarship and degrees. Students will need to complete 120 credits with a g.p.a. of 2.0 or better, including courses taken that apply to the pharmaceutical concentration. Students who have successfully completed at least the

first professional year in the Pharm.D. program at Wayne State University are eliqible for the B.H.S. pharmaceutical sciences concentration degree.

Code	Title	Credits		
Science Requirements				
BIO 1510	Basic Life Mechanisms	3		
BIO 2270 & BIO 2271	Principles of Microbiology and Principles of Microbiology Lab	5		
BIO 2870	Anatomy and Physiology	5		
BIO 3200	Human Physiology	3		
CHM 1100 & CHM 1130	General Chemistry I and General Chemistry I Laboratory	5		
CHM 1140 & CHM 1150	General Chemistry II and General Chemistry II Laboratory	5		
CHM 1240 & CHM 1250	Organic Chemistry I and Organic Chemistry I Laboratory	5		
CHM 2220 & CHM 2230	Organic Chemistry II and Organic Chemistry II Laboratory	5		
CHM 5600	Survey of Biochemistry	3		
MAT 2010	Calculus I	4		
PHY 2130 & PHY 2131	Physics for the Life Sciences I and Physics for the Life Sciences Laboratory	5		
Non-Science Prerequisites				
COM 1010	Oral Communication: Basic Speech	3		
ENG 1020	Introductory College Writing	3		
STA 1020	Elementary Statistics	3		
Additional General Education Requirements				
Social Inquiry (SI)				
Cultural Inquiry (CI)				
Global Learning Inquiry (GL)				
Diversity, Equity & Inclusion Inquiry (DEI)				
Civic Literacy Inquiry (CIV)				
Intermediate Composition (IC)				

## First Professional Year (P-1) Requirements

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Fall Semester		Credits	
PHA 4105	Pathophysiology 1	3	
PHA 4125	Drug Literature Evaluation and Foundations of Research	3	
PSC 4115	Pharmaceutics I	3	
PSC 4125	Introduction to Pharmaceutical Sciences: Medicinal Chemistry / Pharmacology / Immunology	3	
PPR 4115	Social Administrative Sciences and Professional Development I	3	
	Credits	15	
Winter Semester			
PHA 4205	Pathophysiology II	2	
PHA 4225	Principles of Pharmacotherapy I: Respiratory, Gastroenterology, Allergy, Ophthalmology	4	
PHA 4235	Pharmacotherapeutic Problem Solving I: Respiratory, Gastroenterology, Allergy, Ophthalmology	2	
PSC 4215	Pharmaceutics II	2	
PSC 4225	Autonomic Pharmacology	2	
PPR 4245	Patient Care Lab 1	1	
PPR 4255	Social Administrative Sciences and Professional Development II	2	
	Credits	15	
Spring/Summer Semester			
PPR 4315	Pharmacy Jurisprudence I and Professional Responsibility	2	

PPR 4365	Introductory Pharmacy Practice Experience I	1
	Credits	3
	Total Credits	33

Additional undergraduate or professional courses may be needed to achieve the minimum 120 credits required to earn the B.H.S. degree.

#### **Clinical Education Requirements**

Clinical Education is provided throughout the Pharm.D. program including during the required B.H.S. pharmaceutical sciences concentration courses. Patient care involves inherent risk of exposure to potential diseases, particularly blood-borne pathogens, and the risk of possible mishaps in patient care. Therefore, all students are required to maintain health insurance coverage and liability insurance, both of which must be in effect prior to and during all periods in which the student is involved in clinical education. The student is responsible for the cost of these insurances and all other costs (such as travel, parking) associated with the clinical experiences throughout the program.