



# BIO-PHARMACY

## AT EASTERN ILLINOIS UNIVERSITY

NAME	
E NUMBER	
CATALOG	

2023-2024

### GENERAL REQUIREMENTS: 30-38 HRS

#### LANGUAGE: 9 HRS

Grade of "C" or better is required.

COURSE	HOURS	GRADE	SEMESTER
<b>ENG 1001G</b> Composition & Language	3		
<b>ENG 1002G</b> Composition & Language II	3		
<b>CMN 1310G</b> Intro. to Speech Comm.	3		

#### HUMANITIES/FINE ARTS: 9 HRS

COURSE	HOURS	GRADE	SEMESTER
<b>PHI 1000G/1900G</b> <sup>^</sup>	3		
<b>Fine Arts</b> _____	3		
<b>Humanities or Fine Arts</b> _____	3		

#### SENIOR SEMINAR: 3 HRS

Senior topic must be outside the major area. See Undergraduate Catalog for Senior Seminars outside of Biological Sciences.

COURSE	HOURS	GRADE	SEMESTER
<b>EIU</b> _____	3		

### SCIENCE CORE: 56 HRS

BIOLOGY COURSES	HOURS	GRADE	SEMESTER
<b>BIO 1150</b> Biology Forum	1		
<b>BIO 1500</b> General Biology I	4		
<b>BIO 1550G</b> General Biology II	4		
<b>BIO 3120</b> <sup>*</sup> Molecular & Cell Biology	4		
<b>BIO 3200</b> <sup>*</sup> Genetics	4		
<b>BIO 2220</b> <sup>†</sup> Anatomy & Physiology II	4		
<b>BIO 3180</b> <sup>*</sup> Ecology & Evolution	4		
<b>BIO 3300</b> <sup>*</sup> General Microbiology	4		
PHYSICS COURSES	HOURS	GRADE	SEMESTER
<b>PHY 1151G</b> <sup>*</sup> Principles Physics I	3		
<b>PHY 1152G</b> <sup>*</sup> Principles Physics I Lab	1		
<b>PHY 1161</b> <sup>*</sup> Principles Physics II	3		
<b>PHY 1162</b> <sup>*</sup> Principles Physics II Lab	1		

### MAJOR ELECTIVES: 21HRS

21 semester hours of elective course work in Biological Sciences (with the exception of **BIO 3400**, **BIO 4275**, workshops, and courses designed for General Education with the exception of **BIO 3888G**) or Mathematics or Physical Sciences courses above 2000 (with the exception of general education and **CHM 2310**). A minimum of 14 semester hours must be taken in the Biological Sciences.

<b>BIO 2210</b> (4) Anatomy and Physiology I	<b>BIO 3810</b> (3) Freshwater Ecology
<b>BIO 3035</b> (3) Economic Botany	<b>BIO 3850</b> (3) Environmental Biology
<b>BIO 3210</b> (4) Immunology	<b>BIO 3888G</b> (3) Tropical/Marine Ecology
<b>BIO 3312</b> (3) Horticulture	<b>BIO 3950</b> (3) Vertebrate Natural History
<b>BIO 3322</b> (3) Dendrology	<b>BIO 3952</b> (3) Invertebrate Natural History
<b>BIO 3330</b> (4) Introduction to Botany	<b>BIO 3960</b> (1-4) Special Topics
<b>BIO 3340</b> (4) Zoology	<b>BIO 4400</b> (1) Teaching in the Lab
<b>BIO 3450</b> (1-3) Independent Study	<b>BIO 4751</b> (3) Adv. Molec. & Cell Biol.
<b>BIO 3451</b> (1-3) Undergraduate Research	<b>BIO 4800</b> (2) Research Techniques
<b>BIO 3460</b> (4) Clinical Rotation	<b>BIO 4810</b> (4) Plant Ecology
<b>BIO 3610</b> (3) Survey of Algae & Fungi	<b>BIO 4812</b> (3) Fisheries Ecology & Mgmt
<b>BIO 3612</b> (3) Plant Evolution & Diversity	<b>BIO 4814</b> (3) Conservation Biology
<b>BIO 3620</b> (4) Funct. Comp. Anatomy	<b>BIO 4816</b> (3) Biotic Communities
<b>BIO 3622</b> (4) Embryology	<b>BIO 4818</b> (4) Environmental Microbiology
<b>BIO 3624</b> (3) Histology	<b>BIO 4820</b> (4) Spatial Analysis for Environmental Sciences
<b>BIO 3628</b> (4) Evolutionary Medicine	<b>BIO 4830</b> (3) Comp. Vertebrate Physiology
<b>BIO 3710</b> (3) Plant-Animal Interactions	<b>BIO 4832</b> (4) Animal Behavior
<b>BIO 3720</b> (4) Entomology	
<b>BIO 3740</b> (3) Clinical Mycology	

### SOCIAL/BEHAVIORAL SCIENCE: 9 HRS

Must be from two different disciplines. One course must meet Cultural & Diversity requirement

COURSE	HOURS	GRADE	SEMESTER
<b>PSY 1879G</b> Intro to Psychology	3		
<b>ECN 2800 OR 2801 OR 2802</b> <sup>#</sup> Economics of Social Issues/Macro/Micro	3		
	3		

### FOREIGN LANGUAGE: 0-8 HRS

Exempt if 2 yrs in high school with "C" average.

COURSE	HOURS	GRADE	SEMESTER
<b>WL</b> _____ <b>G</b>	4		
<b>WL</b> _____ <b>G</b>	4		

### SCIENCE AWARENESS: 7 HRS

Complete in major.

### MATHEMATICS: 3 HRS

Complete in major.

MATH COURSES	HOURS	GRADE	SEMESTER
<b>MAT 2110G</b> <sup>*</sup> Brief Calculus	3		
<b>BIO 4750</b> <sup>*</sup> Statistic Anly of Sci Data <b>OR MAT 2250G</b> <sup>*</sup> Elementry Statistics	4		
CHEMISTRY COURSES	HOURS	GRADE	SEMESTER
<b>CHM 1310G</b> General Chemistry I	3		
<b>CHM 1315G</b> General Chemistry I Lab	1		
<b>CHM 1410</b> <sup>*</sup> General Chemistry II	3		
<b>CHM 1415</b> <sup>*</sup> General Chemistry II Lab	1		
<b>CHM 2440</b> <sup>*</sup> Organic Chemistry I	3		
<b>CHM 2445</b> <sup>*</sup> Organic Chemistry I Lab	1		

<sup>\*</sup>Additional prerequisite classes may be required. See Undergraduate Catalog  
<sup>†</sup>BIO 2210 (Anatomy and Physiology I) prerequisite. BIO 2210 counts as BIO elective credit.  
<sup>#</sup>Required by some pharmacy schools  
<sup>^</sup>Recommended by some pharmacy schools  
 Departmental Exit Interview is also required prior to leaving EIU.

COURSE	HOURS	GRADE	SEMESTER
<b>BIO 2210</b> Anatomy & Physiology	4		
<b>CHM 2840</b> <sup>#</sup> Organic Chemistry II	3		
<b>CHM 2845</b> <sup>#</sup> Organic Chemistry II Lab	1		
<b>CHM 3450</b> <sup>#</sup> Biochemistry	3		

<b>BIO 4833</b> (4) Neurobiology of Diseases	<b>BIO 4952</b> (3) Herpetology
<b>BIO 4834</b> (4) Neurobiology	<b>BIO 4954</b> (3) Ornithology
<b>BIO 4835</b> (4) Advanced Neurobiology	<b>BIO 4956</b> (3) Mammalogy
<b>BIO 4836</b> (4) Pathogenic Microbiology	<b>BIO 4958</b> (4) Parasitology
<b>BIO 4892</b> (4) Intro. Paleobotany	<b>BIO 4960</b> (3) Wetland & Aqua. Vasc. Plants
<b>BIO 4914</b> (3) Plant Anatomy	<b>BIO 4984</b> (3) Evolutionary Biology
<b>BIO 4920</b> (3) Medicinal Plants	
<b>BIO 4940</b> (3) Phycology	
<b>BIO 4942</b> (3) Mycology	
<b>BIO 4944</b> (3) Lichens	
<b>BIO 4946</b> (3) Bryology	
<b>BIO 4948</b> (3) Plant Taxonomy	
<b>BIO 4950</b> (3) Ichthyology	

Courses numbered 5000-5499 inclusive, may be taken by a senior whose graduation requirements average 2.75 or higher, with the permission of the instructor and the Dean of the Graduate School.

### GRADUATION REQUIREMENTS:

<input type="checkbox"/> 120 Hours
<input type="checkbox"/> 40 SH of upper division courses (3000+)
<input type="checkbox"/> 30 SH in residence at EIU
<input type="checkbox"/> 30 SH junior-senior residency
<input type="checkbox"/> 12 SH senior residency
<input type="checkbox"/> 2.00 Cumulative GPA

<input type="checkbox"/> 2.00 Major GPA
<input type="checkbox"/> Cultural Diversity
<input type="checkbox"/> Application for Graduation (First semester junior year)
<input type="checkbox"/> Electronic Writing Portfolio 1 <input type="checkbox"/> 2 <input type="checkbox"/>
See <a href="http://www.eiu.edu/~assess/">www.eiu.edu/~assess/</a> for requirements

# BIO-PHARMACY

Pharmacists are essential healthcare professionals who enhance patient care and promote wellness. When pharmacists are involved in patient care, outcomes improve and costs decline. Pharmacy is a diverse and rewarding career, with opportunities for patient care, scientific research and innovation.

To prepare for a career in pharmacy, a student must complete a Doctor of Pharmacy (Pharm. D.) degree at a professional college of pharmacy. A Pharm.D. degree consists of 4 academic years of professional education. Although it is possible to apply for a Pharm.D. program after completing 60 semester hours at the undergraduate level, it is not the norm. Many students complete at least 3 years of undergraduate education, while most complete their baccalaureate degree. A "C" or better in all prerequisite coursework and a minimum of a 2.5 GPA are required, although the average accepted student has around a 3.5 GPA.

Pharmacy colleges encourage or require applicants to have volunteer or paid experience working with patients in a pharmacy or health-related setting (hospital, nursing home, etc.). Ongoing work or volunteer experience in a pharmacy setting may be an important factor in the admissions process. Most pharmacy degree programs require 1-4 letters of recommendation typically from a science professor and a pharmacist.

Most pharmacy programs utilize the PharmCAS application service ([www.pharmcas.org](http://www.pharmcas.org)). Applicants can apply as early as July one year prior to when they plan to enter a program

## WHAT MAKES YOU UNIQUE FROM OTHER APPLICANTS?

### HEALTHCARE EXPERIENCE

- Volunteer or work: hospitals, clinics, nursing homes, assisted living centers, crisis nursery, rehab centers are a few examples.
- Shadow/volunteer/work with pharmacists in a variety of settings.

### LEADERSHIP EXPERIENCE

Pharmacists are leaders. Demonstrated leadership skills are a must. Campus, church, and community organizations provide excellent leadership opportunities.

## RESOURCES

**American Association of Colleges of Pharmacy**  
[www.aacp.org](http://www.aacp.org)

**Chicago College of Pharmacy, Northwestern University**  
[www.midwestern.edu/ccp](http://www.midwestern.edu/ccp)

**Chicago State University College of Pharmacy**  
[www.csu.edu/pharmacy/](http://www.csu.edu/pharmacy/)

**Roosevelt University**  
[www.roosevelt.edu/Pharmacy](http://www.roosevelt.edu/Pharmacy)

**Rosalind Franklin University, North Chicago, IL**  
[rosalindfranklin.edu/collegeofpharmacy/](http://rosalindfranklin.edu/collegeofpharmacy/)

**Southern Illinois College of Pharmacy**  
[www.siu.edu/pharmacy/](http://www.siu.edu/pharmacy/)

**University of Illinois at Chicago College of Pharmacy**  
[www.uic.edu/pharmacy](http://www.uic.edu/pharmacy)

## SUGGESTED 4-YEAR SEQUENCE

YEAR 1 MUST EARN 30+ SH FOR SOPHOMORE STATUS			
FALL		SPRING	
ENG 1001G	3	ENG 1002G	3
BIO 1500	4	BIO 1550G	4
CHM 1310G/1315G	4	CHM 1410/1415	4
BIO 1150	1	<sup>1</sup> Gen Ed Elective	3
<sup>1</sup> Gen Ed Elective	3	<sup>2</sup> MAT Prereq	3
Total		Total	
	15		17
YEAR 2 MUST EARN 60+ SH FOR JUNIOR STATUS			
FALL		SPRING	
BIO 3120	4	BIO 3200	4
CHM 2440/2445	4	CHM 2840/2845	4
MAT 2110G	3	BIO 2210	4
<sup>1</sup> Gen Ed Elective	3	<sup>1</sup> Gen Ed Elective	3
Total		Total	
	14		15
YEAR 3 MUST EARN 90+ SH FOR SENIOR STATUS			
FALL		SPRING	
PHY 1151G/1152G (FA ONLY)	4	PHY 1161/1162 (SP ONLY)	4
BIO 2220	4	BIO 3300	4
BIO 4750 OR MAT 2250G	4	CMN 1310G	3
CHM 3450 (FA ONLY)	3	BIO Elective >3000	3
		<i>Apply to Pharmacy School</i>	
Total		Total	
	15		14
YEAR 4 MUST EARN 120 SH TO GRADUATE			
FALL		SPRING	
EIU 4XXXG	3	BIO 3180	4
BIO Elective >3000	3	BIO Elective > 3000	3
<sup>1</sup> Gen Ed Elective	3	<sup>1</sup> Gen Ed Elective	3
<sup>3</sup> Free Elective	3	<sup>3</sup> Free Elective	3
<i>Pharmacy School Admission Interviews</i>		<i>Exit Interview</i>	
Total		Total	
	12		13

<sup>1</sup> General Education Elective

<sup>2</sup> See Math Placement

<sup>3</sup> Take course that was not previously taken

The suggested schedule sequence assumes that the foreign language requirement has been completed.

## NOTES, QUESTIONS, MINOR REQUIREMENTS: