# **Pharmacy**

Department Information

· Department Web Site:

www.ndsu.edu/pharmacy/ (http://www.ndsu.edu/pharmacy/)

· Credential Offered:

B.S.; Pharm.D.

· Sample Program Guide:

catalog.ndsu.edu/programs-study/undergraduate/pharmacy/ (http://catalog.ndsu.edu/programs-study/undergraduate/pharmacy/)

## **Major Requirements**

# Major: Pharmaceutical Sciences (Includes Pre-Pharmacy) Requirements

Degree Type: B.S.

Minimum Degree Credits to Graduate: 127-136

## **University General Education Requirements**

A list of university approved general education courses and administrative policies are available here (http://catalog.ndsu.edu/past-bulletin-archive/2024-25/academic-policies/undergraduate-policies/general-education/#genedcoursestext).

Code	Title	Credits
Category C: Communication		12
ENGL 110	College Composition I	
ENGL 120	College Composition II	
COMM 110	Fundamentals of Public Speaking	
Upper Division Writing <sup>†</sup>		
Category R: Quantitative Reasoning <sup>†</sup>		3
Category S: Science and Technology <sup>†</sup>		10
Category A: Humanities and Fine Arts <sup>†</sup>		6
Category B: Social and Behavioral Sciences <sup>†</sup>		6
Category W: Wellness <sup>†</sup>		2
Category D: Cultural Diversity *†		
Category G: Global Perspectives *†		
Total Credits		39

Courses for category D & G are satisfied by completing D & G designated courses in another general education category.

t

General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.

## **Pre-Pharmacy Requirements**

## **DEGREE NOTES:**

- Student admitted to the Pharm.D. program will earn a Bachelor of Science Degree with a major in Pharmaceutical Sciences with successful completion of all courses through the second year of the professional Pharm.D. program as well as undergraduate graduation requirements including general education.
- Selected Core Courses see information below for grading and GPA information.

Code	Title	Credits
BIOL 150	General Biology I	4
& 150L	and General Biology I Laboratory	
BIOL 151	General Biology II	4
& 151L	and General Biology II Laboratory *	
BIOL 220	Human Anatomy and Physiology I	4
& 220L	and Human Anatomy and Physiology I Laboratory *	

#### Pharmacy

2

BIOL 221 & 221L	Human Anatomy and Physiology II and Human Anatomy and Physiology II Laboratory	4
CHEM 121 & 121L	General Chemistry I and General Chemistry I Laboratory *	4
CHEM 122 & 122L	General Chemistry II and General Chemistry II Laboratory *	4
CHP 190		3
COMM 110	Fundamentals of Public Speaking *	3
ECON 201	Principles of Microeconomics *	3
ENGL 120	College Composition II *	3
MATH 146	Applied Calculus I *	4
MICR 350 & 350L	General Microbiology and General Microbiology Lab *	5
PHYS 211	College Physics I	3
STAT 330	Introductory Statistics *	3
Biochemistry - select from below: 1		5 or 6
BIOC 460 & BIOC 461	Foundations of Biochemistry and Molecular Biology I and Foundations of Biochemistry and Molecular Biology II	
PSCI 301	Biochemistry and Molecular Biology for Pharmacists (Limited to Early Admission Pathway (EAP) students)	
Organic Chemistry - select from below: 1		5 or 7
CHEM 341 & 341L & CHEM 342	Organic Chemistry I and Organic Chemistry I Laboratory and Organic Chemistry II *	
PSCI 300	Pharmaceutical Organic Chemistry (Limited to Early Admission Pathway (EAP) students)	
Upper Division Writing - select from below <sup>1</sup>		3
ENGL 324	Writing in the Sciences	
or ENGL 325	Writing in the Health Professions	
PHRM 324	Writing and Professionalization in Pharmacy (Limited to Early Admission Pathway (EAP) students)	
Professional Pharmacy P1 & P2 Years		72-76

Curricular plan based on traditional admissions path or early acceptance path. Consult adviser for additional information.

## **Selected Core Courses**

Selected core courses will be used for selection criteria to determine GPA used in calculation for admission to the professional program. These courses must show evidence of letter grade, or other means of demonstrating acceptable competency (i.e. AP – CEEB) and MUST be completed by the end of fall semester prior to the admissions deadline to apply to the pharmacy program. Remaining courses, which are required and listed in the pre-pharmacy curriculum, MUST be completed by the end of spring term. The only exception to this is that up to six credits of electives may be completed during the summer term.

## **Pre-Professional Pharmacy Requirements and Notes**

 All courses listed for pre-pharmacy must be complete in order to apply for the professional program in the last spring semester in which prerequisite courses are taken.

#### **Degree Requirements and Notes**

- All required courses must be completed with a grade of 'C' or above.
- All students must maintain a semester GPA of 2.0 or above for each semester in the College. A student who fails to meet this standard for two
  successive or three non-successive semesters may be terminated from enrollment in the College of Health Professions.