

# PHARMACEUTICAL SCIENCES BACHELOR OF SCIENCE

## Pharmaceutical Science, Bachelor of Science Requirements

Code	Title	Credits
<b>GENERAL EDUCATION REQUIREMENTS - 34 Hours Required</b>		
Minimum of "C-" required for University Gen Eds.		
<b>Fundamental Skills</b>		<b>15</b>
<b>Writing – 6 hrs.</b>		
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	
<b>Oral Communication – 3 hrs.</b>		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
<b>Quantitative Literacy – 3 hrs.</b>		
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
<b>Data Literacy – 3 hrs.</b>		
Select one from the following:		
STAT 1100	DATA LITERACY AND VISUALIZATION	
STAT 1530	ELEMENTARY STATISTICS	
Until Fall 2028, students can satisfy this requirement with an approved data literacy course, or any approved natural or social science general education course.		
<b>Breadth of Knowledge</b>		<b>13</b>
Social Science – 3 hrs.		
Humanities – 3 hrs.		
Natural & Physical Science (must complete a lab) – 4 hrs.		
Arts – 3 hrs.		
<b>Individual and Social Responsibility</b>		<b>6</b>
Cultural Knowledge – 3 hrs.		
Civic Knowledge and Engagement – 3 hrs.		
<b>MAJOR REQUIREMENTS - Minimum grades of "C" required in each major and cognate course.</b>		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
<b>Pharmaceutical Sciences - 75 Hours Required</b>		<b>28</b>
<b>Required Chemistry Coursework</b>		
CHEM 1180 & CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY (**^)	
CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY	
CHEM 2250	ORGANIC CHEMISTRY I	

CHEM 2260 & CHEM 2274	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY	
CHEM 2400 & CHEM 2404	QUANTITATIVE ANALYSIS and QUANTITATIVE ANALYSIS LAB	
CHEM 4650 & CHEM 4654	BIOCHEMISTRY I and BIOCHEMISTRY I LABORATORY	
CHEM 4660 & CHEM 4664	BIOCHEMISTRY II and BIOCHEMISTRY II LABORATORY	
<b>Required Pharmaceutical Coursework</b>		<b>15</b>
PHSI 1010	INTRODUCTION TO FOUNDATIONS AND CAREER PATHS IN PHARMACEUTICAL SCIENCES	
PHSI 3110	CURRENT RESEARCH TOPICS IN PHARMACEUTICAL SCIENCES	
PHSI 3210	FOUNDATIONS OF MOLECULES TO MEDICINE	
PHSI 3310	APPLICATIONS OF MOLECULES TO MEDICINE	
PHSI 4010	INTRODUCTION TO PHARMACEUTICAL SCIENCE	
PHSI 4210	CONTEMPORARY USE OF MEDICINES	
PHSI 4410	PHARMACEUTICAL SCIENCES RESEARCH EXPERIENCE	
PHSI 4510	ADVANCED RESEARCH EXPERIENCE IN PHARMACEUTICAL SCIENCES	
<b>Select 6 hours of additional Pharmaceutical Science courses in consultation with advisor</b>		<b>6</b>
<b>Other Required Coursework (Required Cognate)</b>		<b>26</b>
BIOL 1450	BIOLOGY I (**)	
BIOL 2740	HUMAN ANATOMY AND PHYSIOLOGY I	
BIOL 2840	HUMAN ANATOMY AND PHYSIOLOGY II	
MATH 1940	CALCULUS FOR BIOMEDICINE	
or MATH 1950	CALCULUS I	
PHYS 1110 & PHYS 1154	PHYSICS FOR LIFE SCIENCE I and GENERAL PHYSICS LABORATORY I (**)	
An Approved Statistics Course (PSYC 3130, SOC 2130, STAT 3000, or BIOL 4110)		
<b>College Requirements</b>		<b>15-30+</b>
Bachelor Science Cognate Requirement: See major requirements		
<b>College Breadth (choose one option)</b>		
Option 1: Complete any UNO minor or undergraduate certificate* - 15+ hours		
Option 2: Additional General Education Requirements - 18+ hours		
Additional Quantitative Literacy - 3 hours		
Additional Social Science Gen. Ed. from another Discipline - 3 hours		
Additional Humanities Gen. Ed. from another Discipline - 3 hours		
HIST 1000 and HIST 1010 - 6 hours		
Additional Natural Science with or without Lab - 3-4 hours		
Option 3: CAS comprehensive major (50+ hours) OR any second UNO major (30+ hours)		
*With the exception of the Chemistry minor		
<b>ELECTIVES</b>		
Elective hours as required to reach a total of 120 hours		

# Pharmaceutical Science, Bachelor of Science Four Year Plan

## Freshman

Fall		Credits
ENGL 1150	ENGLISH COMPOSITION I	3
CHEM 1180 & CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY	4
MATH 1940 or MATH 1950	CALCULUS FOR BIOMEDICINE or CALCULUS I	5
PHSI 1010	INTRODUCTION TO FOUNDATIONS AND CAREER PATHS IN PHARMACEUTICAL SCIENCES	1
General Education Course or Elective		3
Attend Durango Days; other campus events. Set up a Handshake account and take the Pathway U career assessment. Attend the Student Involvement & Volunteer Fair to explore student organizations. Make advising appointment for spring: Sept-Oct. Work with your advisor to develop your Pathway in Stellic.		
<b>Credits</b>		<b>16</b>

## Spring

ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	3
CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY	4
BIOL 1450	BIOLOGY I	5
Approved Statistics Course: STAT 3000, PSYC 3130, SOC 2130, BIOL 4110		3
Attend campus events such as major exploration week to get an idea of interests and career paths. Schedule a resume review with UNO Career Services. Visit faculty office hours and ask about undergraduate research opportunities. Make advising appointment for summer and fall: February – March.		
<b>Credits</b>		<b>15</b>

## Sophomore

Fall		Credits
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
BIOL 1160	TERMINOLOGY OF HUMAN HEALTH & DISEASE	2
BIOL 2740	HUMAN ANATOMY AND PHYSIOLOGY I	4
CHEM 2250	ORGANIC CHEMISTRY I	3
General Education Course or Elective (PHIL 2030 Intro to Ethics if pre-pharmacy)		3
Attend the Career & Internship Fair to start networking with employers. Look for volunteer, research, or part-time work to gain experience. Join a student organization or club related to your field or interests. Make advising appointment for spring: Sept. - Oct.		
<b>Credits</b>		<b>15</b>

## Spring

BIOL 2840	HUMAN ANATOMY AND PHYSIOLOGY II	4
CHEM 2260 & CHEM 2274	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY	5

PHSI 3310	APPLICATIONS OF MOLECULES TO MEDICINE	3
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Elective		3
Attend a career fair for informational and networking purposes. Update your resume and LinkedIn profile with new experiences. Investigate and apply for summer internships, research, or study abroad programs. Make advising appointment for summer and fall: February – March.		

<b>Credits</b>		<b>15</b>
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## Junior

Fall		Credits
CHEM 4650 & CHEM 4654	BIOCHEMISTRY I and BIOCHEMISTRY I LABORATORY	4
PHSI 3110	CURRENT RESEARCH TOPICS IN PHARMACEUTICAL SCIENCES	1
PHSI 3210	FOUNDATIONS OF MOLECULES TO MEDICINE	3
Pharmaceutical Sciences Elective Course		1
General Education Course or Elective		3
Elective		3
Apply for a paid internship or research assistantship. Attend a mock interview workshop or use online interview tools with Career Services. Start researching and visiting graduate programs or professional schools. Visit Career Center, continue updating resume. Make advising appointment for spring: Sept-Oct.		
<b>Credits</b>		<b>15</b>

Spring		Credits
CHEM 2400 & CHEM 2404	QUANTITATIVE ANALYSIS and QUANTITATIVE ANALYSIS LAB	4
CHEM 4660 & CHEM 4664	BIOCHEMISTRY II and BIOCHEMISTRY II LABORATORY	4
PHSI 4410	PHARMACEUTICAL SCIENCES RESEARCH EXPERIENCE	1
Pharmaceutical Sciences Elective Course		3
Elective		3
Request letters of recommendation from faculty for jobs or grad school. Attend the All-Majors Career Fair with a plan to network. Meet with your advisor or submit for a graduation check-in to review remaining degree requirements. Make advising appointment for summer and fall: February – March.		
<b>Credits</b>		<b>15</b>

Senior		Credits
PHYS 1110 & PHYS 1154	PHYSICS FOR LIFE SCIENCE I and GENERAL PHYSICS LABORATORY I	5
PHSI 4010	INTRODUCTION TO PHARMACEUTICAL SCIENCE	3
PHSI 4510	ADVANCED RESEARCH EXPERIENCE IN PHARMACEUTICAL SCIENCES	1
General Education Course or Elective		3
Pharmaceutical Science Elective Course		1-2
Check in with Career Center for networking tips. Finalize graduate school applications or job search strategy. Attend a career fair and start applying for full-time jobs. Prepare for interviews and salary negotiations with Career Services. Make advising appointment for spring: Sept. - Oct.		
<b>Credits</b>		<b>13-14</b>

Fall		Credits
PHYS 1110 & PHYS 1154	PHYSICS FOR LIFE SCIENCE I and GENERAL PHYSICS LABORATORY I	5
PHSI 4010	INTRODUCTION TO PHARMACEUTICAL SCIENCE	3
PHSI 4510	ADVANCED RESEARCH EXPERIENCE IN PHARMACEUTICAL SCIENCES	1
General Education Course or Elective		3
Pharmaceutical Science Elective Course		1-2
Check in with Career Center for networking tips. Finalize graduate school applications or job search strategy. Attend a career fair and start applying for full-time jobs. Prepare for interviews and salary negotiations with Career Services. Make advising appointment for spring: Sept. - Oct.		
<b>Credits</b>		<b>13-14</b>

Spring		Credits
PHSI 4210	CONTEMPORARY USE OF MEDICINES	2

Pharmaceutical Sciences Elective Course	1
General Education Course or Elective	3
General Education Course or Elective	3
Elective	3
Elective	3
Complete your final advising check before graduation. Polish your resume, cover letters, and LinkedIn profile. Stay connected by joining alumni networks and professional organizations. Apply for graduation via MavLink.	
<b>Credits</b>	<b>15</b>
<b>Total Credits</b>	<b>119-120</b>

**College Breadth:** Students should plan on using at least 15 hours of "Electives" to fulfill Option 1, 2, or 3, of the College of Arts and Sciences' breadth requirement.

**Upper Level Credits:** Students need 27 upper level credits throughout the degree with at least 18 upper level credits within the major. Electives may need to be selected at the 3000-4000 level to reach these minimums.

**Additional Information About this Plan:**

**University Degree Requirements:** The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. In order to graduate on-time (four years for an undergraduate degree), you need to take 30 hours each year.

**Placement Exams:** For Math, English, World Language, a placement exam may be required. More information on these exams can be found at <https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php>

Transfer credit or placement exam scores may change suggested plan of study.

**GPA Requirements: 2.0**

**Note:** This plan provides a general guide, but your specific courses, experiences, and career goals may differ. Work with your academic advisor to ensure you're meeting degree requirements and consult with career advisors to explore internships, research opportunities, and post-graduation plans. Regular check-ins will help you stay on track and make the most of your time at UNO!