



**Plan of Study**  
**Biology for Pre-Pharmacy**  
 Catalog Year: 2021-2022

**Sample Schedule:** students are not limited to this plan; it is meant to serve as a guide for planning purposes in discussions with your academic advisor. This plan is one possible path to completing this degree in *four years*.

**FIRST YEAR**

**First Semester**

Course	Prerequisites / Comments	Credits	Semester Offered
BIOL 145-Intro to Sci. Inquiry		1	F
BIOL 151 General Biology I* and Lab		4	F
CHEM 112 General Chemistry I * and Lab	Math 114, 115, 129, 121, 123, 125 or 281	4	F
MATH 1XX College Algebra/Trigonometry/Calculus I**	Placement reports determine	3-4	Varies
CSC 105 Intro to Computers		3	F,S,SU
	<b>Total Credit Hours</b>	<b>15-16</b>	

**Second Semester**

Course	Prerequisites / Comments	Credits	Semester Offered
BIOL 153 General Biology II * and Lab		4	S
ENGL 101 Composition I*		3	F,S
CHEM 114 General Chemistry II* and Lab	CHEM 112; Math 114, 115, 129, 121, 123, 125, or 281	4	S
PSYC 101 General Psychology **		3	F,S
CIS 123 Prob. Solving or CSC 150 Comp. Science I		3	F,S,SU
	<b>Total Credit Hours</b>	<b>17</b>	

**SECOND YEAR**

**Third Semester**

Course	Prerequisites / Comments	Credits	Semester Offered
BIOL 331 Microbiology* and Lab	BIOL 151 and Lab	4	F
BIOL 280 Inquiry and Analysis in Biology and Lab	BIOL 151 and Lab or BIOL 153 and Lab	2	F
CHEM 326 Organic Chemistry I*	CHEM 114 and Lab	3	F
CHEM 326L Organic Chemistry I Lab*		1	F
Arts and Humanities		3	Varies
	<b>Total Credit Hours</b>	<b>16</b>	

**Fourth Semester**

Course	Prerequisites / Comments	Credits	Semester Offered
BIOL 221 Human Anatomy** and Lab	BIOL 151 and Lab	4	S
CHEM 328 Organic Chemistry II**	CHEM 326 and Lab	3	S
CHEM 328L Organic Chemistry II Lab**		1	S
SPCM 101 Oral Communications*		3	F,S
MATH 281 Introduction to Statistics**		3	F,S,SU
	<b>Total Credit Hours</b>	<b>14</b>	

### THIRD YEAR

#### Fifth Semester

Course	Prerequisites / Comments	Credits	Semester Offered
BIOL 311 Ecology and Lab	BIOL 151 and Lab; or BIOL 153 and Lab	4	F Odd Years
BIOL 325 Physiology* and Lab	BIOL 151 and Lab; or BIOL 153 and Lab; or Biol 221 and Lab; or CHEM 112 and Lab	4	F
PHYS 211 University Physics I* and Lab	Math 123 or Math 125	4	F
ENGL 201 Composition II*	ENGL 101	3	F,S,SU
<b>Total Credit Hours</b>		<b>15</b>	

#### Sixth Semester

Course	Prerequisites / Comments	Credits	Semester Offered
BIOL 371 Genetics and Lab	BIOL 101 and Lab; or Biol 151 and Lab	4	S Even Years
CHEM 460 Biochemistry* and Lab	CHEM 326 and Lab	3	S Even Years
BIOL 303 Intro to Biological Instrumentation	BIOL 151 and Lab; and CSC 105	3	S Odd Years
PHYS 213 University Physics II* and Lab	MATH 123 and PHYS 211 and Lab	4	S
Arts and Humanities		3	Varies
<b>Total Credit Hours</b>		<b>16</b>	

### FOURTH YEAR

#### Seventh Semester

Course	Prerequisites / Comments	Credits	Semester Offered
BIOL 422 Immunology and Lab	BIOL 151 and Lab; and CHEM 112 and Lab	3	F Even Years
BIOL Elective		4	Varies
Social Science Elective		3	Varies
ECON 201 Principles of Microeconomics*		3	F,S,SU
<b>Total Credit Hours</b>		<b>13</b>	

#### Eighth Semester

Course	Prerequisites / Comments	Credits	Semester Offered
BIOL 343 Cell Molecular Biology** and Lab	BIOL 151 and Lab	4	S Odd Years
BIOL Elective		3	Varies
BIOL 498 Undergrad. Research	Consent of instructor	2	F,S,SU
BIOL 335 Bioinformatics	BIOL 151 and Lab	3	S Even Years
ENGL 379 Tech Communications	ENGL 201	3	S
<b>Total Credit Hours</b>		<b>15</b>	

\* Required for all pharmacy schools

\*\* Required or recommended by many pharmacy schools

**Information is subject to change. This is not a contract.**

Semester: F = Fall; S = Spring; SU = Summer (online only)