

**Bachelor of Science in Biology**  
**Biotechnology & Molecular Biology Concentration**  
**Freshman Curriculum Planning Guide and Baccalaureate Degree Plan**  
**Fayetteville State University**  
**(2022-2023)**

University College Core Curriculum (39 Credits)	Course	Cr.	Term	Grade
<b>Transitional Studies – University Studies (2 Credits)</b> <i>Select one option from (UNIV 101/102) or UNIV 110 or UNIV 111 or UNIV 112</i>		2		
<b>Transitional Studies – Life Skills (2 Credits)</b> <i>Select two credits from the following: ENTR 100 or FINC 100 or GEOG 110 or HEED 112 or HEED 113 or PEDU 101 or PEDU 107 or PEDU 112 or PEDU 120 or PEDU 122 or PEDU 130 or PEDU 132 or PEDU 140</i>		2		
<b>Communication Skills – Written Communication (3 Credits) – ENGL 110</b>		3		
<b>Information Literacy (3 Credits) – ENGL 120</b>		3		
<b>Communication Skills – Oral Communication (3 Credits)</b> <i>SPEE 200 Or BADM 215</i>		3		
<b>Reasoning Skills – Critical Thinking (3 Credits)</b> <i>Select one from the following: PHIL 110 or PHIL 220</i>		3		
<b>Reasoning Skills – Quantitative Reasoning (3 Credits)</b> <i>Select one from the following: MATH 123 or MATH 126 or MATH 129 or MATH 130 or MATH 131 or POLI 240 or STAT 202</i>	MATH 129	3		
<b>Scientific Literacy – Natural Sciences (7-8 Credits)<sup>1</sup></b> <i>Select from the following: ASTR 101/101L or ASTR 102/102L or ASTR 213 or ASTR 214 or BIOL 111/111L or BIOL 131/BIOL 131L or BIOL 150/150L or BIOL 160/160L or CHEM 105/105L or CHEM 106/106L or CHEM 141/141L or CHEM 161/161L or ENEC 201/201L or ENEC 202/202L or GEOG 200 or NSCI 111/111L or NSCI 121/121L or PHYS 115 or PHYS 116 or PHYS 125/125L or PHYS 126/126L</i>	BIOL 150 and 150L	4		
	BIOL 160 and 160L	4		
<b>Scientific Literacy – Social Sciences (3 Credits)</b> <i>CRJC 210 or ECON 211 or ECON 212 or GEOG 210 or HIST 212 or HIST 271 or POLI 200 or POLI 210 or POLI 220 or POLI 270 or PSYC 210 or SOCI 210</i>		3		
<b>Humanities and Creative Arts (3 Credits)</b> <i>Select one from the following: ART 210 or COMM 220 or ENGL 220 or ENGL 223 or ENGL 240 or ENGL 250 or ENGL 253 or HIST 210 or HUMN 211 or HUMN 212 or MUSI 210 or MUSI 225 or MUSI 260 or PHIL 210 or RELI 215 or THEA 203</i>		3		
<b>Global Literacy (3 Credits)<sup>5</sup></b> <i>Select one from the following: ANTH 210 or ART 150 or ART 215 or BADM 210 or CHIN 110 or CHIN 120 or ENGL 211 or ENGL 212 or FREN 110 or FREN 120 or GEOG 220 or HIST 110 or HIST 120 or HIST 270 or PHIL 211 or POLI 230 or SOCI 150 or SPAN 110 or SPAN 112 or SPAN 120 or SPAN 122 or SPAN 211 or THEA 242 or YORU 110 or YORU 120</i>		3		
<b>Ethics and Civic Engagement (3 Credits)</b> <i>Select three credits from the following: BADM 220 or CRJC 203 or EDUC 211 or ENEC 210 or ENGL 232 or ENGL 233 or (ETCE 101/102/103) or ETCE 200 or GEOG 270 or HCM 200 or HIST 211 or PHIL 120 or PHIL 212 or PHIL 250 or PNUR 210 or POLI 150 or SPTM 210 or SWRK 220</i>		3		

**Notes**

UNIV 101-UNIV 102 required for all first-time students; UNIV 110 required for transfer students with fewer than 30 transfer credits. Students do not earn credit if requirement is waived. UNIV 111 may be required based on academic performance

Not required for students with 60+ transfer credits. Students do not earn credit if requirement is waived

MATH 121 may be required based on profile scores. Some core courses require a one-hour lab.

At least one natural science class must include its associated lab. Some majors require two lab sciences, increasing requirement to 8 credits

Not required for students with 30 or more transfer credits from a foreign institution. Students do not earn credit if requirement is waived.



<b>Program Requirements (81 Credits)</b>	<b>Course</b>	<b>Cr.</b>	<b>Term</b>	<b>Grade</b>	
<b>Required Major Courses (51 Credits)</b> <i>(BIOL 200 And BIOL 200L) And (BIOL 210 And BIOL 210L) And (BIOL 220 And BIOL 220L) And BIOL 225 And BIOL 320 And (BIOL 310 And BIOL 310L) (BIOL 330 And BIOL 330L) And (BIOL 350 And BIOL 350L) And BIOL 400 And BIOL 499 And (CHEM 141 And CHEM 141L) And (CHEM 161 And CHEM 161L) And (PHYS 115 And PHYS 125L) And (PHYS 116 And PHYS 126L).</i>	BIOL 200/200L	<b>51</b>			
	BIOL 210/210L				
	BIOL 220/220L				
	BIOL 225				
	BIOL 310/310L				
	BIOL 320				
	BIOL 330/330L				
	BIOL 351/351L				
	BIOL 400				
	BIOL 499				
	CHEM 141/141L				
	CHEM 161/161L				
	PHYS 115/125				
	PHYS 116/126L				
	<b>Required Concentration Electives (Select 27 Credits from the following):</b> <i>(BIOL 230 And BIOL 230L), (BIOL 240 And BIOL 240L), (BIOL 355 And BIOL 355L), (BIOL 370 And BIOL 370L), (BIOL 440 And BIOL 440L), (BIOL 470 And BIOL 470L), BIOL 430, BIOL 445, (BTCH 340 And BTCH 340L), (CHEM 223 And CHEM 223L), STAT 202., ENEC 420</i>		<b>27</b>		
<b>Other Required (3 Credits)</b>					
<i>MATH 130 Or Higher</i>	MATH 130	<b>3</b>			
<b>Total Credits</b>		<b>120</b>			

### Four-Year Plan

This Plan illustrates how students can meet degree course requirements in four years. Some courses listed below may be taken in an alternate order. Courses fulfilling requirements are listed on the previous pages. For information about prerequisites and other program requirements, consult the appropriate Catalog Program of Study and an advisor. Students should work with advisor to create and update an individual plan in Degree Works.

<b>Year 1 Fall</b>			<b>Year 1 Spring</b>		
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Requirement	Course	Cr
University Studies	UNIV 101	1
Written Communication	ENGL 110	3
Core Transitional Skills	See the core	2
Precalculus Mathematics I	MATH 129	3
Core Social Science	See core courses <sup>1</sup>	3
Core Humanities Creative Arts	See core courses <sup>1</sup>	3
<b>Total:</b>		<b>15</b>

Requirement	Course	Cr
University Studies	UNIV 102	1
Information Literacy	ENGL 120	3
Communication Skills	BADM 215 Or SPEE 200	3
Reason. Skills-Critical Thinking	PHIL 110 Or PHIL 220	3
Precalculus Mathematics II	MATH 130	3
Principles of Biology I w/ Lab	BIOL 150/150L	4
<b>Total:</b>		<b>17</b>

Year 2 Fall		
Requirement	Course	Cr
Principles of Biology II w/ Lab	BIOL 160/160L	4
General Chemistry I w/ Lab	CHEM 141/141L	4
Scientific Communication	BIOL 225	3
Core Global Literacy-Foreign Language	See core courses <sup>1</sup>	3
Core Ethics Civic Engagement	See core courses <sup>1</sup>	3
<b>Total:</b>		<b>17</b>

Year 2 Spring		
Requirement	Course	Cr
Cellular Biology w/ Lab	BIOL 200/200L	4
General Zoology w/ Lab	BIOL 220/220L	4
General Chemistry II w/ Lab	CHEM 161/161L	4
Introduction to Biotechnology	BTCH 210	3
<b>Total:</b>		<b>15</b>

Year 3 Fall		
Requirement	Course	Cr
General Botany w/ Lab	BIOL 210/210L	4
Biology Seminar	BIOL 320	1
Biotechniques I	BTCH 220	4
General Physics I	PHYS 115	3
College Physics I Lab	PHYS 125L	1
<b>Total:</b>		<b>13</b>

Year 3 Spring		
Requirement	Course	Cr
Principles of Genetics w/ Lab	BIOL 310/310L	4
Microbiology & Immunology w/ Lab	BIOL 330/330L	4
Biotechniques II	BTCH 230	4
General Physics II	PHYS 116	3
College Physics II Lab	PHYS 126L	1
<b>Total:</b>		<b>16</b>

Year 4 Fall		
Requirement	Course	Cr
Biostatistics	BIOL 400	3
Mol. Biol./Mol. Genet.	BIOL325/325L Or BTCH360/360L	4
Concentration Elective	See conc. Electives <sup>2</sup>	3
Concentration Elective	See conc. Electives <sup>2</sup>	3
<b>Total:</b>		<b>13</b>

Year 4 Spring		
Requirement	Course	Cr
Res. in Biotech/Senior Capstone	BTCH 490 Or BIOL 499	4
Concentration Elective	See conc. Electives <sup>2</sup>	4
Concentration Elective	See conc. Electives <sup>2</sup>	3
Concentration Elective	See conc. Electives <sup>2</sup>	3
<b>Total:</b>		<b>14</b>

#### Notes

- Core Courses: (UNIV 101/102) or UNIV 110 or UNIV 111 or UNIV 112; ENTR 100 or FINC 100 or GEOG 110 or HEED 112 or HEED 113 or PEDU 101 or PEDU 107 or PEDU 112 or PEDU 120 or PEDU 122 or PEDU 130 or PEDU 132 or PEDU 140; ENGL 110; ENGL 120; SPEE 200 Or BADM 215; PHIL 110 or PHIL 220; MATH 129 and MATH 130 or MATH 131; BIOL 150 and BIOL 150L And BIOL 160 And BIOL 160L; CRJC 210 or ECON 211 or ECON 212 or GEOG 210 or HIST 212 or HIST 271 or POLI 200 or POLI 210 or POLI 220 or POLI 270 or PSYC 210 or SOCI 210; ART 210 or COMM 220 or ENGL 220 or ENGL 223 or ENGL 240 or ENGL 250 or ENGL 253 or HIST 210 or HUMN 211 or HUMN 212 or MUSI 210 or MUSI 225 or MUSI 260 or PHIL 210 or RELI 215 or THEA 203; ANTH 210 or ART 150 or ART 215 or BADM 210 or CHIN 110 or CHIN 120 or ENGL 211 or ENGL 212 or FREN 110 or FREN 120 or GEOG 220 or HIST 110 or HIST 120 or HIST 270 or PHIL 211 or POLI 230 or SOCI 150 or SPAN 110 or SPAN 112 or SPAN 120 or SPAN 122 or SPAN 211 or THEA 242 or YORU 110 or YORU 120; BADM 220 or CRJC 203 or EDUC 211 or ENEC 210 or ENGL 232 or ENGL 233 or (ETCE 101/102/103) or ETCE 200 or GEOG 270 or HCM 200 or HIST 211 or PHIL 120 or PHIL 212 or PHIL 250 or PNUR 210 or POLI 150 or SPTM 210 or SWRK 220.
- Concentration Courses: BIOL 205, BIOL 410/410L Or (BICH 411/BICH 421), BIOL 430, BTCH 310, BTCH 320, BTCH 340, BTCH 350, BTCH 410, BTCH 425, BTCH 435/435L, BTCH 440, BTCH 450, BTCH 460, CHEM 223/223L, CHEM 225/225L.