Bachelor of Science in Biology Biotechnology and Molecular Biology Concentration Freshman Curriculum Planning Guide and Four-Year Plan Fayetteville State University (2019-2020)

| University College Core Curriculum (39 Credits) | Course | Cr. | Term | Grade |
|---|---------------|-----|------|-------|
| Transitional Studies – University Studies (2 Credits) ¹ Select one option from (UNIV 101/102) or UNIV 110 or UNIV 111 or UNIV 112 | | 2 | | |
| Transitional Studies – Life Skills (2 Credits) 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 | | 2 | | |
| Communication Skills – Written Communication (3 Credits) – ENGL 110 | | 3 | | |
| Information Literacy (3 Credits) – ENGL 120 | | 3 | | |
| Communication Skills – Oral Communication (3 Credits) Select one from the following: BADM 215 or SPEE 200 | | 3 | | |
| Reasoning Skills – Critical Thinking (3 Credits) ² Select one from the following: PHIL 110 or PHIL 220 | | 3 | | |
| Reasoning Skills – Quantitative Reasoning (3-4 Credits) ³ Select one from the following: MATH 129 or MATH 130 or MATH 131 | | 3 | | |
| Scientific Literacy – Natural Sciences (8 Credits) ⁴ | BIOL 150/150L | 4 | | |
| Select from the following: BIOL 150/150L and BIOL 160/160L | BIOL 160/160L | 4 | | |
| Scientific Literacy – Social Sciences (3 Credits) 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 | | 3 | | |
| Humanities and Creative Arts (3 Credits) 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 | | 3 | | |
| Global Literacy (3 Credits) ⁵ Select one from the following: CHIN 110 or CHIN 120 or FREN 110 or FREN 120 or SPAN 110 or SPAN 112 or SPAN 120 or SPAN 122 or SPAN 211 or YORU 110 or YORU 120 | | 3 | | |
| Ethics and Civic Engagement (3 Credits) ² 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 | | 3 | | |

Notes

- 1 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
- 2 Not required for students with 60+ transfer credits. Students do not earn credit if requirement is waived
- 3 MATH 121 may be required based on profile scores. Some core courses require a one-hour lab.
- 4 At least one natural science class must include its associated lab. Some majors require two lab sciences, increasing requirement to 8 credits
- 5 Not required for students with 30 or more transfer credits from a foreign institution. Students do not earn credit if requirement is waived.

| Program Requirements (81 Credits) | Course | Cr. | Term | Grade |
|--|-----------------------------------|-----|------|-------|
| Required Major Courses (62 Credits) | BIOL 200/200L | 4 | | |
| (BIOL 200 And BIOL 200L) And BIOL 225 And BIOL 320 And (BIOL 330 And BIOL 330L) And (BIOL 210 And BIOL 210L) And BIOL 400 And (BIOL 220 And BIOL 220L) And (BIOL 310 And | BIOL 225 | 3 | | |
| BIOL 310L) And BTCH 210 And BTCH 220 And BTCH 230 And (BTCH 360 And BTCH 360L) | BIOL 320 | 1 | | |
| Or (BIOL 325 And BIOL 325L) And (BTCH 490 Or BIOL 499) And (CHEM 141 And CHEM | BIOL 330/330L | 4 | | |
| 141L) And (CHEM 161 And CHEM 161L) And (PHYS 115 And PHYS 125L) And (PHYS 116 And PHYS 126L). | BIOL 210/210L | 4 | | |
| | BIOL 400 | 3 | | |
| | BIOL 220/220L | 4 | | |
| | BIOL 310/310L | 4 | | |
| | BTCH 210 | 3 | | |
| | BTCH 220 | 4 | | |
| | BTCH 230 | 4 | | |
| | BTCH 360/360L or BIOL 325/325L | 4 | | |
| | BTCH 490 or BIOL 499 | 4 | | |
| | CHEM 141/141L | 4 | | |
| | CHEM 161/161L | 4 | | |
| | PHYS 115/125L | 4 | | |
| | PHYS 116/126L | 4 | | |
| Required Concentration Electives (Select 16 Credits from the following): | | | | |
| (BIOL 410 And BIOL 410L) Or (BICH 411 And BICH 421) Or BIOL 430 Or BTCH 450 Or BTCH 310 Or BTCH 320 Or (BTCH 340 And BTCH 340L) Or BTCH 350 Or (BTCH 360 And | | | | |
| BTCH 360L) Or (BIOL 325 And BIOL 325L) Or BTCH 410 Or BTCH 425 Or (BTCH 435 And | | | | |
| BTCH 435L) Or BTCH 440 Or (BTCH 460 And BTCH 460L) Or BTCH 490 Or BIOL 499. | | | | |
| | | | | |
| | | | | |
| Other Required: (3 Credits) MATH 130 Or Higher | | 3 | | |
| Total Credits | | 120 | | |

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.

| Year 1 Fall | | | |
|------------------------------------|----------|--------|----|
| Requirement | Course | | Cr |
| University Studies | UNIV 101 | | 1 |
| Written Communication | ENGL 110 | | 3 |
| Core Transitional Life Skills | | | 2 |
| Reasoning Skills: Quant. Reasoning | MATH 129 | | 3 |
| Core Social Science | | | 3 |
| Core Humanities & Creative Arts | | | 3 |
| | | | |
| | | Total: | 15 |

| Year 1 Spring | | |
|-------------------------------------|-------------------|----|
| Requirement | Course | Cr |
| University Studies | UNIV 102 | 1 |
| Information Literacy | ENGL 120 | 3 |
| Communication Skills - Oral | BADM 215/SPEE 200 | 3 |
| Scientific Literacy: Nat. Sciences | BIOL 150 | 3 |
| Scientific Literacy: Nat. Sciences | BIOL 150L | 1 |
| Reasoning Skills: Quant. Reasoning | MATH 130 | 3 |
| Reasoning Skills: Critical Thinking | PHIL 110/PHIL 120 | 3 |
| | Total: | 17 |

| Year 2 Fall | | | |
|------------------------------------|-----------|--------|----|
| Requirement | Course | | Cr |
| Scientific Literacy: Nat. Sciences | BIOL 160 | | 3 |
| Scientific Literacy: Nat. Sciences | BIOL 160L | | 1 |
| Global Literacy: Foreign Language | | | 3 |
| Core Ethics & Civic Engagement | | | 3 |
| Major Requirement | BIOL 225 | | 3 |
| Major Requirement | CHEM 141 | | 3 |
| Major Requirement | CHEM 141L | | 1 |
| | | Total: | 17 |

| Year 2 Spring | | | |
|-------------------|-----------|--------|---|
| Requirement | Course | Cı | r |
| Major Requirement | BIOL 220 | 3 | |
| Major Requirement | BIOL 220L | 1 | |
| Major Requirement | CHEM 161 | 3 | |
| Major Requirement | CHEM 161L | 1 | |
| Major Requirement | BIOL 200 | 3 | |
| Major Requirement | BIOL 200L | 1 | |
| Major Requirement | BTCH 210 | 3 | |
| | Tot | al: 15 | ; |

| Year 3 Fall | | |
|-------------------|-----------|----|
| Requirement | Course | Cr |
| Major Requirement | PHYS 115 | 3 |
| Major Requirement | PHYS 125L | 1 |
| Major Requirement | BIOL 210 | 3 |
| Major Requirement | BIOL 210L | 1 |
| Major Requirement | BIOL 320 | 1 |
| Major Requirement | BTCH 220 | 4 |
| | | |
| | Total: | 13 |

| Year 3 Spring | | |
|-------------------|-----------|------|
| Requirement | Course | Cr |
| Major Requirement | PHYS 116 | 4 |
| Major Requirement | PHYS 126L | 1 |
| Major Requirement | BIOL 310 | 3 |
| Major Requirement | BIOL 310L | 1 |
| Major Requirement | BIOL 330 | 3 |
| Major Requirement | BIOL 330L | 1 |
| Major Requirement | BTCH 230 | 4 |
| | Total | : 16 |

| Year 4 Fall | | |
|------------------------|---------------------|----|
| Requirement | Course | Cr |
| Major Requirement | BIOL 400 | 3 |
| Major Requirement | BTCH 360/BIOL 325 | 3 |
| Major Requirement | BTCH 360L/BIOL 325L | 1 |
| Concentration Elective | | 3 |
| Concentration Elective | | 3 |
| | Total: | 13 |

| Year 4 Spring | | |
|------------------------|---------------------|-----|
| Requirement | Course | Cr |
| Major Requirement | BIOL 499 | 4 |
| Concentration Elective | | 4 |
| Concentration Elective | | 3 |
| Concentration Elective | | 3 |
| | | |
| | Total: | 14 |
| TO | OTAL DEGREE CREDITS | 120 |