

**BACHELOR OF SCIENCE DEGREE IN BIOLOGY
COMPREHENSIVE CONCENTRATION (WITH CHEMISTRY MINOR)
DEGREE PLAN
TOTAL CREDITS: 125**

I. FIRST YEAR

- **First Semester – 17 hrs.**
Because of Graduate School preparation requirements, HIST 281 is not to be used as an Institutional Option. SC 135 or 136 is more pertinent to said preparation.
- **Second Semester – 17 hrs.**
Again, HIST 281 cannot be used as an Institutional Option. CS 116 would better prepare matriculating students for entrance and success in graduate school.

II. SECOND YEAR

- **Third Semester – 17 hrs.**
Approved as listed
- **Fourth Semester – 17 hrs.**
Approved as listed

III. THIRD YEAR

- **Fifth Semester – 12 hrs.**
Approved as listed.
SC 135 or 136 moved to First Semester
- **Sixth Semester – 17 hrs.**
Approved as listed – 17 hrs.

IV. FOURTH YEAR

- **Seventh Semester – 14 hrs.**
Approved as listed.
- **Eighth Semester – 14 hrs.**
Approved as listed

**BACHELOR OF SCIENCE DEGREE IN BIOLOGY COMPREHENSIVE
CONCENTRATION (WITH CHEMISTRY MINOR) DEGREE PLAN –
TOTAL CREDITS: 125**

		FIRST SEMESTER		SECOND SEMESTER	
First Year	BIOL 131 Biological Science I Lec	3	BIOL 132 Biological Science II Lec	3	
	BIOL 111 Biological Science I Lab	1	BIOL 112 Biological Science II Lab	1	
	CHEM 111 General Chemistry I Lab	1	CHEM 112 General Chemistry II Lab	1	
	CHEM 131 General Chemistry I Lec	3	CHEM 132 General Chemistry II Lec	3	
	MATH 133 College Algebra	3	MATH 136 Precalculus	3	
	ENG 131 Freshman English I	3	ENG 132 Freshman English II	3	
	SC 135 or 136 Business & Professional Communication or Public Address	3	CS 116 Computer Science I Lec	3	
	17 hrs		17 hrs		
		THIRD SEMESTER		FOURTH SEMESTER	
Second Year	BIOL 211 Cell Biology Lab	1	BIOL 338 Genetics	3	
	BIOL 231 Cell Biology	3	BIOL 341 Organismic Biology	4	
	BIOL 212 Developmental Biology Lab	1	CHEM 212 Organic Chemistry II lab	1	
	BIOL 232 Developmental Biology	3	CHEM 232 Organic Chemistry II Lec	3	
	CHEM 211 Organic Chemistry I Lab	1	MUSI 131 or ART 131 Intro to Music or Drawing and Comp. I	3	
	CHEM 231 Organic Chemistry I Lec	3	PSY 131 or SOC 157 or SOC 158 In- tro to Psychology or Sociology or Contemporary	3	
	MATH 241 Calculus & Analytic Geometry I	4			
	BIOL 300 – Seminar	1			
	17 hrs		17 hrs		
		FIFTH SEMESTER		SIXTH SEMESTER	
Third Year	BIOL 347 Microbiology	4	BIOL Electives	4	
	CHEM 322 Quantitative Analysis Lab	2	BIOL 443 Molecular Biology	4	
	CHEM 332 Quantitative Analysis Lec	3	ENG 2xx Upper level English	3	
	HIST 231 Social & Political History of the United States to 1877	3	HIST 232 Social & Political History of the United States since 1877	3	
			POLS 235 American Political Systems I	3	
		12 hrs		17 hrs	
		SEVENTH SEMESTER		EIGHTH SEMESTER	
Fourth Year	BIOL Electives	7	BIOL Electives	7	
	POLS 236 American Political Systems II	3	MATH 231 or BIOL 460 Elementary Statistics or Biostatistics	3	
	PHYS 213 – College Physics lab I	1	PHYS 214 – College Physics Lab II	1	
	PHYS 237 – College Physics I	3	PHYS 238 – College Physics II	3	
		14 hrs		14 hrs	

**CURRICULUM SUMMARY FOR BACHELOR OF SCIENCE DEGREE
IN BIOLOGY
COMPREHENSIVE CONCENTRATION
TOTAL CREDITS REQUIRED: 120 – 141 (depends on minor selected)**

CORE CURRICULUM* (STANDARD)		TCCNS	MAJOR (BIOLOGY)	OTHER REQUIREMENTS	MINOR REQUIREMENTS
42 Credits		EQUIVALENT	50 Credits	28 Credits	21 Credits
Communication:			BIOL 111 (1)	CHEM 111 (1)	Contact Department of choice after being admitted as a Biology Major. Chemistry is highly recommended as a minor for Biology majors***
ENG 131 (3)**	ENGL 1301		BIOL 112 (1)	CHEM 112 (1)	
ENG 132 (3)	ENGL 1302		BIOL 131 (3)	CHEM 211 (1)	
Mathematics:			BIOL 132 (3)	CHEM 212 (1)	
MATH 133 (3)	MATH 1314		BIOL 211 (1)	CHEM 231 (3)	
Life and Physical Sciences:			BIOL 212 (1)	CHEM 232 (3)	
CHEM 131 (3)	CHEM 1311		BIOL 231 (3)	MATH 136 (3)	
CHEM 132 (3)	CHEM 1312		BIOL 232 (3)	MATH 241 (4)	
Language, Philosophy, and Culture:			BIOL 338 (3)	MATH 231	
ENG 2xx (3)			BIOL 341 (4)	or BIOL 460 (3)	
Creative Arts:			BIOL 347 (4)	PHYS 213 (1)	
MUSI 131 or	MUSI 1301		BIOL 443 (4)	PHYS 214 (1)	
ART 131 (3)	ARTS 1316		BIOL 499 (1)	PHYS 237 (3)	
American History:			Plus 18 Upper Level BIOL credits selected from the following:	PHYS 238 (3)	
HIST 231 (3)	HIST 1301				
HIST 232 (3)	HIST 1302				
Government/Political Science			BIOL 300 (1), BIOL 332 (3),		
POLS 235 (3)	GOVT 2305		BIOL 334 (3), BIOL 340 (3),		
POLS 236 (3)	GOVT 2306		BIOL 343 (3), BIOL 344 (4),		
Social and Behavioral Sciences:			BIOL 345 (1), BIOL 348 (4),		
PSY 131 or	PSYC 230 1		BIOL 349 (3), BIOL 401 (1),		
SOC 157 or	SOCI 1301		BIOL 431 (3), BIOL 434 (3),		
SOC 158 (3)	SOCI 1306		BIOL 435 (3), BIOL 438 (3),		
Institutional Options:			BIOL 439 (3), BIOL 441 (4),		
CS 116 (3)	COSC 130 0		BIOL 446 (1), BIOL 447 (3),		
SC 135 or 136 (3)	SPCH 1321 or SPCH 1315		BIOL 448 (3), BIOL 450 (3),		
			BIOL 451 (4), BIOL 452 (3),		
			BIOL 454 (3), BIOL 461 (3)		

* Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.** (N) represents the number of course credits.

*** In selecting Chemistry as a minor, Biology majors need only two additional courses: **CHEM 322 (2 credits)** and **CHEM**

332 (3 credits). For other minors selected, up to 21 credits may be needed if these minors do not have credits required in other categories for the Biology degree.

Note: Students interested in receiving a Bachelor of Science Degree in Biology and in teaching biology in grades 8-12 may substitute courses required by the College

of Education for educator preparation and certification in place of "Minor Requirements." These courses include: EDCI 310 , EDCI 328, EDCI 339 , EDCI 350, EDCI 464 , Reading 400 and Reading 402.