

**BACHELOR OF SCIENCE DEGREE IN BIOLOGY
PRE-HEALTH PROFESSIONAL CONCENTRATION (WITH CHEMISTRY MINOR)
DEGREE PLAN
TOTAL CREDITS: 125**

I. FIRST YEAR

- **First Semester – 17 hrs.**
Because of Professional School preparation requirements, HIST 281 is not to be used as an Institutional Option. SC 135 or 136 yields matriculating students being more competitive applicants.
- **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 Professional Schools.

II. SECOND YEAR

- **Third Semester – 16 hrs.**
Approved as listed
- **Fourth Semester – 17 hrs.**
Approved as listed

III. THIRD YEAR

- **Fifth Semester – 18 hrs.**
Approved as listed.
SC 135 or 136 moved to First Semester
- **Sixth Semester – 14 hrs.**
Approved as listed

IV. FOURTH YEAR

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

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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 Intro to Psychology or Sociology or Contemporary Social Issues	3
	MATH 241 Calculus & Analytic Geometry I	4		
	16 hrs		17 hrs	
FIFTH SEMESTER		SIXTH SEMESTER		
Third Year	BIOL 340 Biochemistry of Biological Comp.	3	BIOL 441 Histology	4
	BIOL 347 Microbiology	4	BIOL 443 Molecular Biology	4
	CHEM 322 Quantitative Analysis Lab	2	HIST 232 Social & Political History of the United States since 1877	3
	CHEM 332 Quantitative Analysis Lec	3	POLS 236 American Political Systems II	3
	POLS 235 American Political Systems I	3		
	HIST 231 Social & Political History of the United States to 1877	3		
	18 hrs		14 hrs	
SEVENTH SEMESTER		EIGHTH SEMESTER		
Fourth Year	BIOL 454 Immunology	3	BIOL 452 Intermediary and Cellular Metabolism	3
	MATH 231 or BIOL 460 Elementary Statistics or Biostatistics	3	BIOL 447 Human Physiology	3
	ENG 2xx Upper level English	3	PHYS 214 – College Physics Lab II	1
	PHYS 213 – College Physics lab I	1	PHYS 238 – College Physics II	3
	PHYS 237 – College Physics I	3	BIOL Elective	3
	13 hrs		13 hrs	

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

CORE CURRICULUM* (STANDARD) 42 Credits		TCCNS EQUIVALENT	MAJOR (BIOLOGY) 50 Credits	OTHER REQUIREMENTS 28 Credits	MINOR CONCENTRATION 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 340 (3)	or BIOL 460 (3)	
Creative Arts:			BIOL 341 (4)	PHYS 213 (1)	
MUSI 131 or	MUSI 1301		BIOL 347 (4)	PHYS 214 (1)	
ART 131 (3)	ARTS 1316		BIOL 441 (4)	PHYS 237 (3)	
American History:			BIOL 443 (4)	PHYS 238 (3)	
HIST 231 (3)	HIST 1301		BIOL 447 (3)		
HIST 232 (3)	HIST 1302		BIOL 452 (3)		
Government/Political Science			BIOL 454 (3)		
POLS 235 (3)	GOVT 2305		BIOL Elective (3)		
POLS 236 (3)	GOVT 2306				
Social and Behavioral Sciences:					
PSY 131 or	PSYC 230 1				
SOC 157 or	SOCI 1301				
SOC 158 (3)	SOCI 1306				
Institutional Options:					
CS 116 (3)	COSC 1300				
SC 135 or 136 (3)	SPCH 1321 or SPCH 1315				

* 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.