BACHELOR OF SCIENCE, MAJOR IN BIOLOGY

Code	Title	Hours
Bachelor of Science, Major in Biology		
Core Curriculum (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/)		
Component Area I (Communication)		6
Component Area II (Mathematics) [1]		3
Component Area III (Life and Physical Science) (Courses for Science Majors) [2]		8
Component Area IV (Language, Philosophy, and Culture)		3
Component Area V (Creative Arts)		3
Component Area VI (U.S. History)		6
Component Area VII (Political Science/Government)		6
Component Area VIII (Social and Behavioral Sciences)		3
Component Area IX (Component Area Option)		4
Degree Specific Requirements		
CHEM 1411	General Chemistry I [2]	4
CHEM 1412	General Chemistry II [2]	4
CHEM 2323 & CHEM 2123	Organic Chemistry I: Lecture and Organic Chemistry I Lab	4
MATH 1420	Calculus I [1]	4
Select one of the following:		3-4
MATH 1430	Calculus II	
MATH 3379	Statistical Mthods in Practice	
STAT 3379	Statistical Methds in Practice	
PHYS 1301 & PHYS 1101	General Phy-Mechanics & Heat and General Physics Laboratory I	4
PHYS 1302 & PHYS 1102	Gen Phy-Snd,Lght, Elec, & Mag and General Physics Laboratory II	4
Major Core		
BIOL 1406	General Biology I	4
BIOL 1407	General Biology II	4
BIOL 2110	Being a Professional Biologist	1
BIOL 3409	General Ecology	4
BIOL 3450	Introductory Genetics	4
BIOL 3470	General Microbiology	4
BIOL 4110	Undergraduate Seminar	1
BIOL 4361	Evolutionary Biology	3
Major		
BIOL advanced electives (3000-4000 level courses) [3]		19-24
Minor (required)		
Recommended minor is CHEM or MATH. Six minor hours must be advanced. [4]		10
Advanced General Electives		
Any advanced 3000-4000 level courses from any department needed to meet 120 hour and SHSU advanced hour requirements [5, 6]		9
Total Hours		**120-126**

1. Satisfies Core Curriculum requirement for Component Area II (Mathematics) and one semester credit hour of Component Area IX (Component Area Option).
2. Satisfies Core Curriculum requirement for Component Area III (Life and Science).
3. Students who are not Chemistry minors may substitute CHEM 2325 for one of these advanced BIOL electives. Students who take BIOL 4080, BIOL 4394, or BIOL 4095 are allowed to apply only one of these courses to their Advanced Biology Electives requirement.
4. Students choosing CHEM as their minor cannot substitute CHEM 2325 for an advanced BIOL elective.

[5] Students should use the elective and/or minor hours to meet the 42-advanced hour requirement for graduation.

[6] Students who are not Chemistry minors should use the Advanced General Electives to satisfy their minor requirements.

Note: This total reflects MATH 1420 satisfying Component Area II and one hour of Component Area IX, and CHEM 1411 and CHEM 1412 satisfying Component Area III.

First Year

Fall	Hours	Spring	Hours	Summer	Hours
BIOL 1406 or 1407	4	Component Area IV	3	Component Area V (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3
CHEM 1411[1]	4	BIOL 1407 or 1406	4		
ENGL 1301[2]	3	CHEM 1412[1]	4		
MATH 1420[3]	4	ENGL 1302[2]	3		
	15		**14**		**3**

Second Year

Fall	Hours	Spring	Hours	Summer	Hours
BIOL 3470, 3409, or 3450	4	Component Area IX (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	3	General Electives (advanced)[6, 7]	3
CHEM 2323 & CHEM 2123	4	BIOL 2110	1		
HIST 1301[4]	3	BIOL 3409, 3450, or 3470	4		
MATH 1430, 3379, or STAT 3379	3-4	HIST 1302[4]	3		
		POLS 2305[5]	3		
	14-15		**14**		**3**

Third Year

Fall	Hours	Spring	Hours
BIOL 3409, 3450, or 3470	4	Component Area VIII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)	3
Minor Course	4	Biology Elective (advanced)	7-8
PHYS 1301 & PHYS 1101	4	PHYS 1302 & PHYS 1102	4

POLS 2306[5]	3		
	15		**14-15**

Fourth Year

Fall	Hours	Spring	Hours
BIOL 4110	1	Biology Electives (advanced)	4-8
BIOL 4361	3	General Electives (advanced)[6, 7]	6
Biology Electives (advanced)	8	Minor Course (advanced)	3
Minor Course (advanced)	3		
	15		**13-17**

Total Hours: 120-126

1 Satisfies Core Curriculum requirement for Component Area III (Life and Science).

2 Satisfies Core Curriculum requirement for Component Area I (Communications)

3 Satisfies Core Curriculum requirement for Component Area II (Mathematics) and one semester credit hour of Component Area IX (Component Area Option).

4 Satisfies Core Curriculum requirement for Component Area VI (U.S. History).

5 Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).

6 Students should use the elective and/or minor hours to meet the 42-advanced hour requirement for graduation.

7 Students who are not Chemistry minors should use the Advanced General Electives to satisfy their minor requirements.

Note: This total reflects MATH 1420 (http://catalog.shsu.edu/archives/2021-2022/search/?P=MATH%201420) satisfying Component Area II and one hour of Component Area IX, and CHEM 1411 and CHEM 1412 satisfying Component Area III.

The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX plan** and was designed to help students articulate their skills to employers. Marketable skills are those skills valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The BS in Biology is designed to provide graduates with the following marketable skills:

- Master the depth of knowledge required for a degree in the biological sciences.
- Demonstrate critical thinking.
- Communicate effectively.
- Work collaboratively.