BS Biology Major (Fall 2024 & Later)

Minimum 120 credits required for Bachelor's degree

Foundational Core (27-29 Credits)		Grade
FYWS-125[1]	First Year Seminar	
MA ____	Foundational Core Math course	
Choose 1 course from each area *		
[2]Natural/Physical Science		
Literature		
History	HI-100,102,110, or 115	
Arts/Design/Comm.		
Philosophy		
Theology/Relig		
Social/Behavioral Science		

Human Journey Seminars: Great Books in CIT (6 Credits)

CIT 201	CIT Seminar I	
CIT 202	CIT Seminar II	

Liberal Arts Explorations (LAE) (12 Credits Total)

Student must complete 4 courses from at least 2 different subjects and one course in each area. (see list on Registrar's Website - checksheets)		
Humanistic Inquiry (3 credits)		
Social and Global Awareness (3 credits)		
Scientific Literacy (3 credits)		
LAE in any area (3 credits)		

* See list of courses.

[1](Requires Grade C or higher)

[2]Science/Natural Science courses includes approved Math and Computer Science courses. Students are required to take at least one course in Biology, Chemistry, or Physics in the Foundational or Liberal Arts Exploration Core. CS and MA courses may be used as a Science/Natural Science in either the Foundational Core **or** as a requirement in the LAE Core but not in both categories.

Note: MA 006 and ESL courses **will not** count towards the 120 credit graduation requirement.
Approved Study Abroad courses may be used to satisfy requirements for the foundational core or a Liberal Arts Exploration
A maximum of 8 Applied Music credits may be applied towards graduation

Required Curriculum for Degree in Major

Biology Major (39 credits)		Grade
BI 111	Concepts in Biology I	
BI 112	Concepts in Biology II	
BI 113	Concepts in Biology I Laboratory	
BI 114	Concepts in Biology II Laboratory	
BI 201	Genetics & Evolution	
BI 202	Ecology & Evolution	
BI 203	Genetics & Evolution Laboratory	
BI 204	Ecology & Evolution Laboratory	
BI 399	Senior Seminar	
Biology Major Electives		
Six additional Biology courses with at least one course from Environmental, Organismal, and Molecular areas are required. Two must be at the 300 level. Three must include labs (one at the 300 level). Three credits of research (BI 390) or internship (BI 360) are encouraged.		
200/300 w/lab		
200/300 w/lab		
200/300		
200/300		
300 w/lab		
300		

Required Supporting courses		Grade
CH 151	General Chemistry I	
CH 152	General Chemistry II	
CH 153	General Chemistry Laboratory I	
CH 154	General Chemistry Laboratory II	
CH 221/223	Organic Chemistry I with Lab	
MA 131	Statistics	
MA 140 or 151	PreCalculus or Calculus	
PY	Physics 100 level with Lab	

General Electives (number of credits vary)		Grade

Checksheet Key

T	Course transferred & requirement satisfied
W	Requirement waived
TW	Course transferred & requirement waived

SACRED HEART UNIVERSITY
COLLEGE OF ARTS & SCIENCES

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The Biology Department's innovative and interdisciplinary curriculum combines a rigorous grounding in the foundational principles of biological science at all scales of organization from molecules to ecosystems with the opportunity for students to specialize in areas of their choosing. The program reflects the complexity and diversity of the living world and emphasizes the unifying principles of biological science: evolution, transformations of energy and matter, structure and function, information flow exchange and storage, and the higher level complexity inherent in multi-component systems.

The Biology major provides the intellectual and technical skills necessary for a wide range of productive careers in a rapidly changing world. This program enables its graduates to pursue research, teaching, graduate school, medical school or other health related graduate degrees along with innumerable less traditional career paths (science policy, science journalism, biology focused business careers, law, etc). A capable faculty and small class size foster student-faculty relationships which benefit the intellectual development of students. As part of the program students are given the opportunity to explore research with faculty.

Students majoring in Biology are required to complete 39 credits in Biology: 18 credits in the Biology core and 21 credits in upper-level Biology electives. Twenty-three credits are also required in the supporting areas of Chemistry, Mathematics, and Physics.

SUGGESTED FOUR YEAR SEQUENCE OF STUDY:

YEAR 1	SEMESTER I	YEAR 1	SEMESTER 2
XX	First Year Writing Seminar or Elective (Foundational Core)	FYWS 125 or XX	First Year Writing Seminar or Elective (Foundational Core)
BI 111/BI 113	Concepts in Biology I with Laboratory	BI112/BI114	Concepts in Biology II with Laboratory
CH 151/153	General Chemistry I with Laboratory	CH 152/154	General Chemistry II with Laboratory
MA140 or 151	PreCalculus or Calculus	MA 131	Statistics
	Elective (Foundational Core)		Elective (Foundational Core)

YEAR 2	SEMESTER 3	YEAR 2	SEMESTER 4
BI202/204	Ecology & Evolution with Laboratory	BI201/203	Genetics & Evolution with Laboratory
CH 221/223	Organic Chemistry I with Lab	CIT 202	Human Journey CIT II
CIT 201	Human Journey CIT I		LAE Elective
	Elective (Foundational Core)		Elective (Foundational Core)
	Elective (Foundational Core)		Elective (Foundational Core)

YEAR 3	SEMESTER 5	YEAR 3	SEMESTER 6
BI ___	Biology elective	BI ___	Biology elective
BI ___	Biology elective	BI ___	Biology elective
	LAE Elective		LAE Elective
	Elective (Free)		Elective (Free)
	Elective (Free)		Elective (Free)

YEAR 4	SEMESTER 7	YEAR 4	SEMESTER 8
BI ___	Biology elective	BI ___	Biology elective
PY 1XX	Physics With Lab	BI 399	Senior Seminar
	Elective (Free)		Elective (Free)
	Elective (Free)		Elective (Free)
	Elective (Free)		Elective (Free)

Note: Students must average 15 or more credits/semester to graduate on an 8 semester schedule.