## BS BIOLOGY (Fall 2018 & Later)

#### Minimum 120 credits required for Bachelor's degree Foundational Core (30-32 Credits) Grade FYXX 125 First Year Seminar CTL 125 Critical Thinking MA 140 Precalculus Choose 1 course from each area \* Science Literature History Fine Arts/Communications Philosophy Theology/Relig Social Science

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

CIT 201	Lluman Jaumau CIT I	
CIT ZUT	Human Journey CIT I	
CIT 202	Human Journey CIT II	

#### Liberal Arts Explorations (LAE) (9 Credits)

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Humanistic Inquiry (3 Credits)	
Social and Global Awareness (3 Credits)	
Scientific Literacy (3 Credits)	

<sup>\*</sup> See list of courses. Courses must be in the same theme.

<sup>2</sup>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 Exporations Core. CS and MA courses may be used as a Science/Natural Science in either the Foundational Core or as the Exploration 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 the Liberal Arts Exploartions Core.

#### **Required Curriculum for Degree in Major**

	39 Credits	Grade
Biology		
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	Organisms to Populations	
BI 202	Populations to Ecosystems	
BI 203	Organisms to Populations Laboratory	
BI 204	Populations to Ecosystems Laboratory	
BI 399	Senior Seminar	

Six additional Biology courses comprising at least one course from the Environmental, Organismal, and Molecular areas are required. Two of the 6 courses must be at the 300 level. Three of the 6 courses must include labs (one at the 300 level). Three credits of research (BI 390) or internship (BI 360) are encouraged.

200/300+Lab		
200/300+Lab		
200/300		
200/300		
300+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 131/13	Statistics*	
MA 140/15	PreCalculus, Calculus*	
PY	Physics 100 level with Lab*	

<sup>\*</sup>Fulfills Core Requirement

General Electives (To total 120 credits) Grade		

<sup>&</sup>lt;sup>1</sup>(Requires Grade C or higher)

# SACRED HEART UNIVERSITY COLLEGE OF ARTS & SCIENCES BS BIOLOGY (Fall 2018 & Later)

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 own 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 gradaute degrees along with inumerable less traditional career paths (science policy, science journalism, biology focused business careers, 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 problems with faculty.

Students majoring in Biology on the traditional track are required to complete: 39 credits in Biology, 23 credits in the supporting areas of Chemistry, Physics, and Mathematics and other general electives selected to support a student's goals and interests.

#### SUGGESTED FOUR YEAR SEQUENCE OF STUDY:

YEAR 1	SEMESTER I (15 or 18 cr)	YEAR 1	SEMESTER 2 (14 to 17cr)
FYXX 125 or	First Year Seminar	FYXX 125 or	First Year Seminar or
CTL 125	Critical Thinking	CTL 125	Critical Thinking
BI 111/BI 113	Concepts in Biologyl 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
MA140/151	PreCalculus, Calculus	MA 131/133	Statistics (or other Mathematics)
	_Elective (Foundational Core)		_ Elective (Foundational Core)
YEAR 2	SEMESTER 3 (14 to 17 cr)	YEAR 2	SEMESTER 4 (13 to 16 cr)
BI202/204	Populations to Ecosystems with Laboratory	BI201/203	Organisms to Populations with Laboratory
CH 221/223	Organic Chemistry I with Lab		_TLA Elective
CIT 201	Human Journey CIT I	CIT 202	Human Journey CIT II
ī	Elective (Foundational Core)		_ Elective (Foundational Core)
	Elective (Foundational Core)		_ Elective (Foundational Core)
YEAR 3	SEMESTED 5 (14 to 17 cr)	YEAR 3	SEMESTER 6 (15 cr)
PY 1XX	SEMESTER 5 (14 to 17 cr) Physics With Lab	BI	Elective (Biology)
BI	Elective (Biology)	BI	Elective (Biology)
Ы	LAE Elective	Ы	LAE Elective
	LAE Elective	-	Elective (Free)
	Elective (Free)	BI 398	Senior Seminar Prep
	Elective (Fiee)	ы 390	_ Seriioi Seriiiriai Frep
YEAR 4	SEMESTER 7 (13 to 18 cr)	YEAR 4	SEMESTER 8 (13 to 18 cr)
BI	Elective (Biology)	BI	Elective (Biology)
BI	Elective (Biology)	BI 399	Senior Seminar
	Elective (Free)		Elective (Free)
	Elective (Free)		Elective (Free)
	Elective (Free)		Elective (Free)
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Note: Found ational Core should be completed by the end of the Junior Year

Note: LAE Core should be completer by the end of the 1st semester of the Senior Year

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