

BS Neuroscience (Fall 2018 & Later)

Minimum 120 credits required for Bachelor's degree Foundational Core (30-32 Credits)

		Grade
FYXX 125 ¹	First Year Seminar	
CTL 125	Critical Thinking	
MA 140	Precalculus	
Choose 1 course from each area *		
² Science		
Literature		
History		
Arts/Design/Comm		
Philosophy		
Theology/Relig		
Social Science		

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

CIT 201	Human Journey CIT I	
CIT 202	Human Journey CIT II	

Liberal Arts Explorations (LAE) (9 Credits)

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

* See list of courses. Courses must be in the same theme.

¹(Requires Grade C or higher)

²Science/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 Explorations Core. CS and MA courses may be used as a Science/Natural Science in either the Foundational Core or as a theme 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 Thematic Liberal Arts Explorations Core.

Required Curriculum for Degree in Major

52-55 credits required in Biology/Psychology

Biology Core		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: Org. to Pop.	
BI 202	Ecology: Pop. to Eco.	
BI 203	Genetics & Evolution: Org. to Pop. Laboratory	
BI 204	Ecology: Pop. to Eco. Laboratory	
BI 399	Senior Seminar	

Psychology Core

PS 110	Introduction to Psychology	
PS 201	Research Design & Analysis I	

Neuroscience Core

BI205/PS350	Essentials of Neuroscience	
BI 345	Neurobiology	
PS 351	Brain & Behavior	
BI 390/360	Supervised Research (3 credits) or	
PS 397	Internship (3 credits)	

At least 5 electives from the following list (2 must be from Biology and 2 must be from Psychology)

BI 255/305	Animal Behavior or Behavioral Neurobiology	
BI 306	Pharmacology	
BI 311	Cell Biology	
BI 299	Neuroscience elective	
PS 335	Human & Animal Learning	
PS 352	Hormones & Behavior	
PS 353	Neuropharmacology	
PS 389	Special Topics in Neuroscience	

Required Supporting Courses (23 Cr.)

		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 ____	Statistics (131/132/133)	
MA ____	PreCalculus, Calculus	
PY ____	Physics 100 level with Lab	

SACRED HEART UNIVERSITY COLLEGE OF ARTS & SCIENCES BS in Neuroscience (Fall 2018 & Later)
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The Neuroscience concentration in the Biology major offers an innovative and interdisciplinary curricula that combines a rigorous grounding in the foundational principles of both biological and psychological science at all scales of organization from molecules to human and animal behavior up to ecosystems. The program emphasizes coursework in biology and psychology focusing on the areas where these two disciplines intersect with one another. The major provides students with the education to pursue graduate studies in an array of fields as well as enter medical school or the workplace in neuroscience-related biotechnology and pharmaceutical enterprises. Experienced faculty provide small classes, personal attention, and mentoring to benefit the development of the student. A focus of the program is to provide students with research and internship opportunities in the field of neuroscience.

A student majoring in the Neuroscience concentration is required to complete 52 to 55 credits in Biology and Psychology: 18 in the Biology core, 6 in the Psychology Core, and 28-31 credits in the Neuroscience core. Twenty-three credits are required in the supporting areas of Chemistry, Physics, and Mathematics.

SUGGESTED FOUR YEAR SEQUENCE OF STUDY:

YEAR 1	SEMESTER I (18 cr)	YEAR 1	SEMESTER 2 (14cr)
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 BiologyI 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 ____	Statistics (131/132/133)
PS 110	Introduction to Psychology		Elective (Foundational Core)
YEAR 2	SEMESTER 3 (17 cr)	YEAR 2	SEMESTER 4 (16 cr)
BI202/204	Ecology: Pop. to Eco. with Laboratory	BI201/203	Genetics & Evolution: Org. to Pop. with Laboratory
CH 221/223	Organic Chemistry I with Lab	BI205/PS350	Essentials of Neuroscience
CIT 201	Human Journey CIT I	PS 201	Research Design & Analysis I
	Elective (Foundational Core)	CIT 202	Human Journey CIT II
	Elective (Foundational Core)		Elective (Foundational Core)
YEAR 3	SEMESTER 5 (16 cr)	YEAR 3	SEMESTER 6 (14 cr)
BI 345	Neurobiology	BI/PS ____	Neuroscience elective
PS 351	Brain & Behavior	BI/PS ____	Neuroscience elective
	LAE Elective		LAE Elective
	LAE Elective		Supervised Research
	Elective (Foundational Core)	BI 398	Senior Seminar Prep
YEAR 4	SEMESTER 7 (16 cr)	YEAR 4	SEMESTER 8 (14 cr)
BI/PS ____	Neuroscience elective	BI/PS ____	Neuroscience elective
BI/PS ____	Research or Internship	BI/PS ____	Neuroscience elective
PY 1XX	Physics With Lab	BI 399	Senior Seminar
	Elective (Free)		Elective (Free)
	Elective (Free)		Elective (Free)

Note: Foundational Core should be completed by the end of the Junior Year

Note: LAE Core should be completed 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.