

**BACHELOR OF SCIENCE IN INTEGRATIVE STUDIES
BIOLOGY AND CHEMISTRY FOCUS AREAS (Bioprocess Science)**

This guide provides only a suggested course of study and should be used in consultation with an advisor and the SIUE Undergraduate Catalog, available online at www.siu.edu/registrar.

Fall Semester		Spring Semester	
Year 1		Year 1	
ENG 101 English Composition I	3	ENG 102 English Composition II	3
BIOL 150 Introduction to Biological Sciences I (BLS, EL)	4	BIOL 151 Introduction to Biological Sciences II	4
CHEM 121A/125A General Chemistry I and lab (BPS, EL)	5	CHEM 121B/125B General Chemistry II and lab	5
MATH 125 Pre Calculus	3	ACS 101 Public Speaking or ACS 103 Interpersonal Comm	3
	15		15
Year 2		Year 2	
CHEM 241A Organic Chemistry I	3	CHEM 241B/245 Organic Chemistry II and lab	5
Breadth Social Sciences (BSS)	3	BIOL 250 Bacteriology	4
Breadth Humanities (BHUM)	3	US Cultures (EUSC)	3
RA 101 OR PHIL 213	3	QR 101 (proficiency recommended)	3
BIOL 220 Genetics	4	CHEM 296 or BIOL 493	0-1
	16		15-16
Year 3		Year 3	
CHEM 396 or BIOL 493	2	BIOL 493 or CHEM 396	0-4
Breadth Information & Communication in Society (BICS)	3	Global Cultures (EGC)	3
Fine & Performing Arts-Breadth (BFPA)	3	CHEM 482/483 Fermentation Science II & Lab	4
CHEM 480/481 Fermentation Science I and Lab	4	3xx-4xx Level Program Elective or Minor	3
ELECTIVE	3	ELECTIVE	3
	15		13-17
Year 4		Year 4	
INTG 300 Foundations of Integrative Studies	3	INTG 499 Integrative Studies Senior Project	3
CHEM 484/485 Fermentation Science III & Lab	4	Leadership Course+	3
CHEM 351 or 451a	3	Interdisciplinary Studies(IS) course	3
3xx-4xx Level Program Elective or Minor	3	BIOL 493 Research or CHEM 496	2
3xx-4xx Level Program Elective or Minor	3	ELECTIVE (if CHEM 296/BIOL 493 is not taken for credit)	4
	16		15

Declaration:

Declaration into this major requires an academic plan created in consultation with the Integrative Studies advisor and an application submitted to the Integrative Studies Program Director.

The University requires students earning a Bachelor of Science (BS) degree to complete at least eight (8) courses in the sciences (life, physical, or social) (*), including, as a part of those eight (8) courses, two (2) courses designated as labs (EL).

Students must complete 60 hours at the 200 level or above and 40 hours at the 300 level or above.

+Select one of the following courses: PSYC 320 Introduction to Industrial/Organizational Psychology, PSYC 365 Group Dynamics and Individual Behavior, PSYC 474 Organizational Psychology, or SOC 338 Sociology at Work