

John Carroll University Chemistry and Biochemistry Department

B.S. Chemistry with Biochemistry Concentration and Study Abroad Study Plan

First Year

Fall Semester	Credits	Major	Core	Minor/Other	Spring Semester	Credits	Major	Core	Minor/Other
CH1410 General Chemistry I*	4	X			CH1420 General Chemistry II*	4	X		
CH1430 General Chemistry Lab I*	1	X			CH1440 General Chemistry Lab II*	1	X		
MT1350 Calculus / Analytic Geometry I	4	X			MT1360 Calculus / Analytic Geometry II	4	X		
EN1250 Seminar on Academic Writing*	3		X		COM1251 Speech Communications	3		X	
BL1500 Principles of Biology I	3	X			BL1600 Principles of Biology II	3	X		
BL1505 Principles of Biology Lab I	1	X			BL1605 Principles of Biology Lab II	1	X		
Total Credit Hours	16				Total Credit Hours	16			

Second Year

Fall Semester	Credits	Major	Core	Minor/Other	Spring Semester	Credits	Major	Core	Minor/Other
CH2210 Organic Chemistry I	3	X			CH2220 Organic Chemistry II	3	X		
CH2230 Organic Chemistry Lab I	1	X			CH2240 Organic Chemistry Lab II	1	X		
PH1250 General Physics I	3	X			CH2610 Analytical Chemistry	3	X	X	
PH1251 General Physics Lab I	1	X			CH2630 Analytical Chemistry Lab (QA)	1	X	X	
Career or Program Electives	6	x	X		PH1260 General Physics II	3	X		
Creative and Performing Arts (CAPA)*	1-3		X		PH1261 General Physics Lab II	1	X		
					BL2130 Genetics**	4	X		X
Total Credit Hours	15-18				Total Credit Hours	16			

Third Year

Fall Semester	Credits	Major	Core	Minor/Other	Spring Semester	Credits	Major	Core	Minor/Other
CH3630 Physical Chemistry I	3	X			Study Abroad Semester				
CH3670 Physical Chemistry I Lab	2	X			Humanities Course	3		X	
CH4350 Biochemistry I	3	X			Social Sciences Course	3		X	
CH4370 Biochemistry Laboratory	1	X			Core, Career or Program Elective	6	X	X	X
Engaging the Global Community (EGC)	3		X		CH or BL Elective	3	X		
TRS Course	3		X						
Total Credit Hours	15				Total Credit Hours	15			

Fourth Year

Fall Semester	Credits	Major	Core	Minor/Other	Spring Semester	Credits	Major	Core	Minor/Other
CH or BL Elective**	3	X			CH Elective**	3	X		
Issues in Social Justice Course (ISJ)	3		X		CH4360 Biochemistry II	3	X		
Language Requirement	3		X		Language Requirement	3		X	
Philosophy Values/Society (PLVS)	3		X		TRS Course	3		X	
Linked Pair of Courses	6		X		Philosophy/Knowledge/Reality (PLKR)	3		X	
Total Credit Hours	18				Total Credit Hours	15			

If you are planning to attend graduate school or a health professions program, take the GRE or MCAT in summer between years 3 and 4 and begin submitting applications this fall.

Total CH Credit Hours Required: 42 Total Credit Hours Required to Graduate: 120

Notes:

*Well prepared students may substitute the CH1410-1440 sequence with CH1510-1530 - Chemical Principles and Lab in the Fall Semester. BL4710 and PS4260 and others by petition

CH3980 or CH3994 (with three credits of CH399) One of these should be taken in the senior year.

Please consult your academic advisor to address specific needs of your major, minor, and/or concentration.