Biochemistry Major – B.S.

Pre-Medicine concentration

First Year

Fall		Credits	Spring		Credits
CHEM 121	Chemical Principles I/Lab	4	CHEM 122	Chemical Principles I/Lab	4
MATH 121	Calculus I	3	MATH 122	Calculus II	3
BCHM 192	Freshman Biochem. Seminar	0	PHYS 121	General Physics I/Lab	4
WRIT 102	Research Writing, G.E.	3	CORE 113	First Year Seminar, G.E.	3
BIOL 110	Intro to Biology I/Lab	4	RLST 105	Francis & Glob. Iss., G.E.	3
Soc Sci 1st	Social Science (1 of 3), G.E.	3	CORE 104	Spring Comm. Enrich., G.E.	0
CORE 103	Fall Comm. Enrich., G.E.	0			17
		17			

Second Year

Fall			Spring		
CHEM 221	Organic Chemistry I/Lab	4	CHEM 222	Organic Chemistry II/Lab	4
PHYS 122	General Physics II/Lab	4	BCHM Stat	BCHM statistics/Lab	3-4
LIT XXX	Literature, G.E.	3	BCHM 292	Soph. Biochem. Seminar	0
BIOL 111	Intro to Biology II/Lab	4	Soc Sci 2nd	Social Science (2 of 3), G.E.	3
		15	PHIL 205	Reason & Respons., G.E	3
			BIOL 401	Cell & Mol Biol/Lab	4
					16-17

Third Year

Fall			Spring		
BCHM 392	Junior BCHM PreMed Seminar	0	BIOL 301	Genetics/Lab	4
BCHM 405	Biochemistry I/Lab	4	BCHM 407	Biochemistry II	3
BIOL 211	Comp. Vert. Anatomy/Lab	4	BCHM 408	Biochemistry II Lab	2
BCHM XXX	Biochemistry elective	3	BIOL 406	Vert. Physiology/Lab	4
RLST or PHIL	Ethics Course, G.E.	3	Diversity	Diversity Elective, G.E.	3
HIST XXX	History, G.E.	3			16
EXAM 301	Writing Comp. Exam, G.E.	0			
		17			

Fourth Year

Fall			Spring		
CHEM 321	Physical Chemistry I/Lab	4	BCHM Keystone Seminar		3-4
XXX	Elective	3	BCHM 302	Phys. Inorg. Chem./Lab	4
LANG XXX	Language, G.E.	3	Soc Sci 3rd	Social Science (3 of 3) G.E.	3
FNAR XXX	Fine Arts, G.E.	3	XXX	Elective	3
XXX	Elective*	3			13-14
		16			

Biochemistry Statistics Electives (3 or more credits)

BIOL 315	Biostatistics/Lab	4	MATH 215	Introductory Statistics	3
CHEM 251	Quantitative Analysis/Lab	3	STAT 205	Essentials of Statistics	3

Biochemistry Electives (3 or more credits; previous Biochemistry elective courses do not count)

BCHM 398/399	Biochem. Internship	3-15	BIOL 305	Immunology	3
BCHM 402	Biophysics	3	BIOL 315	Biostatistics/Lab	4
BCHM 410	Special Topics-Biochem.	3	BIOL 402	Evolution	3
BCHM 499	Undergraduate Research	1-4	CHEM 251	Quantitative Analysis/Lab	3
BCHM 501	Independent Study in Biochem.	1-8	CHEM 322	Physical Chemistry II/Lab	4
BIOL 251	Bioinformatics	3	CHEM 323	Instrumental Analysis/Lab	3
BIOL 302	Gen. Microbiology/Lab	4	CHEM 324	Inorganic Chemistry/Lab	4

Biochemistry Keystone Seminar (3 or 4 credits)

CHEM 457 Chemistry and Society (3) or CORE 407 Keystone Sem., G.E. (3) and BCHM 492 Biochem Sem.(1)

Note: The following General Education requirements are suggested before the end of the 3rd year:

1st & 2nd Social Science	3rd Social Science	available for History	Ethics course
PSYC 101 Intro to Psych	PSYC 209 Developmental Psychology	HIST 245 History of Medicine	PHIL 312 Health Care Ethics
SOC 101 General Sociology	SOC 312 Medical Sociology		

American Chemical Society Certified Degree (credits may be used for Biochemistry electives)

Required courses: CHEM 121, CHEM 122, CHEM 221, CHEM 222, CHEM 251, CHEM 321, CHEM 322, CHEM 323, CHEM 324, BCHM 405, BCHM 407, BCHM 492, and BCHM 398-399 or BCHM 499; 3 additional credits: CHEM 305, CHEM 308, CHEM 401, CHEM 404, CHEM 410

*if required. A minimum of 128 credits are required for graduation.

Fall 2021