

B.S. in Biochemistry - Traditional
AY 2021-2022

	First Semester		Second Semester	
1st Year	CHEM 1211K (4) MATH 1551 (2) ENGL 1101 (3) GT 1000 (1) CS 13XX* (3) APPH 10XX* (2) <i>Sub-Total (15)</i>	Chemical Principles I Differential Calculus English Comp. I Freshman Seminar CS Requirement Wellness Requirement	CHEM 1212K (4) MATH 1552 (4) ENGL 1102 (3) BIOS 1107 (3) BIOS 1107L (1) <i>Sub-Total (15)</i>	Chemical Principles II Integral Calculus English Comp. II Biological Principles Biological Principles Lab
2nd Year	CHEM 2214 (4) CHEM 2311 (3) MATH 1553 (2) BIOS 2600 (3) Free Elective (3) <i>Sub-Total (15)</i>	Quantitative Analysis Organic Chemistry I Intro. Linear Algebra Genetics	CHEM 2313** (3) CHEM 2380 (2) CHEM 4511 (3) Core Elective* (3) Core Elective* (3) Free Elective (1) <i>Sub-Total (15)</i>	Bioorganic Chemistry Synthesis Lab I Biochemistry I
3rd Year	CHEM 4512 (3) CHEM 3371 (2) MATH 2551 (4) PHYS 2211 (4) Core Elective* (3) <i>Sub-Total (16)</i>	Biochemistry II Organic Chem Lab Multivariable Calc. Intro. to Physics I	CHEM 3216 (3) CHEM 3216L (2) PHYS 2212 (4) Core Elective* (3) Free Elective (3) <i>Sub-Total (15)</i>	Analytical Chemistry Analytical Chemistry Lab Intro. to Physics II
4th Year	CHEM 4581 (3) CHEM 4601 (2) CHEM 3411 (3) BIOS 3450 (3) Core Elective* (3) Free Elective (1) <i>Sub-Total (15)</i>	Biochemistry Lab I Chemistry Seminar Physical Chemistry I Cellular & Molecular Bio.	CHEM 4582 (3) CHEM 4521 (3) Biology Elective*** (3) Core Elective (3)* Free Elective (3) Free Elective (1) <i>Sub-total (16)</i>	Biochemistry Lab II Biophysical Chemistry

Note: 39 credit hours of 3XXX/4XXX level coursework is required to graduate.

Only Free Electives can be taken as Pass/Fail.

Maximum 6 hours of CHEM 2699 and 12 hours of CHEM 4699.

The last 36 hours must be taken in residence and may not be transferred in.

* Core Electives :	APPH 1040 or 1050 or 1060 (2) CS 1301, 1315, or 1371 (3) Humanities electives (6 hours required) Social Sciences electives (9 hours required) History/constitution requirement: HIST 2111 (3), HIST 2112 (3), PUBP 3000 (3), INTA 1200 (3), or POL 1101 (3) (Credit not allowed for both INTA 1200 and POL 1101)
** CHEM 2313:	CHEM 2312, Organic Chemistry II, can be substituted for CHEM 2313, Bioorganic Chemistry.
*** Biology Elective	3 credit hours of biology electives must be completed via one of the following courses: BIOS 3380, BIOS 4015, BIOS 4340, BIOS 4401, BIOS 4418, BIOS 4464, BIOS 4570, BIOS 4607, BIOS 4668, or CHEM 4765.