

Saint Francis University Education Department
Paradigm for Catalog Year 2023-2024

CHEMISTRY/SECONDARY EDUCATION CONCENTRATION

Chemistry 7-12

Suggested Course Sequence - 130 Total Credits Needed for Graduation

FIRST YEAR FALL			CREDITS	FIRST YEAR SPRING			CREDITS
CHEM 192	Freshman Chemistry Seminar		0	MATH 122	Calculus II		3
CHEM 121	Chemical Principles I/Lab		4	CHEM 122	Chemical Principles II/Lab		4
MATH 121	Calculus I		3	PHYS 121	General Physics I/Lab		4
WRIT 102	Research Writing		3	CORE 104	Spring Comm Enrich GE		0
PSYC 101	Intro to Psychology GE		3	CORE 113	First Year Seminar GE		3
FTAE 105	Franciscan Goals for Today GE		3	EDUC 150	Education Psychology		3
CORE 103	Fall Comm Enrich GE		0				
TOTAL			16	TOTAL			17

SECOND YEAR FALL			CREDITS	SECOND YEAR SPRING			CREDITS
MATH 221/306	Mathematics Elective		3	CHEM 222	Organic Chemistry II/Lab		4
CHEM 221	Organic Chemistry I/Lab		4	CHEM 251	Quant Analysis/Lab		3
PHYS 122	General Physics II/Lab		4	CHEM 292	Sophomore Chemistry Seminar		0
EDUC 205	Intro to Special Education		3	PHIL 205	Reason & Response GE		3
EDUC 261	Linguistic Diversity in Classroom		3	*LIT 104	Writing about Literature GE		3
				EDUC 240	The Diverse Learner in Sec Settings		3
TOTAL			17	TOTAL			16

THIRD YEAR FALL			CREDITS	THIRD YEAR SPRING			CREDITS
CHEM 321	Physical Chemistry I/Lab		4	CHEM 322	Physical Chemistry II/Lab		4
CHEM 324	Inorganic Chemistry/Lab		4	CHEM 392	Junior Chemistry Seminar		0
PHIL 319	Philosophy, Ethics & Education		3	HIST	History Elective GE		3
EXAM 301	Writing Comp Exam GE		0	Diversity/Comm	Diversity/Comm		3
EDUC 333	Reading Content Area		3	SOSC	2nd Social Science GE		3
EDUC 430	Middle/Secondary Methods ii		3	EDUC 429	Middle/Secondary Methods I		3
TOTAL			17	TOTAL			16

FOURTH YEAR FALL			CREDITS	FOURTH YEAR SPRING			CREDITS
EDUC 450	Student Teaching		12	CHEM 323	Instrumental Analysis/Lab		3
EDUC 407	Teacher as Reflective Practitioner		3	CHEM 492	Chemistry Seminar		1
				FNAR	Fine Arts Elective		3
				ELEC	Elective		3
				ELEC	Elective		3
				LANG	Language 102+ GE		3
TOTAL			16	TOTAL			15

Mathematics Elective

MATH 221 Calculus III (3 credits) or MATH 306 Differential Equations (3 credits)

- GE Inner core, under this paradigm, is completed by the end of the second year (except WCE, Fine Arts, 2nd Social Science and the Language requirement in the third year.
- To obtain an ACS certified degree you must take the following classes: CHEM 121, 122, 192, 221, 222, 251, 292, 308, 321, 322, 323, 324, 392, 398/399 OR 499, 405, 492, and 6 credits of CHEM electives (305, 308, 401, 402, 404, 407, 410, 501).
- *LIT 104-Completing any of the following 200-level courses (LIT 201,202,204,207,222,274, and 270) can also satisfy this requirement. Any course taken for the fulfillment of this general education requirement may not count for the general education outer core or for a course within any major.

Note: Sequence of courses may be altered with advisor's approval.

Revised 8/2019, 5/2022