

Effective Fall 2021 to present

CHEMISTRY MAJOR - B.S. (CH-S) Ambialet, France Paradigm
American Chemical Society Certified Bachelor of Science

First Year

Fall		Credits	Spring		Credits
CHEM 121	Chemical Principles I/Lab	4	CHEM 122	Chemical Principles II/Lab	4
MATH 121	Calculus I	3	MATH 122	Calculus II	3
CHEM 192	Freshman Chem. Seminar	0	PHYS 121	General Physics I/Lab	4
WRIT 102	Research Writing, <u>G.E.</u>	3	CORE 113	First Year Seminar, <u>G.E.</u>	3
HIST XXX	History, <u>G.E.</u>	3	RLST 105	Francis & Glob. Iss., <u>G.E.</u>	3
SOC SCI 1st	Social Science (1 of 3), <u>G.E.</u>	3	CORE 104	Spring Comm. Enrich., <u>G.E.</u>	0
CORE 103	Fall Comm. Enrich., <u>G.E.</u>	0			
		<u>16</u>			<u>17</u>

Second Year

Fall			Spring		
CHEM 221	Organic Chemistry I/Lab	4	CHEM 222	Organic Chemistry II/Lab	4
MATH 221/306	Mathematics Elective	3	CHEM 251	Quantitative Analysis/Lab	3
PHYS 122	General Physics II/Lab	4	CHEM 292	Sophomore Chem. Seminar	0
LIT XXX	Literature, <u>G.E.</u>	3	XXX	Elective	3
XXX	Elective	3	XXX	Elective	3
		<u>17</u>	SOC SC 2nd	Social Science (2 of 3), <u>G.E.</u>	3
					<u>16</u>

Third Year

Fall			Spring		
CHEM 321	Physical Chemistry I/Lab	4	CHEM 322	Physical Chemistry II/Lab	4
BIOL 111	Biology I/Lab	4	CHEM 405	Biochemistry I/Lab	4
CHEM XXX	Chemistry Elective*	3	CHEM 392	Junior Chem. Seminar	0
PHIL 205	Reason and Respons., <u>G.E.</u>	3	SOC SCI 3rd	Social Science (3 of 3), <u>G.E.**</u>	3
XXX	Elective	3	XXX	Elective	3
EXAM 301	Writing Comp. Exam, <u>G.E.</u>	0	XXX	Elective	3
		<u>17</u>			<u>17</u>

Fourth Year

Fall			Spring		
CHEM 324	Inorganic Chemistry/Lab	4	CHEM 323	Instrumental Analysis/Lab	3
FNAR XXX	Fine Arts, <u>G.E.**</u>	3	CHEM 457***	Chemistry in Society	3
PHIL/RLST	Ethics Course, <u>G.E.**</u>	3	Chem XXX	Elective	3
LANG XXX	Language, <u>G.E.**</u>	3	CHEM 499	Undergraduate Research	1-4
XXX	Elective	3	(or 398/399)	(or Internship)	3-15)
		<u>16</u>			<u>13-16</u>

Mathematics Electives

MATH 221	Calculus III	3 or	MATH 306	Differential Equations	3
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*Chemistry Electives (6 or more credits must be taken from the following)

CHEM 305	Environmental Chemistry/Lab	4	CHEM 308	Forensic Chemistry	3/4
CHEM 401	Spectroscopy	3	CHEM 402	Biophysics	3
CHEM 404	Advanced Organic Chemistry	3	CHEM 407	Biochemistry II/Lab	4
CHEM 410	Special Topics in Chemistry	3	CHEM 501	Independent Study in Chem.	1-8

**If the course taken to satisfy one of these requirements (RLST/PHIL, FNAR, Soc Sci, LANG) is on the list of courses approved to satisfy the diversity requirement, then both requirements will be fulfilled with a single course. Otherwise a separate diversity course (3 credits) is needed.

*** If CORE 407 taken while in Ambialet, CHEM 457 may be replaced with CHEM 492, Chemistry Seminar, 1 cr

Note: Sequence of courses may be altered with advisor's approval. If a course is substituted in the paradigm you may not qualify for an ACS certified degree.

Revised 05/20/2021