

Bachelor of Science in Chemistry
General Concentration beginning with MATH A111
2025-2026 Academic Calendar



First Year					
1st Semester (14 hrs)			2nd Semester (16 hrs)		
Course	Title	hrs	Course	Title	hrs
CHEM A111	General Chemistry I	4	CHEM A112	General Chemistry II	4
MATH A111	Pre-Calculus I	3	MATH A112	Pre-Calculus II	3
ENGL A101	Composition	3	ENGL A102	Comp. & Literature	3
BIOL A121	Biological Science I	4	GEN ED	Humanities	3
			GEN ED	Social/Behavioral Sciences	3
Second Year					
1st Semester (15 hrs)			2nd Semester (16 hrs)		
Course	Title	hrs	Course	Title	hrs
CHEM A331	Organic Chemistry I	3	CHEM A332	Organic Chemistry II	3
CHEM A331L	Organic Chemistry Lab I	1	CHEM A332L	Organic Chemistry Lab II	1
PHYS A201	Physics I	4	PHYS A202	Physics II	4
MATH A141	Calculus I	4	MATH A142	Calculus II	4
HIST A101/A102	GEN ED Global Cultures	3	CHEM A310	Research Methods	1
			COMM A201/A241	GEN ED Oral Communications	3
Third Year					
1st Semester (14-15 hrs)			2nd Semester (14-16 hrs)		
Course	Title	hrs	Course	Title	hrs
CHEM Foundation 1 (intro.)	one of CHEM A311/321 or BIOL A541 and its lab	4	Advanced CHEM elective 1	one of CHEM A511/521/550 and its lab	4/5
CHEM A541 & 541L	Physical Chemistry I and lab	4	CHEM A542 & 542L	Physical Chemistry II and lab	4
POLI A201 HIST A201/A202	GEN ED American Political Institutions	3	COLLEGE REQ.	College requirement elective (not math or science)	3
COGNATE	Cognate	3/4	ELECT	Free elective	3
Fourth Year					
1st Semester (15-17 hrs)			2nd Semester (14-18 hrs)		
Course	Title	hrs	Course	Title	hrs
CHEM Foundation 2 (intro)	another CHEM A311/321 or BIOL 541	4	Advanced CHEM elective 2	another of CHEM A511/521/550	4/5
CHEM Foundation 3	final CHEM A311/321 /or BIOL A541	4	COGNATE	Cognate	3/4
CHEM A499	Senior Research	1-3	CHEM A499	Senior Research	1-3
ELECT	Free elective	3	ELECT	Free elective	3
GEN ED	Humanities	3	ELECT	Free elective	3

Notes: Take one MATH class in the sequence every semester until MATH 142 is completed. Sequence is MATH 111&112&141&142.

Cognate: Courses that count as a cognate are any non CHEM course numbered 300-level or above and any of the following courses: BIOL A244, BIOL A250, ELCT A221, ENCP A200, ENCP A260, ENCP A290, MATH A241, MATH A242, PHYS A212

Cognates can double count as College Electives. A total of 8 credit hours of Cognate electives is required in addition to BIOL 541.

Gen Ed courses timing can be interchanged throughout. They can also be swapped with Cognates and the College Requirement.

Advanced Chemistry Elective: choose 2 of 3 from CHEM 511/521/550. Take one each Spring in 3rd & 4th year.