

Bachelor of Science in Chemistry

Sample Plan

The academic plan below is one pathway through the degree/certificate. It includes all requirements, taking into account recommendations from program faculty. Each student's plan may vary according to their initial course placement (<https://catalog.uaa.alaska.edu/academicpoliciesprocesses/academicstandardsregulations/courseplacement/>), intended course load, additional majors and/or minors, and their placement into required prerequisite courses. Any change in the plan below can have an unforeseen impact on the rest of the plan. **Therefore, it is very important to meet with your academic advisor to verify your personal academic plan.**

Please review the following terms, definitions, and resources associated with the sample academic plan below.

- Each course in the far left column links to a pop-up bubble with a course description, prerequisite requirements, and associations with university requirements. For example, if a course fulfills a general education requirement, you will see that in the pop-up bubble.
- GER:** indicates a General Education Requirement (<https://catalog.uaa.alaska.edu/undergraduateprograms/baccalaureaterequirements/gers/>). GERs that also count toward degree/certificate requirements appear as a specific course in the plan. For these courses, "GER" is not indicated explicitly in the table, but if you click on the course, you will see the course's GER status in the pop-up bubble.
- Program Elective:** indicates a specific course selection determined by program faculty to fulfill a degree/certificate requirement. Students should seek assistance from their academic advisor.
- Elective:** indicates an open selection of 100-400 level university courses to fulfill elective credits needed to meet the minimum total credits toward the degree/certificate.
- Upper Division Program Elective:** indicates a specific 300-400 level course selection determined by the program faculty to fulfill a degree/certificate requirement. Students should seek assistance from their academic advisor.
- Upper Division Elective:** indicates an open selection of 300-400 level courses to fulfill elective credits needed to meet the minimum total credits toward the degree/certificate. These courses must be upper division in order to meet General University Requirements for the particular degree/certificate type..

First Year

Fall		Credits
CHEM A105 & A105L	General Chemistry I and General Chemistry I Laboratory	4
MATH A155	Precalculus	5
WRTG A111	Writing Across Contexts	3
GER Fine Arts		3

GER Oral Communication Skills	3
Credits	18

Spring

BIOL A108	Principles and Methods in Biology	6
CHEM A106 & A106L	General Chemistry II and General Chemistry II Laboratory	4
MATH A251	Calculus I	4
WRTG A213	Writing and the Sciences	3
Credits		17

Second Year

Fall

BIOL A242	Fundamentals of Cell Biology	3
CHEM A218	Experiential Learning: Quantitative Chemical Analysis	5
CHEM A321	Organic Chemistry I	3
STAT A253	Applied Statistics for the Sciences	4
Credits		15

Spring

BIOL A252	Principles of Genetics	3
CHEM A322	Organic Chemistry II	3
CHEM A418	Experiential Learning: Chemical Instrumentation and Methods	5
PHYS A123 & A123L	College Physics I and College Physics I Laboratory	4
Credits		15

Third Year

Fall

BIOL A243	Experiential Learning: Cell Biology and Genetics	4
CHEM A323L	Organic Chemistry Laboratory	2
CHEM A441	Principles of Biochemistry I	3
PHYS A124 & A124L	College Physics II and College Physics II Laboratory	4
GER Humanities		3
Credits		16

Spring

CHEM A442	Principles of Biochemistry II	3
CHEM A443	Biochemistry Laboratory	2
GER Humanities		3
GER Social Sciences		3
Upper Division Program Elective		3
Credits		14

Fourth Year

Fall

BIOL A461 or BIOL A465	Molecular Biology or Experiential Learning: Molecular Biology	3-4
CHEM A208	Principles of Bioinorganic Chemistry	3

CHEM A481	Experiential Learning: Undergraduate Seminar I	1
GER Alaska Native-Themed		3
GER Social Sciences		3
Upper Division Program Elective		3
Credits		16-17
Spring		
CHEM A411	Biophysical Chemistry	3
CHEM A482	Experiential Learning: Undergraduate Seminar II	2
GER Intercultural Fluency		3
Upper Division Program Elective		3
Upper Division Program Elective		4
Credits		15
Total Credits		126-127