Bachelor of Arts in Mathematics

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**
MATH A251 or MATH A251F	Calculus I [1] or F.A.T. Calculus I	4-6
WRTG A111	Writing Across Contexts	3
GER Fine Arts		3
GER Oral Communication Skills		3
Elective		3
	Credits	**16-18**
Spring		
MATH A252 or MATH A252F	Calculus II or F.A.T. Calculus II	4-6
MATH A264	Introduction to the Mathematics Major	1
WRTG A213	Writing and the Sciences	3
GER Natural Sciences		3
GER Natural Sciences Lab		1
Program Elective (COMM or THR)		3
	Credits	**15-17**

Second Year

Fall		
MATH A253	Calculus III	4
PHIL A101	Introduction to Logic	3
GER Alaska Native-Themed		3
GER Natural Sciences		3
Program Elective (ENGL/WRTG)		3
	Credits	**16**
Spring		
MATH A265	Fundamentals of Mathematics	3
GER Humanities		3
GER Intercultural Fluency		3
Program Elective (COMM or THR)		3
Upper Division Program Elective (Statistics)		3
	Credits	**15**

Third Year

Fall		
MATH A306	Discrete Methods	3
MATH A314	Linear Algebra	3
MATH A401	Introduction to Real Analysis	3
GER Social Sciences		3
Elective		3
	Credits	**15**
Spring		
GER Social Sciences		3
Elective		3
Elective		3
Upper Division Program Elective (Analysis & Topology)		3
Upper Division Program Elective (Applied Math)		3
	Credits	**15**

Fourth Year

Fall		
MATH A420	Historical Mathematics	3
Elective		3
Upper Division Elective		3
Upper Division Program Elective (Analysis & Topology, Applied Math, Statistics, or Other Mathematics Courses)		3

Upper Division Program Elective (Capstone Experience)		3
Mathematics Portfolio and Exam [2]		
	Credits	**15**
Spring		
MATH A405	Introduction to Abstract Algebra	3
Elective		1
Program Elective (MATH A305 or MATH A309)		3
Upper Division Elective		3
Upper Division Program Elective (Analysis & Topology, Applied Math, Statistics, or Other Mathematics Courses)		3
	Credits	**13**
	Total Credits	**120-124**

[1] *MATH A251 and MATH A251F have prerequisites.*

[2] *Majors are required to complete a Mathematics Portfolio and a Mathematics Knowledge Exam in the fourth year.*