Chemistry A.S. Transfer Pathway

Inver Hills Community College

This guide is intended for students completing the Chemistry A.S. Transfer Pathway. Students who do not intend to complete the 60-credit program should contact Kaia Sherburne at ksherburne01@hamline.edu for course selection advice. All courses must be completed with a C- or better to transfer. For graduate school, courses should be graded a B or better.

The table below lists the Inver Hills courses that have approved equivalencies at Hamline or fulfill requirements for the Chemistry B.S. major and general graduation requirements.

Inver Hills Community College Course	Hamline Plan	Credits	Hamline University Course
CHEM 1061 Principles of Chemistry I	N1	5	CHEM 1130 General Chemistry I w/lab
CHEM 1062 Principles of Chemistry II	N1	5	CHEM 1140 General Chemistry II w/lab
CHEM 2061 Organic Chemistry I	N1	5	CHEM 3450 Organic Chemistry I
CHEM 2062 Organic Chemistry II	N1	5	CHEM 3460 Organic Chemistry II
MATH 1133 Calculus I	R, M	5	MATH 1170 Calculus I
MATH 1134 Calculus II	R, M	5	MATH 1180 Calculus II
PHYS 1081 Calculus-Based Physics 1	N1	5	PHYS 1230 General Physics I w/lab
PHYS 1082 Calculus-Based Physics 2	N1	5	PHYS 1240 General Physics II w/lab
Goal 1			, ,
ENG 1108 Writing and Research Skills	l E	4	FYW 1120 First Year Writing
Choose one:			
ENG 1111 Research Writing		2	
ENG 1114 The Research Paper		3	
ENG 1130 Writing & Research for the Professions		3	ENG 1800 Introduction to Professional Writing & Rhetoric
Choose one:			
COMM 1100 Interpersonal Communication	O, D	3	COMM 3360 Interpersonal Communication
COMM 1110 Public Speaking	0	3	COMM 1110 Public Speaking
COMM 2230 Small Group Communication	0	3	CMM 3380 Small Group Communication
Goal 2 – fulfilled by completing this degree			
Goal 3 – completed by pathway requirements			
Goal 4 – completed by pathway requirements			
Goal 5 – minimum of 3 credits			
Examples:			
SOC 1100 Introduction to Sociology	S	4	SJSC 1110 Society and Social Change
POLS 1111 Introduction to US Politics	S	3	PSCI 1110 American Government and Politics
PSYC 1101 Introduction to Psychology	S	4	PSY 1330 General Psychology
Goal 6 – minimum of 3 credits			
Examples:			
ART 1100 Introduction to Art	F, G	3	
PHIL 1112 Ethics	Н	3	
ENG 2239 Women in Literature	H, D	3	
General Electives chosen from MnTC courses – 4-5			
credits			
Examples:			
GEOG 1130 Minnesota Geography	S, D	3	
SPAN 1101 Beginning Spanish I	H, G	5	PSCI 1110 American Government and Politics
THTR 1101 Introduction to Film	F, G	3	SPAN 1110 Beginning Spanish I
Total credits for A.S. degree		60	

Remaining major courses for Chemistry B.S. degree (American Chemical Society approved)	Credits
CHEM 3240 Analytical Chemistry w/lab (Hamline Plan C, W)	4
CHEM 3330 Instrumental Methods	4
CHEM 3940 Advanced Laboratory Techniques (Hamline Plan W)	2
CHEM 3550 Thermochemistry	4
CHEM 3560 Quantum Chemistry	4
CHEM 3950 Physical Chemistry Laboratory Techniques (Hamline Plan W)	2
CHEM 3840 Inorganic Chemistry w/lab (Hamline Plan O)	4
MATH 3320 Multivariable and Vector Calculus or equivalent 3XXX level course	4
Advanced Courses and Research Experience - 12 credits required, at least 4 credits from each area Advanced Course (with approval may substitute one course with advanced BIOL, MATH or PHYS course):	
BIOC 3820 Biochemistry I (Hamline Plan C, D)	4
BIOC 3830 Biochemistry II (Hamline Plan O) CHEM 5900 Advanced Topics in Chemistry	4 2
CHEM 5980 Special Topics	2
Research Experience:	-
CHEM 3965 Intermediate Research	2
CHEM 4010 Collaborative Research	4
CHEM 4015 SCUR Summer Collaborative Research	-
CHEM 5965 Advanced Research	2
Seminar Experience	
CHEM 5950 Chemistry Seminar A (three semesters)	0.5 (1.5 total)
CHEM 5960 Capstone Seminar (Hamline Plan P, Q, W)	2
Total for major	43.5
Remaining graduation requirements for B.S. degree	Credits
General Education Requirements	
- Hamline Plan W - Writing Intensive (one course if not met by remaining major courses)	0–4
- Hamline Plan S - Social Science (one course if not met by MnTC)	0–4
- Hamline Plan F - Fine Arts (eight credits total; can be partially or fully met by MnTC)	0–8
- Hamline Plan H - Humanities (two courses if not met by MnTC)	0–8
- Hamline Plan D - Diversity (two courses if not met by MnTC and/or major courses)	0–8
- Hamline Plan G - Global Citizenship (one course if not met by MnTC)	0–4
Elective credits to reach minimum 128	Varies
Total credits completed at Hamline University	68
Total credits for B.S. degree	128

Advising Notes

All sequence courses should be completed at the same institution. Ex. Organic Chemistry I & II, Introduction to Physics I & II.

Choice of elective courses should be based on your intended career and graduate school goals. Please contact the Hamline Transfer Admission Counselor (https://www.hamline.edu/admission-aid/admission/transfer) for assistance before signing up for elective coursework.

Please consult with the Hamline Transfer Admission Counselor when choosing courses for goal areas 5-10 to maximize meeting Hamline's graduation requirements.

Students transferring in at junior status should have the following courses completed in the major prior to transfer: CHEM 1061 and 1062, PHYS 1081 and 1082, and MATH 1133 and 1134.

Completing the full AS degree prior to transfer is highly recommended.

A STEM Education program launched in Fall 2022. Contact Hamline Undergraduate Admission for more details.

Hamline Plan

- E Expository Writing
- O Speaking Intensive
- R Formal Reasoning
- M Quantitative Reasoning
- F Fine Arts
- H Humanities
- N Natural Science (N1 lab, N2 non-lab)
- S Social Science
- G Global Citizenship
- D Diversity
- C Collaboration
- W Writing Intensive
- Q Independent Critical Inquiry and Information Literacy
- P LEAP: Liberal Education As Practice