

Chemistry A.S. Transfer Pathway

Anoka Ramsey 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 Anoka Ramsey courses that have approved equivalencies at Hamline or fulfill requirements for the Chemistry B.S. major and general graduation requirements.

Anoka Ramsey Community College Course	Hamline Plan	Credits	Hamline University Course
CHEM 1061 Principles of Chemistry I	N1	4	CHEM 1130 General Chemistry I
CHEM 1062 Principles of Chemistry II	N1	4	CHEM 1140 General Chemistry II
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 1400 Calculus I	R, M	5	MATH 1170 Calculus I
MATH 1401 Calculus II	R, M	5	MATH 1180 Calculus II
PHYS 1327 College Physics I	N1	6	PHYS 1230 General Physics I
PHYS 1328 College Physics II	N1	6	PHYS 1240 General Physics II
Goal 1			
Choose one:			
ENGL 1120 Cross-Current College Writing & Critical Reading	E	4	FYW 1120 First Year Writing
ENGL 1121 College Writing & Critical Reading	E	4	FYW 1120 First Year Writing
Choose one:			
CMST 1110 Intro to Communication	O	3	COMM 1100 Intro to Communication Studies
CMST 2215 Public Speaking	O	3	COMM 1110 Public Speaking
CMST 2220 Interpersonal Communication	D, O	3	COMM 3360 Interpersonal Communication
Goal 2 – fulfilled by completing this degree			
Goal 3 – completed by pathway requirements			
Goal 4 – completed by pathway requirements			
Goals 5-10 – minimum of 13 credits chosen from at least two goal areas			
Examples:			
PSYC 1110 General Psychology (Goal 5, 7)	S, D	4	PSY 1330 General Psychology
ART 1100 Introduction to Art (Goal 6, 8)	F, G	3	
ENGL 2210 Global Literature (Goal 6, 8)	H, G	3	ENGL 1200 Introduction to English Studies
POLS 1111 American Gov't & Politics (Goal 5, 9)	S	3	PSCI 1110 American Government & Politics
PHIL 1120 Environmental Ethics (Goal 9, 10)		3	
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)	4
CHEM 5900 Advanced Topics in Chemistry	2
CHEM 5980 Special Topics	-
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 (two courses if not met by MnTC)	0-8
- 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 1327 and 1328, and MATH 1400 and 1401.

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