

Chemistry A.S. Transfer Pathway

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

| North Hennepin Community College Course | Hamline Plan | Credits | Hamline University Course |
|-----------------------------------------------------|--------------|---------|-----------------------------------------|
| CHEM 1061 Principles of Chemistry I | N1 | 4 | CHEM 1130 General Chemistry I w/lab |
| CHEM 1062 Principles of Chemistry II | N1 | 4 | 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 1221 Calculus I | R, M | 5 | MATH 1170 Calculus I |
| MATH 1222 Calculus II | R, M | 5 | MATH 1180 Calculus II |
| PHYS 1601 General Physics I | N1 | 5 | PHYS 1230 General Physics I w/lab |
| PHYS 1602 General Physics II | N1 | 5 | PHYS 1240 General Physics II w/lab |
| Goal 1 | | | |
| ENGL 1200 Gateway College Writing | | 4 | FYW 1110 Critical Reading & Composition |
| or ENGL 1201 College Writing 1* | | 4 | |
| AND | | | |
| ENGL 1202 College Writing 2* | E | 2 | FYW 1120 First Year Writing |
| COMM 1010 Fundamentals of Public Speaking | O | 3 | COMM 1110 Public Speaking |
| Goal 2 – fulfilled by completing this degree | | | |
| Goal 3 – completed by pathway requirements | | | |
| Goal 4 – completed by pathway requirements | | | |
| Goal 5 – PSYC 1150 General Psychology** | S | 3 | PSY 1330 General Psychology |
| SOC 1110 Introduction to Sociology** | D,S | 3 | SJSC 1110 Society and Change |
| Goal 6 – minimum of three credits | | | |
| Examples: | | | |
| ART 1401 Drawing I | F | 3 | PHIL 1140 Ethics |
| ART 1040 Art Appreciation | F, G | 3 | |
| PHIL 1020 Ethics | H | 3 | |
| ENGL 2320 Writing: From Structure to Style | H, D | 3 | |
| Goals 7-10 – minimum of three credits | | | |
| Examples: | | | |
| ANTH 1010 Cultural Anthropology | G, S | 3 | |
| ART 1040 Art Appreciation | F, G | 3 | |
| GCST 1040 American Indian Culture | D | 3 | |
| At least one (1) additional elective credit | | 1 | |
| Total credits for A.S. degree | | 60 | |
| *Recommended for Hamline University | | | |
| **Transferred in from completion of pathway | | | |

| 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 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 (one course if not met by MnTC and/or major courses) | 0-4 |
| - 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 1601 and 1602, and MATH 1221 and 1222.

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