

Biology A.S. Transfer Pathway
Normandale Community College

This document is designed for community college students completing the Biology A.S. Transfer Pathway. Students who do not intend to complete the 60-credit degree should contact Transfer Admission at admission@hamline.edu for course selection advice. All courses must be completed with a C- or better to transfer. If planning to apply to graduate school, courses should be graded a B or better. Although not required, completing the MnTC prior to transfer is advantageous for students. Learn more about the Hamline Plan alignment with the MnTC here: (<https://www.hamline.edu/admission-aid/admission/transfer/mntc-hamline-plan>).

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

Normandale Community College Course - Major	Hamline Plan	Credits	Hamline University Course
BIOL 1501 Principles of Biology I (w/lab)	N1	5	BIOL 1510 Integrated Concepts in Biology I
BIOL 1502 Principles of Biology II (w/lab)	N1	4	BIOL 1520 Integrated Concepts in Biology II
BIOL 2205 Genetics		4	BIOL 3050 Principles of Genetics
Choose one of the following: BIOL 2206 Ecology* BIOL 2207 Cell Biology* BIOL 2208 Biology of Microorganisms		4	BIOL 3030 Ecology BIOL 3060 Principles of Cell Biology BIOL 3XXX 3000-level elective
CHEM 1061 Principles of Chemistry I		5	CHEM 1130 General Chemistry I
CHEM 1062 Principles of Chemistry II		5	CHEM 1140 General Chemistry II
ENGC 1101 College Writing	E	4	FYW 1120 First Year Writing
Goal Area 1 - Choose one of the following: COMM 1101 Fundamentals of Public Speaking COMM 1111 Interpersonal Communication	O	3	COMM 1110 Public Speaking COMM 1XXX 1000-level elective
Goal Area 4: MATH 1100 College Algebra <i>AND choose one of the following:</i> MATH 1080 Intro to Statistics* MATH course higher than College Algebra	R & M	8-10	MATH TRAN General Credit QMBE 1310 Statistics Varies
Goal Area 5 - One course	S	3-4	Varies
Goal Area 6 - One course	H or F	3-5	Varies
Goal Areas 7, 8*, 9 or 10 - One course	Varies	3-5	Varies
Two additional courses to meet credit/goal area requirements. Recommended for students seeking B.S.:			
MATH 1510 Calculus I	R & M	4	MATH 1170 Calculus I
PHYS 1121 Physics 1 for Scientists and Engineers		5	PHYS 1230 General Physics I
PHYS 1122 Physics 2 for Scientists and Engineers		5	PHYS 1240 General Physics II
<i>or</i>			
PHYS 1201 Physics 1 with Biomedical Applications		4	PHYS 1150 Algebra-based Physics I
PHYS 1202 Physics 2 with Biomedical Applications		4	PHYS 1160 Algebra-based Physics II
Total credits for A.S. degree		60	
*Recommended for Hamline University			

Remaining major courses for Biology B.S. degree	Credits
Diversity, Equity, Ethics, and Inclusion in Science (choose one): BIOL 1980 Special Topics: Inclusive Science or STEM Equity (Hamline Plan D) PHIL 1140 Ethics (Hamline Plan H) PHIL 1980 Special Topics: Bioethics (Hamline Plan H)	4
CHEM 3450 Organic Chemistry I	4
Two Supporting Courses**: CHEM 3460 Organic Chemistry II MATH 1170 Calculus I MATH 1180 Calculus II PBHL 3100 Epidemiology PHYS 1150 Algebra-Based Physics I PHYS 1160 Algebra-Based Physics II PHYS 1230 General Physics I PHYS 1240 General Physics II NEUR 3100 Neurological Diseases, Disorders, and Society CDS 1010 Introduction to Programming (Hamline Plan C) CDS 1020 Introduction to Computational Data Science (Hamline Plan D)	0-8
Statistics (choose one):** MATH 1200 Statistics OR QMBE 1310 Statistics	0-4
Select Biology electives (5 courses) which must include: One course from each category (3 categories), and one course must be at the 5000 level	16-20
Recommended course (consult with faculty advisor, can meet Hamline Plan P): BIOL 5700 Biology Research OR BIOL 4010 Collaborative Research (not counted as BIOL elective) OR Internship (not counted as BIOL elective)	0-4
Biology Seminars (1 credit per semester; free): BIOL 5961, BIOL 5962, BIOL 5963, and BIOL 5964 (Hamline Plan O)	4
BIOL 5960 Senior Capstone (Hamline Plan Q, W)	4
**May be transferred in from pathway	
Total Remaining Major Credits	32-52

Remaining graduation requirements for B.S. degree	Credits
General Education Requirements	
- Hamline Plan W - Writing Intensive (1 course if not met by remaining major courses)	0-4
- Hamline Plan S - Social Science (1 course)	4
- Hamline Plan F - Fine Arts (8 credits total; can be partially met by MnTC)	4-8
- Hamline Plan H - Humanities (2 courses if not met by MnTC and/or major courses)	0-8
- Hamline Plan D - Diversity (2 courses if not met by MnTC Goal 7 and/or major courses)	0-8
- Hamline Plan G - Global Citizenship (1 course if not met by MnTC Goal 8)	0-4
- Hamline Plan C - Collaboration (1 course if not met by supporting major courses)	0-4
- Hamline Plan P - LEAP (1 course; see "recommended course" under remaining major courses)	2 or 4
Elective credits to reach minimum 128	Varies
Total credits completed at Hamline University	68
Total credits for B.S. degree	128

Advising Notes:

Concentrations are offered in Genetics, Molecular and Cellular Biology; Ecology and Evolutionary Biology; or Public Health: <https://www.hamline.edu/academics/undergraduate/biology>.

Microbiology is required as an upper division course for many graduate programs. If you plan to go on to graduate school, Microbiology should be taken after transfer.

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: BIOL 1501 and 1502, CHEM 1061 and 1062. Completing MATH 1080 and at least one of the BIOL 2xxx courses is highly recommended. Completing the full AS degree prior to transfer is highly recommended.

Hamline Biology B.A. degree requirements are identical to the B.S. degree, except for three courses (Organic Chemistry I and two additional supporting courses) that are omitted from the B.A.

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