AS: Biology Transfer Pathway

2022-2023

The Associate of Science Biology Transfer Pathway offers students an opportunity to earn course credits that directly transfer to a designated Biology bachelor's degree program at Minnesota State universities. The entire curriculum has been carefully designed to meet bachelor's degree program requirements for transfer students planning initial study at a Minnesota State college. Students planning to transfer to non-system universities are advised to consult with their intended transfer institution as early as possible to determine transferability of the courses in this curriculum.

Program Courses

Course No.	Course Title	Credits
BIOL1101	Principles of Biology I (minimum grade 1.67)	4
BIOL1102	Principles of Biology II (minimum grade 1.67)	4
BIOL2360	Genetics	4
BIOL2610	General Ecology	4

General Education Courses

Course No.	Course Title	Credits
CHEM1061	Principles of Chemistry I (minimum grade 1.67)	4
CHEM1062	Principles of Chemistry II (minimum grade 1.67)	4
COMM	Any 3 Credit Communication Course	3
MATH1150	College Algebra or higher - MATH 1150 College Algebra or higher (choose based on receiving institution and program; MATH 1210 Applied Statistics or MATH 1221 are recommended)	6-8
College Writing I: (minimum grade 1.67)		
ENGL1200	Gateway College Writing (minimum grade 1.67) *or*	4
ENGL 1201	College Writing I (minimum grade 1.67)	4
ENGL1202	College Writing II	2

MnTC Electives

Course No.	Course Title	Credits
History and the Social/Behavioral Sciences (Goal Area 5) - 3 credits		
The Humanities and Fine Arts (Goal Area 6) - 3 credits		
13-15 Additional Elective Credits to equal 60 total credits (Chosen based on Major Track and Transfer University)* ** *Goal area requirements for the AS requires 6 of 10 MNTC goal areas (courses may count for more than one goal area) **CHEM 2061 Organic Chemistry I and CHEM 2062 Organic Chemistry II are recommended for some university programs		

NHCC Residency and GPA

Course No.	Course Title	Credits
15 Credits must be earned at NHCC:		
2.00 overall GPA for NHCC courses		

Total Credit Required 60

Degree Requirements

2.00 overall GPA for NHCC courses

Notes

Under some circumstances, students may substitute Biology 1001 for Biology 1101 if the appropriate chemistry and mathematics prerequisites are met prior to enrolling in Biology 1102. Students who have completed Biology 1001 and 1002 under the previous NHCC course numbering system may substitute these courses for Biology 1101/1102. Students planning to transfer to a BA/BS program are advised to consult the mathematics and chemistry requirements of the program and institution to which transfer is planned. MATH 1150 or higher is required by the NHCC program, but other math courses may be chosen as electives depending on the requirements of the institution students intend to transfer into. Likewise, a student may opt to take CHEM 2061 and CHEM 2062 depending on the students' choice of transfer institution and career goals.

13-15 Elective Credits are chosen to add to 60 total credits and to include 6 of 10 goal areas (courses may count for more than one goal area), chosen based on major track and transfer University.

Biology Transfer Pathway's Competencies

ScientificMethod

Science is a process of trial and error by which we hope to improve our understanding of the natural world incrementally, by making predictions, testing them, and improving their accuracy. The Scientific Method includes the ability to propose testable hypotheses and carry out experiments to test them, and relies on standardized international systems of measurement.

DataInterpretationandStatisticalAnalysis

Students should be able to analyze simple data sets using appropriate descriptive and inferential statistics.

NavigatingandReadingtheScientificLiterature

Students should be able to use public literature databases to find appropriate published material, and should be able to read, understand, and evaluate the validity and importance of the scientific literature and to integrate new concepts into their existing knowledge frameworks.

ScientificCommunication

Students should be able to communicate their own and others data and analysis in oral and written format, using computers where necessary to visualize data or to create clear and compelling papers, posters, or presentations.

ScienceandSociety/CivicEngagement

Students should be able to analyze scientific studies in light of their ecological, social, economic, ethical, and cultural implications.

Collaboration

Students should learn to communicate and work productively with others in designing, conducting, and evaluating projects, experiments, and other course related deliverables as an essential skill in science

InterdisciplinaryNatureofScience

Science depends upon knowledge, skills, and tools from other scientific and nonscientific disciplines. Students should develop their ability to utilize other disciplines as sources of context and skills to inform the learning and work they are engaged in.

Microscopy

The microscope is a tool used extensively in biology for observation and investigation. Skill development in basic light microscopy and exposure to more advanced forms of microscopy and digital imaging is fundamental to further study in biology.

Degree Information

The Associate of Science (A.S.) degree is intended for students whose primary goal is to complete the credentials for a specific career and/or prepare for transfer to complete a bachelor's degree at a college or university with whom North Hennepin Community College has an articulation agreement. The A.S. degree provides a balance of general education courses and the

required scientific, professional or technical courses in the degree program. A student shall:
Earn a minimum of 60 semester credits as required in the program, with a grade point average of 2.00 (C) or above in courses taken at North Hennepin Community College. Specific programs may have additional requirements or a higher minimum grade point average. Earn a minimum of 15 semester credits at North Hennepin Community College. A student must complete at least 50% of career specific courses at North Hennepin Community College.
Earn 30 credits in at least 6 Minnesota Transfer Curriculum (MnTC) goal areas. Earn 30 professional/technicalcredits.
Have four years to complete the graduation requirements as published in the catalog in effect at the time of their initial enrollment. Students taking more than four years to complete their graduation requirements may follow any catalog published during the four- year period preceding their graduation.
Completion of an A.S. degree fulfills the Goal Area 2 requirement of the Minnesota Transfer Curriculum (MnTC).

Developmental Courses

Some students may need preparatory course(s) in Math and/or English. Courses numbered below 1000 will not apply toward a degree.

Equal Opportunity Employer and Disability Access Information

North Hennepin Community College is a member of Minnesota State Colleges and Universities system and an equal opportunity employer and educator. This document is available in alternative formats to individuals with disabilities by calling 763-493-0555 or through the Minnesota Relay Service at 1-800-627-3529.

Transfer Information

If you are planning on transferring to another institution, follow the guidelines available on our transfer resources web page to help you plan the process: TransferInformation

Career Opportunities

Information on careers, including salary and employment outlook data, is available on the iseek and Bureau of Labor Statistics websites: www.iseek.org andwww.bls.gov.

Accreditation

North Hennepin Community College is accredited by the: Higher Learning Commission 30 N. LaSalle Street, Suite 2400 Chicago, I L 60602-2504 1-800-621-7440