

## Biotechnology Public Pathway Program

We have partnered with Manchester Community College to offer a Pathways Program that allows you to smoothly transition your MCC associate degree to a bachelor's degree program at UNH Manchester. This document will help you turn your A.S. in Life Sciences from MCC into a B.S. in Biotechnology at UNH Manchester.

Students must take these courses at MCC...	To fulfill these UNH degree requirements...
FYC 100 – First Year Cornerstone	No transfer credit
ENGL 110 – College Composition I	Discovery writing skills course
BIOL 108 – College Biology I <sup>1</sup>	BIOL 413 – Principles of Biology I
PSYC 110 – Introduction to Psychology	Discovery social science course
CHEM 115 – Chemistry I <sup>2</sup>	CHEM 403 – General Chemistry I
MATH 171 – Pre-Calculus <b>OR</b> MATH 204 – Calculus I	Elective credit <b>OR</b> Discovery quantitative reasoning course
Discovery-approved history course	Discovery historical perspectives course
Discovery-approved fine arts course	Discovery fine and performing arts course
BIOL 109 – College Biology II	BIOL 414 – Principles of Biology II
BIOL 110 – Human Anatomy and Physiology I	Elective credit
BIOL 120 – Human Anatomy and Physiology II	Elective credit
CHEM 116 – Chemistry II	CHEM 404 – General Chemistry II
ENGL 120 – College Composition II	Elective credit
PHIL 240 – Ethics	Discovery humanities course
BIOL 201 – Principles of Genetics	GEN 604 – Principles of Genetics
BIOL 210 – Microbiology <sup>3</sup>	BMS 503 – General Microbiology
BIOL 220 – Pathophysiology	Elective credit
LSCI 229 – Life Science Capstone	Elective credit

**Note:** See page 3 for information about UNH's Discovery Program courses.

1. This course fulfills requirements for both Discovery biological science and Biotechnology major at UNH Manchester.
2. This course fulfills requirements for both Discovery physical science and Biotechnology major at UNH Manchester.
3. This course must have been taken Fall 2014 or later to count

*Course titles, names and/or sequencing are subject to change.*

## Once you've finished your associate degree at MCC, complete the following requirements at UNH Manchester to receive your bachelor's degree.

### Major Course Requirements:

CHEM 651/653 – Organic Chemistry I/Organic Chemistry Lab I

CHEM 652/654 – Organic Chemistry II/Organic Chemistry Lab II

BCMB 658/659 – Biochemistry/Biochemistry Lab (writing intensive)

BSCI 501 – Ethical Issues in Biology (writing intensive)

Five advanced Biology 600/700 courses (at least one from each of three groups and one intensive writing course)

PHYS 401 – Introduction to Physics **OR** PHYS 407 – General Physics I

PSYC 402 – Statistics in Psychology

MATH 424B – Calculus for Life Sciences **OR** MATH 425 – Calculus I (if not already completed)

BSCI 701 – Senior Seminar (1 credit)

Capstone (Research, Internship or Independent Study)

### Discovery Program\* Course Requirements:

Discovery quantitative reasoning course

Discovery environmental, technology and society course

Discovery world cultures course

### University Degree Requirements:

Elective courses to fill remainder of credits required for bachelor's degree (128 credits)

University writing requirement\*\*

\* See page 3 for information about UNH's Discovery program.

\*\* Bachelor degree candidates are required to complete four writing-intensive courses, which must include: English 401 – First Year Writing (or equivalent transfer English composition course) and three additional writing-intensive courses, one in the student's major and one at the 600-level or above.



An advisor at UNH Manchester will provide you with the best possible guidance for course selections each term.

### Please also note:

- UNH Manchester accepts a maximum of 64 credits in transfer from 2-year institutions. Only courses completed with a grade of C or better will be accepted as transfer credits.
- Students must earn a minimum overall grade point average of 2.50 at MCC to be eligible for dual enrollment at UNH Manchester.

*Course titles, names and/or sequencing are subject to change.*

## The Manchester Community College courses\* listed below fulfill UNH Manchester's Discovery Program course requirements:

### Writing Skills

ENGL 110M – College Composition I

### Quantitative Reasoning

CIS 118M – Visual Basic Net Programming  
CIS 148M – Java Programming  
CIS 158M – C# Programming  
MATH 170M – Discrete Mathematics  
MATH 200M – Finite Math  
MATH 202M – Probability & Statistics  
MATH 204M – Calculus I

### Biological Science

BIOL 106M – Human Body  
BIOL 150M – Nutrition

### Biological Science/DLAB

BIOL 101M – General Concepts in Biology  
BIOL 102M – Introduction to Botany  
BIOL 107M – Human Body Lab  
BIOL 108M – College Biology I  
BIOL 109M – College Biology II  
BIOL 110M – Human Anatomy & Physiology I  
BIOL 120M – Human Anatomy & Physiology II  
BIOL 151M – Nutrition Lab  
BIOL 201M – Principles of Genetics

### Physical Science

PHYS 105M – Astronomy

### Physical Science/DLAB

CHEM 115M – General Chemistry I  
CHEM 116M – General Chemistry II  
ESCI 110M – Earth Science  
PHYS 110M – Physical Science I  
PHYS 120M – Physical Science II

PHYS 135M – College Physics I  
PHYS 136M – College Physics II  
PHYS 210M – University Physics I  
PHSY 220M – University Physics II

### Environment, Technology & Society

ENVS 125M – Current Issues in the Environment

### Historical Perspectives

HIST 120M – Western Civ. through 1500  
HIST 130M – Western Civ. 1500 to Present  
HIST 202M – US History to 1870  
HIST 204M – US History 1870 to Present  
HIST 205M – History of Russia

### World Culture

ANTH 101M – Intro to Anthropology  
HIST 210M – History of China  
HIST 211M – Modern Middle Eastern History

### Fine and Performing Arts

ARTS 117M – Art History I  
ARTS 123M – Drawing I  
ARTS 130M – Intro to Art  
ARTS 217M – Art History II  
ENGL 202M – Intro to Drama  
HUMA 105M – Intro to Music  
HUMA 106M – History of American Popular Music

### Social Science

ANTH 102M – Intro to Archeology  
BUS 120M – Intro to Communications Media  
ECON 134M – Macroeconomics  
ECON 135M – Microeconomics

GEOG 110M – Geography  
POLS 110M – American Government  
POLS 210M – Intro to Political Science  
PSYC 110M – Intro to Psychology  
PSYC 210M – Human Growth & Development  
SOC 109M – Contemporary Social Problems  
SOC 110M – Sociology  
SOC 250M – Multiculturalism

### Humanities

ENGL 200M – Topics in Literature  
ENGL 201M – Survey of Poetry  
ENGL 204M – Children's Literature  
ENGL 207M – Intro to Literary Analysis  
ENGL 218M – Short Story  
ENGL 223M – British Literature I  
ENGL 224M – British Literature II  
ENGL 225M – Shakespeare  
ENGL 230M – American Literature I  
ENGL 235M – American Literature II  
HIST 215M – World Religions  
HUMA 126M – Intro to Film  
HUMA 200M – Film & American Culture  
HUMA 220M – Love in the Western Tradition  
PHIL 110M – Intro to Philosophy  
PHIL 240M – Ethics

### Writing Intensive

ENGL 110M – College Composition I  
ENGL 120M – College Composition II  
ENGL 203M – Intro to Journalism  
ENGL 213M – Creative Writing  
ENGL 214M – Creative Nonfiction



### UNH Manchester Bachelor Degree Requirements

To graduate from UNH, students must fulfill course requirements in the following areas: **major** courses, University **Discovery** Program courses and **electives**, totaling 128 credits.

### Discovery Program Courses

UNH's Discovery Program builds each student's foundation in general education. To fulfill the Discovery Program, students must take the following courses: one inquiry course<sup>1</sup> (or INQ attribute course); one course in writing skills; one course in quantitative reasoning; as well as one 400- to 600-level course from each of the following Discovery Program categories: Biological Science (BS)<sup>2</sup>; Physical Science (PS)<sup>2</sup>; Environment, Technology and Society (ETS); Fine and Performing Arts (FPA); Historical Perspectives (HP); Humanities (HUMA); Social Science (SS) and World Cultures (WC)<sup>3</sup>

1. The Inquiry requirement shall be waived for students with 26 or more transfer credits.
2. One of these two courses must have a lab component.
3. Also may be satisfied by approved study abroad programs.