

# Biology Transfer Pathway

for Ohio Community College students  
transferring to Ashland University

November 2022



This document outlines the [statewide Ohio Guaranteed Transfer Pathway \(OGTP\) in Biology](#) that has been designed to provide clarity and consistency for college courses transferring between Ohio 2-year and 4-year public institutions.

This same transfer pathway in biology is now approved for students transferring to Ashland University, through a partnership between 11 Ohio community colleges and 14 private colleges called the [Ohio Consortium for Transfer Pathways to the Liberal Arts](#), and whose faculty and administration have collaborated to expand access and credit clarity for students transferring with an associate’s degree from an Ohio community college to an Ohio private college or university.

Pages 1 & 2 of this document outline **community college courses that are approved statewide** for transfer credit toward the bachelor of science degree in biology at an approved 4-year institution. Pages 3-5 show how these courses transfer to Ashland University to meet bachelor degree requirements.

COMMUNITY COLLEGE – ASSOCIATE DEGREE COURSEWORK – TOTAL 60-65 CREDITS GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		Minimum Credit Hours
ENGLISH COMPOSITION AND ORAL COMMUNICATION:		3
Course 1:	Any OT36 approved First Writing course	3
MATHEMATICS, STATISTICS AND LOGIC		4-5
Course 1:	Calculus I <sup>1</sup>	4-5
ARTS AND HUMANITIES (Two courses from two different areas)		6
Course 1:	Any OT36 approved Arts and Humanities course	3
Course 2:	Any OT36 approved Arts and Humanities course	3
SOCIAL AND BEHAVIORAL SCIENCES (Two courses from two different areas)		6
Course 1:	Any OT36 approved Social and Behavioral Sciences course [Introduction to Psychology recommended for pre-medicine]	3
Course 2:	Any OT36 approved Social and Behavioral Sciences course [Introduction to Sociology (OSS021) recommended for pre-medicine]	3
NATURAL SCIENCES		8-10
Course 1:	General Chemistry I with lab	4-5
Course 2:	General Chemistry II with lab	4-5
ADDITIONAL CREDITS		10
Course 1:	Any OT36 approved Second Writing course	3
Course 2:	9 additional hours of OT36 approved courses <sup>2</sup>	9
GENERAL EDUCATION/OHIO TRANSFER 36 TOTAL:		39-42

**Advising Notes:**

Where it indicates “Any OT36 approved,” students should work closely with their advisors.

<sup>1</sup> A prerequisite, such as College Algebra, may be needed for a student to reach Calculus I. The math requirement may vary by institution, and students planning to pursue a Bachelor of Arts in Biology may only need Pre-Calculus. Check with your academic advisor and your receiving institution to determine the appropriate mathematics course.

<sup>2</sup> Due to the variability across institutions, students should work with their academic advisor to determine an appropriate program of study and appropriate amount of additional credits to satisfy the OT36. Students will need 12 courses of OT36-approved courses so that they will only need 3 additional courses at AU after transferring.

COMMUNITY COLLEGE – ASSOCIATE DEGREE COURSEWORK – <i>Continued from page 1</i>		Minimum Credit Hours
<b>PRE-MAJOR/BEGINNING MAJOR</b>		
Course 1:	Biology I	4-5
Course 2:	Biology II	4-5
Course 3:	Calculus-based Physics I with lab or Algebra-based Physics I with lab or biology course <sup>1</sup>	4-5
<b>PRE-MAJOR/BEGINNING MAJOR TOTAL:</b>		<b>12-15</b>
<b>OTHER REQUIREMENTS</b>		
Courses 1 and 2:	Full-Year Sequence of Organic Chemistry with lab <sup>2</sup> [1 <sup>st</sup> semester of Organic Chemistry is required for biology majors at Ashland, but full year is highly recommended for pre-medicine]	8-12
Electives:	General Electives as needed (May include FYE or Orientation course) <sup>3</sup>	4-5
<b>OTHER REQUIREMENTS TOTAL:</b>		<b>8-18</b>
<b>Advising Notes:</b>		
<p><sup>1</sup> Physics is not required for the Ashland University biology major. The amount and type of physics (calculus or non-calculus-based) required in the biological sciences varies from institution to institution. Many institutions require at least one semester of physics, others none. If physics is not a program requirement, an appropriate biology course should be selected with the guidance of your academic advisor. Please consult with your academic advisor and your receiving institution within the first year of study to determine an appropriate course of study.</p> <p><sup>2</sup> The statewide transfer guarantee applies to the full-year sequence. All non-sequence coursework will be reviewed on a course-by-course basis by the receiving institution for transfer and application to the major. Not all institutions require Organic Chemistry, although it may be required for students who are pre-medicine. Consult with your academic advisor and your receiving institution.</p> <p><sup>3</sup> Certain institutions may require two semesters or more of foreign language for Bachelor of Arts and Bachelor of Science degrees. If so, foreign language should be taken – check with your receiving institution.</p> <p>Additional recommended pre-major/major coursework may include courses in cell biology, microbiology, or genetics. Consult with your academic advisor and your receiving institution to determine an appropriate program of study.</p>		
<b>Associate Degree</b>		<b>Total Credit Hours</b>
<b>ASSOCIATE DEGREE TOTAL:</b>		<b>60-65</b>
<b>SPECIAL NOTES</b>		
<p>Students with plans of pursuing a pre-professional or graduate studies track in the future should work closely with their academic advisor and receiving institution starting in the first year of their program to adequately prepare themselves for those types of tracks. Some pre-professional degrees include pre-medicine, pre-veterinary, pre-law, and pre-dentistry.</p> <p>Students should check with individual institutions for their program admission requirements.</p> <p>Some bachelor-degree granting institutions require additional general education courses outside of the OT36 and students may be required to take these courses in their junior or senior year. Students will still be able to follow this pathway and complete their bachelor's degree in approximately 60 additional credit hours.</p>		

## How Biology Pathway Courses Transfer to Ashland University



The following table outlines how transfer credits from the biology transfer pathway and associate's degree will be applied to the Bachelor of Science in Biology degree at Ashland University.

Students interested in transferring to Ashland University should meet with an admission counselor regarding optimal course selection and admission requirements.

ASHLAND UNIVERSITY COURSE EQUIVALENCIES FROM THE ASSOCIATE DEGREE PATHWAY	Course Number	Credit Hours
<b>GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36<sup>1</sup></b>		
Any OT36 approved First Writing course	ENG 101	3
Any OT36 approved Second Writing course	ENG 102	3
Pre-Calculus or Calculus I <sup>2</sup>	MTH 111 or 205	3-5
Any OT36 approved Arts and Humanities course	OT36 A&H Elective	3
Any OT36 approved Arts and Humanities course	OT36 A&H Elective	3
Any OT36 approved Social and Behavioral Sciences course (Introduction to Psychology recommended for pre-medicine)	PSY 101 or OT36 S&BS Elective	3
Any OT36 approved Social and Behavioral Sciences course (Introduction to Sociology recommended for pre-medicine)	OT36 S&BS Elective	3
General Chemistry I with lab	CHEM 103	4
General Chemistry II with lab	CHEM 104	4
Up to 7 additional hours of OT36 approved courses	OT36 Electives	7
<b>PRE-MAJOR/BEGINNING MAJOR</b>		
Biology I	BIO 201	4
Biology II	BIO 202	4
Biology course <sup>3</sup>	BIO XXX	4
<b>OTHER RECOMMENDATIONS</b>		
Full-Year Sequence of Organic Chemistry with lab <sup>4</sup>	CHEM307+307L, CHEM308+308L	8
Electives	OT36 Electives	4-5
<b>TOTAL HOURS FROM ASSOCIATE DEGREE:</b>		<b>60-66</b>

### Advising Notes:

<sup>1</sup> Should include one communications course, one humanities course, and one arts (aesthetics) course.

<sup>2</sup> A 3-unit Calculus course equivalent to Ashland's Math 201 can be taken as well.

<sup>3</sup> Genetics or Microbiology recommended but both courses must have a lab component to be equivalent to the AU course and apply to the biology major.

<sup>4</sup> 1<sup>st</sup> semester of Organic Chemistry is required for biology majors but full year is highly recommended for pre-medicine. The number of credit hours vary depending on whether the student has completed the organic chemistry sequence. The chemistry minor presents the best pathway to completion of the academic minor for those students seeking admission to medical school.

This Transfer Pathway completes the Associate of Science degree, which must total at least 60 semester credits and includes 36 credits of the Ohio Transfer 36 (OT36), which are approved general education requirements. OT36 details can be found at <https://transfercredit.ohio.gov/initiatives-upd/ohio-transfer-36>.

## Biology Transfer Pathway

Remaining Courses to Complete at  
Ashland UniversityASHLAND  
UNIVERSITY

This table outlines the remaining coursework required for the bachelor of science in biology degree at Ashland University. A student transferring to Ashland University with the associate of science degree and biology transfer pathway completed will receive maximum credit, placing them at or near junior standing with introductory coursework in the biology major completed.

Most or all of the Ashland University general education requirements can be completed as part of the associate degree, through planning with a transfer advisor. Students interested in transferring to Ashland University should meet with an admission counselor regarding optimal course selection and admission requirements.

REMAINING COURSEWORK TO COMPLETE THE BACHELOR'S DEGREE AT ASHLAND UNIVERSITY	Course Number	Credit Hours
<b>INSTITUTIONAL DEGREE REQUIREMENTS</b>		
Critical Cultural Inquiry course	Course #	3
Religion course	Course #	3
Historical Reasoning course	Course #	3
<b>MAJOR REQUIREMENTS</b>		
Professional Preparation	Bio 301	1
Genetics (if not taken at 2-year institution)	Bio 303	4
Biology Senior Seminar	Bio 495	1
Statistics	Math 108	3
Seminar course (either Journal Club or Environmental Science Seminar)	Bio 304 or 276	1
One course in three of the following four areas:		10-12
Cell and Molecular Biology (if taken at 2-year institution Microbiology meets this area)		
Biodiversity		4
Physiology		4
Ecology and Evolution		4
16 credits of Biology courses with at least 8 at the 300- or 400-level		16
<b>OTHER BACHELOR DEGREE REQUIREMENTS</b>		
Minor or double major <sup>1</sup>		12-24
Elective credits as needed to reach 120 credit hours		0-24
<b>TOTAL REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE</b>		<b>60-65</b>

**Advising Notes:**

<sup>1</sup> This credit could be applied to a minor. Minors are not required. A student completing a biology major with Biochemistry as the Cell and Molecular Biology course will only need one additional course (typically Chem 320 Quantitative Analysis but there are other options) to complete a chemistry minor.

Transfer students must complete more than 50% of their major at Ashland University.

Ashland University has three Core requirements that are not represented in the OT36: a Religion requirement, a Critical Cultural Inquiry requirement, and a Historical Reasoning requirement (which is in addition to the Humanities requirement). Further, Ashland University requires 6 hours of Humanities AND 6 hours of Aesthetics credits, which are considered separate areas of the Core. Finally, Ashland University requires a Communication course that is separate from the Composition area of the Core.

A candidate for a baccalaureate degree at Ashland University must have completed all the course and proficiency requirements for that particular degree and must earn not less than 120 semester hours (60 hours for associate degree) of college work with a grade point average of not less than 2.0.

# Sample Degree Map for Biology Transfer Pathway

## Ashland University

**ASHLAND**  
UNIVERSITY

This sample degree map shows how students who transfer to Ashland University with the biology transfer pathway can complete the bachelor's degree in four semesters.

THIRD YEAR			
SEMESTER 5		SEMESTER 6	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
Core class 1	3	Core class 2	3
Bio 301 Professional Prep	1	Biology distribution area	3-4
Bio 303 Genetics (if not taken) or elective credit	3-4	Biology elective credit	3-4
Bio 304 Journal club (or take Bio 276 in spring)	0-1	Bio 276 Environmental Science seminar (or take Bio 301 in fall)	0-1
Math 108 Statistics	3	Elective credit	3-4
Biology distribution area course	3-4	Elective credit	3-4
Elective credit	3-4		
<b>Total Semester Credit Hours</b>	<b>16-19</b>	<b>Total Semester Credit Hours</b>	<b>15-20</b>

FOURTH YEAR			
SEMESTER 7		SEMESTER 8	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
Core class 3	3	Biology Senior Seminar	1
Biology distribution area	3-4	Biology elective credit	3-4
Biology elective credit	3-4	Biology elective credit	3-4
Elective credit	3-4	Elective credit	3-4
Elective credit	3-4	Elective credit	3-4
<b>Total Semester Credit Hours</b>	<b>15-19</b>	<b>Total Semester Credit Hours</b>	<b>13-17</b>