

# Biology Transfer Pathway

for Ohio Community College students  
transferring to Lourdes 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 Lourdes 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 Lourdes 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 (OSC008)	4-5
Course 2:	General Chemistry II with lab (OSC009)	4-5
ADDITIONAL CREDITS		10
Course 1:	Any OT36 approved Second Writing course	3
Course 2:	Up to 7 additional hours of OT36 approved courses <sup>2</sup>	7
GENERAL EDUCATION/OHIO TRANSFER 36 TOTAL:		37-40

**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.

COMMUNITY COLLEGE – ASSOCIATE DEGREE COURSEWORK – <i>Continued from page 1</i>		Minimum credit hours
<b>PRE-MAJOR/BEGINNING MAJOR</b>		
Course 1:	Biology I (OSC003)	4-5
Course 2:	Biology II (OSC004)	4-5
Course 3:	Calculus-based Physics I with lab (OSC016) or Algebra-based Physics I with lab (OSC014) 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 (OSC010) <sup>2</sup> [Not required but 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> 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 Lourdes University



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

LOURDES UNIVERSITY COURSE EQUIVALENCIES FROM THE ASSOCIATE DEGREE PATHWAY	Course Number	Credit Hours
<b>GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36</b>		
Any OT36 approved First Writing course	ENG 101	3
Any OT36 approved Second Writing course		3
Calculus I	MATH 135	4
Any OT36 approved Arts and Humanities course <sup>1</sup>	OT36 A&H Elective	3
Any OT36 approved Arts and Humanities course <sup>1</sup>	OT36 A&H Elective	3
Any OT36 approved Social and Behavioral Sciences course (Introduction to Psychology recommended for pre-medicine)	PSY 110 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	CHM/CHL 181	4
General Chemistry II with lab	CHM/CHL 182	4
Up to 7 additional hours of OT36 approved courses	OT36 Electives	
<b>PRE-MAJOR/BEGINNING MAJOR</b>		
Biology I	BIO/BIL 201	4
Biology II	BIO/BIL 202	4
Calculus-based Physics I with lab or Algebra-based Physics I with lab or biology course	PHS/PLA 201 PHS/PLA 301	5
<b>OTHER RECOMMENDATIONS</b>		
Introductory Statistics	MTH 212	3
One of the following:		
Full-Year Sequence of Organic Chemistry with lab	CHM/L 301/302	8
Microbiology with Lab	BIO/L 335	4
Physics II [Not required but suggest evaluation for equivalency]	PHS/PLA 202/302	5
Electives	OT36 Electives	4-5
<b>TOTAL HOURS FROM ASSOCIATE DEGREE:</b>		<b>60-65</b>

### Advising Notes:

<sup>1</sup>Lourdes University Core requires one semester each of approved history, philosophy, ethics, literature, and art or music. Students should work closely with an advisor to fill Arts and Humanities prerequisites to 12 hours.

<sup>2</sup>Lourdes University requires two semesters of approved theology courses. Students should work closely with an advisor to fill Arts and Humanities prerequisites or elective spots if possible.

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  
Lourdes University

This table outlines the remaining coursework required for the bachelor of science in biology degree at Lourdes University.

REMAINING COURSEWORK TO COMPLETE THE BACHELOR'S DEGREE AT LOURDES UNIVERSITY	Course Number	Credit Hours
<b>INSTITUTIONAL DEGREE REQUIREMENTS</b>		
Writing for Science and Health Professions	ENG 355	3
Theology	THSXXX	6
Enduring Questions Seminar	ENQXXX	3
Capstone in the Major	BIO 490	3
<b>MAJOR REQUIREMENTS</b>		
Microbiology with Lab	BIO/BIL 335	4
Genetics with Lab	BIO/BIL 308	4
Cell Biology with Lab	BIO/BIL 307	4
Principles of Ecology	BIO 317	3
Introduction to Research	BIO 402	1
Statistics	MTH 212	3
Full-Year Sequence of Organic Chemistry with lab	CHM/CHL 301,302	8
College Physics II with Lab	PHS/PLA 202 PHS/PLA 302	5
Senior Biology Seminar	BIO 490	1-3
Electives in Biology, Chemistry, or Exercise Science		18
<b>OTHER BACHELOR DEGREE REQUIREMENTS</b>		
Service Learning hours		variable
<b>TOTAL REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE</b>		<b>60-65</b>

**Advising Notes:**

Lourdes University requires a minimum of 120 semester credit hours for degree completion. The total number of hours in the third or fourth year represent a range of hours that may be needed depending on the individual course of study.

The number of credit hours vary depending on whether the student has completed the organic chemistry sequence.

# Sample Degree Map for Biology Transfer Pathway

## Lourdes University



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

### THIRD YEAR

SEMESTER 5	
Course Name & Number	Credit Hours
ENG 355	3
CHM/CHL 301	4
BIO/BIL 308 Genetics with Lab	4
BIO 317 Principles of Ecology	3
BIO Electives	3-4
<b>Total Semester Credit Hours</b>	<b>17-18</b>

SEMESTER 6	
Course Name & Number	Credit Hours
LU Core	3
CHM/CHL 302	4
PHS/PLA 202 or 302	5
BIO/BIL 307 Cell Biology	4
<b>Total Semester Credit Hours</b>	<b>16</b>

### FOURTH YEAR

SEMESTER 7	
Course Name & Number	Credit Hours
LU Core	3
BIO/BIL 335 Microbiology	4
BIO 402 Introduction to Research	1
BIO Electives	6-8
<b>Total Semester Credit Hours</b>	<b>15-16</b>

SEMESTER 8	
Course Name & Number	Credit Hours
Enduring Questions Seminar	3
LU Core	3
BIO490 Senior Biology Seminar	3
BIO Electives	6-8
<b>Total Semester Credit Hours</b>	<b>15-17</b>