



## Transfer Credit Ohio

Ohio Guaranteed Transfer Pathways

CENTRAL STATE UNIVERSITY

## Biology Bachelor of Science

**EFFECTIVE BEGINNING ACADEMIC YEAR 2023-24**

LAST REVISED: April 10, 2025

The following table outlines how transfer credits will be applied to the Bachelor of Science in Biology degree at Central State University for students who completed an Associate of Science degree via the Ohio Guaranteed Biology Transfer Pathway. The OGTP designation guarantees the transfer and applicability of credits, but does not guarantee admission to a program. Some bachelor-degree granting programs may be competitive, and students should check with individual institutions for their program admission requirements.

COURSE EQUIVALENCIES FROM THE ASSOCIATE DEGREE	COURSE NUMBER	CREDIT HOURS
<b>GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36</b>		
Any Ohio Transfer 36 approved First Writing (TME001) course	ENG 1100 or 1101	4-5
Calculus I (TMM005) <sup>1</sup>	MTH 2502	4
Any Ohio Transfer 36 approved Arts and Humanities course <sup>2</sup>	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Arts and Humanities course <sup>2</sup>	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Social and Behavioral Sciences course [Introduction to Psychology (OSS015) recommended for pre-medicine]	PSY 1200 or Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Social and Behavioral Sciences course [Introduction to Sociology (OSS021) recommended for pre-medicine]	SOC 1105 or Ohio Transfer 36 Elective*	3
General Chemistry I with lab (OSC008)	CHEM 1201 (To be submitted) <sup>3</sup>	4
General Chemistry II with lab (OSC009)	CHEM 1202 (To be submitted) <sup>3</sup>	4
Any Ohio Transfer 36 approved Second Writing (TME002) course	ENG 1102	4
Up to 7 additional hours of Ohio Transfer 36 approved courses	Ohio Transfer 36 Electives*	0-7
<b>PRE-MAJOR/BEGINNING MAJOR</b>		
Biology I (OSC003)	BIO 1801	4
Biology II (OSC004)	BIO 1802	4
Genetics (OSC028) or Calculus-based Physics I with lab (OSC016) or Algebra-based Physics I with lab (OSC014) or biology course	BIO 2400 (To be submitted) <sup>3</sup> or PHY 2411	4-5
<b>OTHER RECOMMENDATIONS</b>		
Full-Year Sequence of Organic Chemistry with lab (OSC010) [Not required but highly recommended for pre-medicine] <sup>4</sup>	CHEM 2401 (To be submitted) <sup>3</sup> & CHEM 2402 (To be submitted) <sup>3</sup>	0-8
General Electives as needed (May include FYE or Orientation course) <sup>2</sup>	Varies*	0-6
<b>TOTAL HOURS FROM ASSOCIATE DEGREE:</b>		<b>60-65</b>
Advising Notes: (*) Indicates that coursework will be evaluated for applicable equivalency upon transfer at the university. If a Transfer Assurance Guide (TAG) course is taken, the approved course equivalency will be awarded. <sup>1</sup> A prerequisite may be needed for a student to reach Calculus I (TMM005). <sup>2</sup> Central State University recommends students complete one course in Western/World Civilization OHS041 or OHS042. If a course is not completed, an additional course may be required upon transfer. <sup>3</sup> "To be submitted" indicates that the course does not currently carry the statewide course equivalency guarantee. However, the institution is working towards this goal and will act in good faith to ensure the appropriate equivalency is given that counts toward the degree. <sup>4</sup> Organic Chemistry (OSC010) is required to complete the Bachelor of Science in Biology at Central State University. If it is not completed during associate degree, it will be required upon transfer.		



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The following additional coursework will be required to complete the Bachelor of Science in Biology degree at Central State University after a student has completed an Associate of Science Ohio Guaranteed Biology Transfer Pathway degree. Some bachelor-degree granting programs may be competitive and admission into the program is not guaranteed. Students should check with individual institutions for their program admission requirements.

REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE		COURSE NUMBER	CREDIT HOURS
University Requirement:	Introduction to Africans in the U.S., Global History to 1500, or Global History since 1500 (if not completed during the associate degree)	HIS 1110, HIS 1121, or HIS 1122	0-3
University Requirement:	Marauder Lifestyle: Undergraduate Success Seminar	USS 1000	2
University Requirement:	Marauder Lifestyle: Physical Activity	Varies	1
Major Requirement:	University Physics I (if not completed during the associate degree)	PHY 2411	0-5
Major Requirement:	University Physics II	PHY 2412	5
Major Requirement:	Organic Chemistry Sequence (if not completed during associate degree)	CHEM 2401 & CHEM 2402	0-8
Major Requirement:	Calculus II	MTH 2503	5
Major Requirement:	Writing for Life Sciences	BIO 2100	3
Major Requirement:	Molecular Genetics (if not completed during the associate degree)	BIO 2400	0-4
Major Requirement:	Zoology	BIO 2750	2
Major Requirement:	Plant Biology	BIO 2850	2
Major Requirement:	Mircobiology or Environmental Microbiology	BIO 2650 or BIO 2060	4
Major Requirement:	Ecology or Agroecology	BIO 3500 or BIO 4350	4
Major Requirement:	Introduction to Biochemistry	CHM 3300	3
Major Requirement:	Molecular Cell Biology	BIO 4100	4
Major Requirement:	Undergraduate Research in Biology	BIO 4500	2
Major Requirement:	Biology Electives at the 3000/4000 level	BIO 3XXX/4XXX	13
Electives:	General Electives as needed	Varies	0-6
<b>REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE TOTAL:<sup>1</sup></b>			<b>60-66</b>
Advising Notes: <sup>1</sup> Central State University requires 120 to complete degree requirements. Biology majors must take a minimum of 46 hours of biology, 20 hours of chemistry, 10 hours of physics, and 9 hours of mathematics. The total number of hours to complete a bachelor's degree represents a range of hours that may be needed depending on the individual course selections made during the associate degree program.			

COMPLETE BACHELOR'S DEGREE	TOTAL CREDIT HOURS
<b>BACHELOR'S DEGREE TOTAL:</b>	<b>120</b>

### SPECIAL NOTES

For more information, please contact:  
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## Biology Bachelor of Science

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### SAMPLE DEGREE MAP

#### THIRD YEAR

SEMESTER 5		SEMESTER 6	
COURSE NAME & NUMBER	CREDIT HOURS	COURSE NAME & NUMBER	CREDIT HOURS
PHY2411 University Physics I or BIO 2400 Molecular Genetics	4-5	CHM 2402 Organic Chemistry II (if not completed during associate degree) or General Elective	3-4
CHM 2401 Organic Chemistry I (if not completed during associate degree) or General Elective	3-4	BIO 4500 Undergraduate Research in Biology	2
BIO 2060 Environmental Microbiology or BIO 2650 Microbiology	4	PHY2412 University Physics II	5
USS 1000 Undergraduate Success Seminar	2	BIO 3500 Ecology or BIO4350 Agroecology	4
		BIO 2750 Zoology	2
<b>Total SEMESTER 5 Credit Hours</b>	13-15	<b>Total SEMESTER 6 Credit Hours</b>	16-17

#### FOURTH YEAR

SEMESTER 7		SEMESTER 8	
COURSE NAME & NUMBER	CREDIT HOURS	COURSE NAME & NUMBER	CREDIT HOURS
CHM 3300 Biochemistry	3	BIO 4100 Molecular Cell Biology	4
BIO 2100 Writing for Life Sciences	3	BIO 3XXX/4XXX Elective	3
BIO 2850 Plant Biology	2	BIO 3XXX/4XXX Elective	3
MTH 2503 Calculus II	5	BIO 3XXX/4XXX Elective	3
Physical Activity	1	BIO 3XXX/4XXX Elective	4
<b>Total SEMESTER 7 Credit Hours</b>	14	<b>Total SEMESTER 8 Credit Hours</b>	17