

The following table outlines how transfer credits will be applied to the Bachelor of Science in Biological Sciences degree at Youngstown 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	ENGL 1550	3
Calculus I (TMM005) <sup>1</sup>	MATH 1571	4
Any Ohio Transfer 36 approved Arts and Humanities course	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Arts and Humanities course	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Social and Behavioral Sciences course [Introduction to Psychology (OSS015) recommended for pre-medicine]	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Social and Behavioral Sciences course [Introduction to Sociology (OSS021) recommended for pre-medicine]	Ohio Transfer 36 Elective*	3
General Chemistry I with lab (OSC008)	CHEM 1515/L	4
General Chemistry II with lab (OSC009)	CHEM 1516/L	4
Any Ohio Transfer 36 approved Second Writing (TME002) course	ENGL 1551	3
Up to 7 additional hours of Ohio Transfer 36 approved courses	Ohio Transfer 36 Electives*	3
<b>PRE-MAJOR/BEGINNING MAJOR</b>		
Biology I (OSC003)	BIOL 2601/L (under review) <sup>1</sup>	4
Biology II (OSC004)	BIOL 2602/L	4
Genetics (OSC028) or Calculus-based Physics I with lab (OSC016) or Algebra-based Physics I with lab (OSC014) or biology course <sup>1</sup>	BIOL3721 (to be submitted) <sup>1</sup> or PHYS 2610/L or PHYS 1501/L	5
<b>OTHER RECOMMENDATIONS</b>		
Full-Year Sequence of Organic Chemistry with lab (OSC010) [Not required but highly recommended for pre-medicine]	CHEM 3719/L and CHEM 3720/L	0-8
Any Ohio Transfer 36 approved Oral Communications course	CMST 1545	3
General Electives	Varies*	3
<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> "Under review" or "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.		

### SPECIAL NOTES

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 in order to adequately prepare themselves for those types of tracks. Some pre-professional degrees include pre-medicine, pre-veterinary, pre-law, and pre-dentistry.

The following additional coursework will be required to complete the Bachelor of Science in Biological Sciences degree at Youngstown State University after a student has completed their 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
Major Requirements:	Genetics or Evolution (if not completed during associate degree program)	BIOL 3721 or BIOL 3759	0-3
Major Requirements:	Statistical Methods or Biometry	STAT 3717 or BIOL 5853	3-4
Major Requirements:	Senior Biology Capstone Experience	BIOL 4861	2
Major Requirements:	Upper Division BIOL coursework (BIOL courses at the 3000-5000 level, at least two courses must have a laboratory component and at least one at the 4800-5800 level)	Varies	24
Major Requirements:	Fundamentals of Physics 2 & Laboratory or General Physics 2 & Laboratory	PHYS 1502/L or PHYS 2611/L	4-5
Minor Requirement:	Minor Courses	Varies	18
Electives:	General Electives	Varies	9-10
<b>REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE TOTAL:<sup>1</sup></b>			<b>60-66</b>
Advising Notes: <sup>1</sup> Students must complete at least 39 hours of coursework must be upper-division (3700 or higher). Youngstown State University requires a total of 120 credit hours to earn a bachelor's degree. 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: Biological Sciences 4037 Ward Beecher Science Hall (330) 941-3600 <a href="https://catalog.ysu.edu/undergraduate/colleges-programs/college-science-technology-engineering-mathematics/department-biological-sciences/bs-biological-sciences/">https://catalog.ysu.edu/undergraduate/colleges-programs/college-science-technology-engineering-mathematics/department-biological-sciences/bs-biological-sciences/</a>

**SAMPLE DEGREE MAP**

**THIRD YEAR**

SEMESTER 5		SEMESTER 6	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BIOL 3700-5800 Biology Course with Laboratory	4	STAT 3717 Statistical Methods or BIOL 5853 Biometry	3-4
BIOL 3721 Genetics or BIOL 3759 Evolution (if not completed during associate degree)	0-3	BIOL 3700-5800 Biology Course	3
Minor Course	3	BIOL 3700-5800 Biology Course	3
Minor Course	3	Minor Course	3
General Elective	3	PHYS 1502/L or PHYS 2611/L Physics 2 with Laboratory	4-5
<b>Total Semester 5 Credit Hours</b>	<b>13-16</b>	<b>Total Semester 6 Credit Hours</b>	<b>16-18</b>

**FOURTH YEAR**

SEMESTER 7		SEMESTER 8	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BIOL 3700-5800 Biology Course with 4000 Level Laboratory	4	BIOL 4861 Senior Biology Capstone Experience	2
BIOL 3700-5800 Biology Course	3	Minor Course	3
BIOL 3700-5800 Biology Course	3	BIOL 3700-5800 Biology Course with Laboratory	4
Minor Course	3	General Elective	3-4
Minor Course	3	General Elective	3
<b>Total Semester 7 Credit Hours</b>	<b>16</b>	<b>Total Semester 8 Credit Hours</b>	<b>15-16</b>