

The following table outlines how transfer credits will be applied to the Bachelor of Science in Biology degree at Kent 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 11011	3
Calculus I (TMM005)	MATH 12002	5
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]	PSYC 11762 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 12050 or Ohio Transfer 36 Elective*	3
General Chemistry I with lab (OSC008)	CHEM 10060 and CHEM 10062	5
General Chemistry II with lab (OSC009)	CHEM 10061 and CHEM 10063	5
Any Ohio Transfer 36 approved Second Writing (TME002) course	ENG 21011	3
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)	BSCI 10120	4
Biology II (OSC004)	BSCI 10110	4
Calculus-based Physics I with lab (OSC016) or Algebra-based Physics I with lab (OSC014) or biology course <sup>1</sup>	PHY 23101; or PHY 13001 and PHY 13021	5
<b>OTHER RECOMMENDATIONS</b>		
Full-Year Sequence of Organic Chemistry with lab (OSC010) [Not required but highly recommended for pre-medicine] <sup>2</sup>	CHEM 20481, CHEM 20482, CHEM 30475, and CHEM 30476	0-8
General Electives as needed (May include FYE or Orientation course)	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> Kent State University only requires Algebra-based Physics I with lab (OSC014) for the B.S. in Biology with a concentration in Pre-Med/Pre-Podiatry/Pre-Dentistry. The B.A. in Biology does not require physics. <sup>2</sup> Kent State University only requires the Full-Year Sequence of Organic Chemistry with lab (OSC010) for the B.S. in Biology. The B.A. in Biology does not require the Organic Chemistry sequence.		

### 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 Biology degree at Kent 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 OF SCIENCE DEGREE		Course Number	Credit Hours
University Requirement:	Domestic Diversity Course (if not already completed during the associate degree) <sup>1</sup>	Varies	0-3
University Requirement:	Global Diversity Course (if not already completed during the associate degree) <sup>1</sup>	Varies	0-3
College Requirement:	Foreign Language - Elementary I and II	Varies	8
Major Requirement:	Elements of Genetics	BSCI 30156	3
Major Requirement:	Evolution	BSCI 40163	3
Major Requirement:	Writing in the Biological Sciences	BSCI 40600	1
Major Requirement:	Basic Organic Chemistry I or Organic Chemistry I (if not completed during the associate degree)	CHEM 20481 or CHEM 30481	0-4
Major Requirement:	Basic Probability and Statistics or Analytic Geometry and Calculus II	MATH 30011 or MATH 12003	3-5
Major Requirement:	Concentration Courses (see next page for requirements)	Varies	32-40
General Electives:	General Electives <sup>2</sup>	Varies	0-5
<b>REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE TOTAL:<sup>3</sup></b>			<b>55-60</b>
Advising Notes: Completion of the Ohio Transfer 36 will satisfy the entire set of Kent Core requirements. <sup>1</sup> Students must complete the Kent State diversity course requirement, which includes one course with a domestic diversity focus and one course with a global diversity focus from the approved list. These can often be fulfilled as part of the associate degree with careful course selection. Please work with your advisor to identify appropriate courses. <sup>2</sup> The College of Arts and Sciences requires that students successfully complete a minimum of 42 upper-division credit hours. <sup>3</sup> Kent State requires a total of 120 credits hours for bachelor's degree completion. The total number of hours to complete the 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: Department of Biological Sciences pathways@kent.edu www.kent.edu/biology

MOLECULAR AND CELLULAR BIOLOGY CONCENTRATION		Course Number	Credit Hours
Concentration Requirement:	Cell Biology	BSCI 30140	4
Concentration Requirement:	Molecular Biology	BSCI 40158	3
Concentration Requirement:	Basic Organic Chemistry II or Organic Chemistry Laboratory I (ELR) or Organic Chemistry II (if not completed during the associate degree)	CHEM 20482 or CHEM 30475 or CHEM 30482	0-3
Concentration Requirement:	Biology, Chemistry, Physics Electives	Varies	26-31
<b>MOLECULAR AND CELLULAR BIOLOGY CONCENTRATION TOTAL:</b>			<b>33-38</b>

ORGANISMAL BIOLOGY CONCENTRATION		Course Number	Credit Hours
Concentration Requirement:	Basic Organic Chemistry II or Organic Chemistry Laboratory I (ELR) or Organic Chemistry II (if not completed during the associate degree)	CHEM 20482 or CHEM 30475 or CHEM 30482	0-3
Concentration Requirement:	Organismal Core Electives	Varies	7-8
Concentration Requirement:	Biology, Chemistry, Physics Electives	Varies	25-30
<b>ORGANISMAL BIOLOGY CONCENTRATION TOTAL:</b>			<b>32-38</b>

PRE-MEDICINE/PRE-PODIATRY/PRE-DENTISTRY CONCENTRATION		Course Number	Credit Hours
Concentration Requirement:	General Psychology (if not already completed during the associate degree)	PSYC 11762	0-3
Concentration Requirement:	Introduction to Sociology (if not already completed during the associate degree)	SOC 12050	0-3
Concentration Requirement:	Cell Biology	BSCI 30140	4
Concentration Requirement:	Career Pathways in Biology	BSCI 30105	1
Concentration Requirement:	Human Physiology or Animal Physiology	BSCI 30130 or BSCI 40430	3
Concentration Requirement:	General Microbiology	BSCI 30171	4
Concentration Requirement:	Basic Organic Chemistry II or Organic Chemistry II (if not completed during the associate degree)	CHEM 20482 or CHEM 30482	0-3
Concentration Requirement:	Organic Chemistry Laboratory I (ELR) (if not completed during the associate degree)	CHEM 30475	0-1
Concentration Requirement:	Organic Chemistry Laboratory II (ELR) (if not completed during the associate degree)	CHEM 30476	0-1
Concentration Requirement:	Introductory Biological Chemistry or Biochemical Foundations of Medicine	CHEM 30284 or CHEM 40245	4
Concentration Requirement:	Biology (BSCI) Upper-Division Electives (30000 or 40000 level)	Varies	14
Concentration Requirement:	Physics Electives from approved list	Varies	5-10
<b>PRE-MEDICINE/PRE-PODIATRY/PRE-DENTISTRY CONCENTRATION TOTAL:</b>			<b>35-40</b>

**SAMPLE DEGREE MAP**  
**MOLECULAR AND CELLULAR BIOLOGY CONCENTRATION**

**THIRD YEAR**

SEMESTER 5		SEMESTER 6	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BSCI 30140 Cell Biology	4	BSCI 40158 Molecular Biology	3
MATH 12003 Analytic Geometry and Calculus II or MATH 30011 Basic Probability and Statistics	3-5	Upper Division Biology, Chemistry, Physics Electives	6
BSCI 30156 Elements of Genetics	3	Biology, Chemistry, Physics Electives	3
Foreign Language	4	Foreign Language	4
<b>Total Semester 5 Credit Hours</b>	<b>14-16</b>	<b>Total Semester 6 Credit Hours</b>	<b>16</b>

**FOURTH YEAR**

SEMESTER 7		SEMESTER 8	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BSCI 40163 Evolution	3	Upper Division Biology, Chemistry, Physics Electives	13
BSCI 40600 Writing in the Biological Sciences (WIC)	1	General Elective (upper-division as needed)	3
Upper Division Biology, Chemistry, Physics Electives	9		
<b>Total Semester 7 Credit Hours</b>	<b>13</b>	<b>Total Semester 8 Credit Hours</b>	<b>16</b>

**SAMPLE DEGREE MAP**  
**ORGANISMAL BIOLOGY CONCENTRATION**

**THIRD YEAR**

SEMESTER 5		SEMESTER 6	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
Upper Division Biology, Chemistry, Physics Electives	4	MATH 12003 Analytic Geometry and Calculus II or MATH 30011 Basic Probability and Statistics	3-5
Organismal Core Elective	4	Upper Division Biology, Chemistry, Physics Electives	8
BSCI 30156 Elements of Genetics	3	Foreign Language	4
Foreign Language	4		
<b>Total Semester 5 Credit Hours</b>	<b>15</b>	<b>Total Semester 6 Credit Hours</b>	<b>15-17</b>

**FOURTH YEAR**

SEMESTER 7		SEMESTER 8	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BSCI 40163 Evolution	3	Upper Division Biology, Chemistry, Physics Electives	16
BSCI 40600 Writing in the Biological Sciences (WIC)	1		
Biology, Chemistry, Physics Elective	2		
Organismal Core Elective	3-4		
General Elective (upper-division as needed)	3		
<b>Total Semester 7 Credit Hours</b>	<b>12</b>	<b>Total Semester 8 Credit Hours</b>	<b>15</b>

**SAMPLE DEGREE MAP**  
**PRE-MEDICINE/PRE-PODIATRY/PRE-DENTISTRY CONCENTRATION**

**THIRD YEAR**

SEMESTER 5		SEMESTER 6	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BSCI 30140 Cell Biology	4	BSCI 40600 Writing in the Biological Sciences (WIC)	1
BSCI 30105 Career Pathways in Biology	1	Biology (BSCI) Upper-Division Electives (30000 or 40000 level)	6
BSCI 30156 Elements of Genetics	3	Foreign Language	4
Foreign Language	4	General Elective (upper-division as needed)	3
MATH 12003 Analytic Geometry and Calculus II or MATH 30011 Basic Probability and Statistics	3-5		
<b>Total Semester 5 Credit Hours</b>	<b>15-17</b>	<b>Total Semester 6 Credit Hours</b>	<b>14</b>

**FOURTH YEAR**

SEMESTER 7		SEMESTER 8	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BSCI 30130 Human Physiology or BSCI 40430 Animal Physiology	3	BSCI 40163 Evolution	3
BSCI 30171 General Microbiology	4	Biology (BSCI) Upper-Division Electives (30000 or 40000 level)	8
CHEM 30284 Introductory Biological Chemistry or CHEM 40245 Biochemical Foundations of Medicine	4	Physics Elective (if needed) or General Elective (upper-division as needed)	3-5
Physics Elective	5		
<b>Total Semester 7 Credit Hours</b>	<b>16</b>	<b>Total Semester 8 Credit Hours</b>	<b>14-16</b>

The following additional coursework will be required to complete the Bachelor of Arts in Biology degree at Kent 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 OF ARTS DEGREE		Course Number	Credit Hours
University Requirement:	Domestic Diversity Course (if not already completed during the associate degree) <sup>1</sup>	Varies	0-3
University Requirement:	Global Diversity Course (if not already completed during the associate degree) <sup>1</sup>	Varies	0-3
University Requirement:	Experiential Learning Requirement (ELR) <sup>2</sup>	Varies	Varies
College General Requirement:	One Additional Kent Core Social Sciences Course <sup>3</sup>	Varies	3
College Requirement:	Four Foreign Language Courses	Varies	14-16
Major Requirement:	Elements of Genetics	BSCI 30156	3
Major Requirement:	Evolution	BSCI 40163	3
Major Requirement:	Writing in the Biological Sciences	BSCI 40600	1
Major Requirement:	Biology (BSCI) Electives <sup>4</sup>	Varies	5
Major Requirement:	Biology (BSCI) Upper-Division Electives (30000 or 40000 level) <sup>4</sup>	Varies	11
General Electives:	General Electives <sup>5</sup>	Varies	17-24
<b>REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE TOTAL:<sup>5</sup></b>			<b>57-64</b>

**Advising Notes:**

<sup>1</sup> Students must complete the Kent State diversity course requirement, which includes one course with a domestic diversity focus and one course with a global diversity focus from the approved list. These can often be fulfilled as part of the associate degree with careful course selection. Please work with your advisor to identify appropriate courses.

<sup>2</sup> The Kent State ELR requires completion of one course or experience from the approved list. Please work with your Kent State advisor to identify appropriate courses.

<sup>3</sup> Completion of the Ohio Transfer 36 will satisfy the entire set of Kent Core requirements. College General Requirements for students pursuing a B.A. in the College of Arts and Sciences are not covered by the Ohio Transfer 36, though they may be covered in additional coursework. Please reach out to [pathways@kent.edu](mailto:pathways@kent.edu) with questions.

<sup>4</sup> Students should consult with a biology advisor to determine the most appropriate courses given their disciplinary interests and career aspirations. Maximum 6 credit hours total of any combination of the following courses may be used toward fulfilling electives: BSCI 40199; BSCI 40191; BSCI 40192; BSCI 40193; BSCI 40196.

<sup>5</sup> The College of Arts and Sciences requires that students successfully complete a minimum of 42 upper-division credit hours.

<sup>6</sup> Kent State requires a total of 120 credits hours for bachelor's degree completion. The total number of hours to complete the 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:  
Department of Biological Sciences  
[pathways@kent.edu](mailto:pathways@kent.edu)  
[www.kent.edu/biology](http://www.kent.edu/biology)

**BACHELOR OF ARTS SAMPLE DEGREE MAP**

**THIRD YEAR**

SEMESTER 5		SEMESTER 6	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BSCI 30156 Elements of Genetics	3	Foreign Language	4
Foreign Language	4	Biology (BSCI) Upper-Division Elective (30000 or 40000 level)	3
Biology (BSCI) Elective	5	Biology (BSCI) Upper-Division Elective (30000 or 40000 level)	3
General Elective (upper-division as needed)	3	General Electives (upper-division as needed)	5
<b>Total Semester 5 Credit Hours</b>	<b>15</b>	<b>Total Semester 6 Credit Hours</b>	<b>16-17</b>

**FOURTH YEAR**

SEMESTER 7		SEMESTER 8	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
BSCI 40163 Evolution	3	Foreign Language	3-4
Biology (BSCI) Upper-Division Elective (30000 or 40000 level)	5	General Elective (upper-division as needed)	3
Foreign Language	3-4	General Elective (upper-division as needed)	3
BSCI 40600 Writing in the Biological Sciences	1	General Elective (upper-division as needed)	3
General Elective (upper-division as needed)	3	General Elective (upper-division as needed)	3
<b>Total Semester 7 Credit Hours</b>	<b>15-16</b>	<b>Total Semester 8 Credit Hours</b>	<b>15-16</b>