



This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designated as critical (in boldface and shaded areas) must be completed in the semester listed to ensure a timely graduation.

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
<b>Semester One: [16 Credit Hours]</b>					
<b>Students not placed into MATH 12002 (required in semester 3) should take MATH 11010 (Kent Core course) in first year of study</b>					
<b>BSCI 10110 Biological Diversity</b>	4			■	<b>Fulfills Kent Core Basic Sciences</b>
<b>CHEM 10060 General Chemistry I</b>	4			■	<b>Fulfills Kent Core Basic Sciences</b>
<b>CHEM 10062 General Chemistry I Laboratory</b>	1			■	<b>Fulfills Kent Core Basic Sciences</b>
US 10097 Destination Kent State: First Year Experience	1				Not required for transfer students with 25 credits
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
<b>Semester Two: [15 Credit Hours]</b>					
<b>BCSI 10120 Biological Foundations</b>	4			■	<b>Fulfills Kent Core Additional</b>
<b>CHEM 10061 General Chemistry II</b>	4			■	<b>Fulfills Kent Core Basic Sciences</b>
<b>CHEM 10063 General Chemistry II Laboratory</b>	1			■	<b>Fulfills Kent Core Basic Sciences</b>
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
<b>Semester Three: [14-15 Credit Hours]</b>					
<b>BSCI 30156 Elements of Genetics</b>	3	■		■	
<b>CHEM 20481 Basic Organic Chemistry I or CHEM 30481 Organic Chemistry</b>	3-4			■	
<b>MATH 12002 Analytic Geometry and Calculus I</b>	5			■	<b>Fulfills Kent Core Mathematics and Critical Reasoning</b>
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>Semester Four: [14-19 Credit Hours]</b>					
<b>CHEM 20482 Basic Organic Chemistry II or CHEM 30475 Organic Chemistry Laboratory I or CHEM 30482 Organic Chemistry II</b>	1-3			■	
<b>MATH 12003 Analytic Geometry and Calculus II or MATH 30011 Basic Probability and Statistics</b>	3-5			■	
Zoology Core Courses	7-8	■		■	See note 1 on page 2
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>Semester Five: [16-18 Credit Hours]</b>					
<b>BSCI 40600 Writing in Biological Sciences</b>	1	■	C	■	Fulfills writing-intensive course requirement
Foreign Language (Elementary I)	4-5				Fulfills College General Requirement
Zoology Core Course	4	■		■	See note 1 on page 2
<b>BSCI and/or CHEM and/or PHY electives (at least 2 credit hours must be upper division)</b>	7-8			■	See note 2 on page 2
<b>Semester Six: [16-17 Credit Hours]</b>					
Foreign Language (Elementary II)	4-5				Fulfills College General Requirement
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>BSCI and/or CHEM and/or PHY electives (at least 4 credit hours must be upper division)</b>	9			■	See note 2 on page 2
<b>Semester Seven: [13 Credit Hours]</b>					
<b>BSCI 40163 Organic Evolution</b>	3	■		■	
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>BSCI and/or CHEM and/or PHY electives (all credit hours must be upper division)</b>	7	■		■	See note 2 on page 2
<b>Semester Eight: [17 Credit Hours]</b>					
<b>BSCI and/or CHEM and/or PHY elective (all credit hours must be upper division)</b>	3	■		■	See note 2 on page 2
General Electives (at least 11 credit hours must be upper division)	14				Number of credits required depends on meeting minimum 121 credit hours and minimum 42 upper-division credit hours



**Graduation Requirements Summary**

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Global / Domestic Diversity Course	Writing-Intensive	Experiential Learning	Minimum Major GPA	Minimum Overall GPA
121	42	36	Kent Core or General Electives	BSCI 40600	BSCI 40099 or BSCI 40192; or visit <a href="http://www.kent.edu/catalog/elr">www.kent.edu/catalog/elr</a>	2.000	2.000

**Kent Core Summary**

Kent Core Categories	Important Notes	Remaining Credit Hours
<b>Composition (6-8 credit hours)</b> <i>ENG 11002, 11011, 21011; HONR 10197, 10297</i>	Enrollment based on placement test	6-8
<b>Mathematics and Critical Reasoning (3-5 credit hours)</b>	Fulfilled in this major with MATH 12002	0
<b>Humanities and Fine Arts (9 credit hours)</b> <i>Minimum one course from humanities in Arts and Sciences and minimum one course from fine arts</i>	May fulfill diversity requirement	9
<b>Social Sciences (6 credit hours)</b> <i>Must be selected from two curricular areas</i>	May fulfill diversity requirement	6
<b>Basic Sciences (6-7 credit hours)</b> <i>Must include one laboratory</i>	Fulfilled in this major with BSCI 10120, CHEM 10060, CHEM 10061, CHEM 10062 and CHEM 10063	0
<b>Additional (6 credit hours)</b> <i>Must be selected from two Kent Core categories</i>	4 credits fulfilled in this major with BSCI 10110; may fulfill diversity requirement	2

**Note 1: Zoology core courses** (11-12 credit hours), choose from the following:

BSCI 30140 Cell Biology	4	BSCI 40430 Animal Physiology	3
BSCI 30171 General Microbiology	4	BSCI 40433 Mammalian Physiology I	3
BSCI 30360 General Ecology	4	BSCI 40434 Mammalian Physiology II	3
BSCI 30518 Vertebrate Anatomy	4	BSCI 40515 Animal Behavior	3
BSCI 30519 Vertebrate Embryology/Development Anatomy	4	BSCI 40556 Vertebrate Zoology	4
BSCI 30560 Invertebrate Zoology	4	BSCI 40581 Animal Parasitology	4
BSCI 30580 Entomology	4		

**Note 2: BSCI and/or CHEM and/or PHY electives** (26-27 credit hours\*), choose from the following:

BSCI courses**(in consultation with faculty advisor)	11-26	PHY 13001 General College Physics I <b>and</b> PHY 13021 General College Physics Laboratory I <b>or</b> PHY 23101 General University Physics I	5***
CHEM 20482 Basic Organic Chemistry II <b>or</b> CHEM 30482 Organic Chemistry II	2-3		
CHEM 30475 Organic Chemistry Laboratory I	1	PHY 13002 General College Physics II <b>and</b> PHY 13022 General College Physics Laboratory II <b>or</b> PHY 23102 General University Physics II	5***
CHEM 30476 Organic Chemistry Laboratory II	1		

\*Maximum 4 credit hours of these courses may be satisfactory/unsatisfactory graded.

\*\*\*May not be taken in semesters 7 and 8 in order to meet upper division hours.

**\*\*Must choose one of the following:**

*Maximum 6 credit hours of any combination of the following may be used to fulfilling this elective (enrollment in these courses must be determined with a faculty advisor):*

BSCI 30005 Career Pathways in Biology	1	BSCI 40192 Internship in Biological Sciences [ELR]	3-6
BSCI 40099 Senior Honors Thesis [ELR]	1-3	BSCI 40196 Individual Investigation	1-3
BSCI 40191 Senior Seminar	1	ELR fulfills experiential learning requirement	

**Note:** All courses taken from the list of major program requirements are used in the calculation of the major GPA.

**The following Biological Sciences (BSCI) courses may not be used in the elective category for majors or the minor in the Department of Biological Sciences:**

10001 Human Biology	11010 Anatomy and Physiology I for Allied Health	26002 Ecological Principles of Pest Mgmt
10002 Life on Planet Earth	11020 Anatomy and Physiology II for Allied Health	26003 Plant Identification and Selection I
10003 Laboratory Experience in Biology	16001 Horticultural Botany	26004 Plant Identification and Selection II
10100 Anatomy for Veterinary Technicians	20020 Biological Structure and Function	30050 Human Genetics
11001 Anatomy for Physical and Occupation Therapists	20021 Basic Microbiology	40020 Biology of Aging
	20022 Basic Microbiology Lab	



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**Kent Core**

Students must complete a minimum 36 credit hours of the Kent Core. Certain courses required in programs and in student's major field may also fulfill the Kent Core. Honors equivalents shall satisfy the Kent Core. None of the courses on the Kent Core list may be taken with a pass/fail grade. Visit [www.kent.edu/catalog/kent-core](http://www.kent.edu/catalog/kent-core) for course list.

**Diversity Course Requirement**

Students must complete a two-course diversity requirement, consisting of one with a domestic (U.S.) focus and one with a global focus. One course must come from the Kent Core. The second course may be taken as a second Kent Core, within a major or minor, or as a general elective; or, with dean's approval, by completing one semester of study in another country. Visit [www.kent.edu/catalog/diversity](http://www.kent.edu/catalog/diversity) for course list.

**Writing-Intensive Course Requirement**

Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.000) grade. Visit [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic) for course list.

**Experiential Learning Requirement (ELR)**

To provide students with direct engagement in learning experiences that promote academic relevance, meaning and an understanding of real-world issues, students must complete this requirement at Kent State, either as a for-credit course or as a non-credit, non-course experience approved by the appropriate faculty member. Visit [www.kent.edu/catalog/elr](http://www.kent.edu/catalog/elr) for course list.

**Upper-Division Requirement**

Students must complete a minimum 39 upper-division (numbered 30000 to 49999) credit hours of coursework. Programs in the College of Arts and Sciences require a minimum of 42 hours of upper-division coursework.

**Foreign Language**

Visit [www.kent.edu/catalog/foreign-languages](http://www.kent.edu/catalog/foreign-languages) for course list.

