



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>Note: 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>BSCI 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: [13-16 Credit Hours]</b>					
<b>CHEM 20481 Basic Organic Chemistry I (4) or CHEM 30481 Organic Chemistry (3)</b>	3-4			■	
<b>BSCI 30140 Cell Biology</b>	4	■		■	See note on page 2
<b>BSCI and/or CHEM and/or PHY Electives</b>	3			■	
<b>MATH 12002 Analytic Geometry and Calculus I</b>	5			■	<b>Fulfills Kent Core Mathematics and Critical Reasoning</b>
<b>Semester Four: [15-17 Credit Hours]</b>					
<b>BSCI 30156 Elements of Genetics</b>	3	■		■	
<b>CHEM 20482 Basic Organic Chemistry II (2) or CHEM 30475 Organic Chemistry Laboratory I (1) or CHEM 30482 Organic Chemistry II (3)</b>	1-3			■	<b>Students may take CHEM 30284 Introductory Biological Chemistry instead of CHEM 20482 or 30482 with major advisor approval; see note on page 2</b>
<b>MATH 12003 Analytic Geometry and Calculus II or MATH 30011 Basic Probability and Statistics</b>	3-5			■	
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
General Elective (upper division)	2	■			2 credits required if students take MATH 30011
<b>Semester Five: [16-17 Credit Hours]</b>					
Foreign Language (Elementary I)	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 on page 2
<b>Semester Six: [15-16 Credit Hours]</b>					
<b>Note: Pre-med students should take MCAT if applying to medical school summer or fall of the senior year (consult with advisor)</b>					
<b>BSCI 40158 Molecular Biology</b>	3	■		■	
Foreign Language (Elementary II)	4-5				Fulfills College General Requirement
<b>BSCI and/or CHEM and/or PHY Electives (at least 3 credit hours must be upper division)</b>	8			■	See note on page 2
<b>Semester Seven: [14 Credit Hours]</b>					
<b>BSCI 40163 Organic Evolution</b>	3	■		■	
<b>BSCI 40600 Writing in the Biological Sciences</b>	1	■	C	■	<b>Fulfills writing-intensive course requirement</b>
Kent Core Requirement	2				See Kent Core Summary on page 2
<b>BSCI and/or CHEM and/or PHY Electives (all credit hours must be upper division)</b>	8	■		■	See note on page 2



Critical requirements are boldface in shaded areas

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
<b>Semester Eight: [15 Credit Hours]</b>					
BSCI and/or CHEM and/or PHY Elective (upper division)	3	■		■	See note below
General Electives (upper division)	12	■			Number of credits required depends on meeting minimum 121 credit hours and 42 upper-division 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 40060	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 category and minimum one course from fine arts category</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 10110, 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 10120; may fulfill diversity requirement	2

**Note 2: BSCI and/or CHEM and/or PHY electives** (31 credit hours\*), choose from the following:

BSCI courses ** † (in consultation with advisor)	16-31	PHY 13001 General College Physics I (4) <b>and</b> *** PHY 13021 General College Physics Laboratory I (1) *** <b>or</b> PHY 23101 General University Physics I (5) ***	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 (4) <b>and</b> *** PHY 13022 General College Physics Laboratory II (1) *** <b>or</b> PHY 23102 General University Physics II (5) ***	5
CHEM 30476 Organic Chemistry Laboratory II	1		

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

\*\* **Must choose one of the following (maximum 6 credit hours of any combination allowed):**

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

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

† BSCI 40430 Animal Physiology is recommended as an elective for pre-med students to help with material for MCAT

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

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

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

### 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.

