



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>CHEM 10062 General Chemistry I Laboratory</b>	1			■	
US 10097 Destination Kent State: First Year Experience	1				Not required for transfer students with 25 credits
PSYC 11762 General Psychology	3			■	Fulfills Kent Core Social Sciences and domestic diversity
Kent Core Requirement	3				See Kent Core Summary on page 2
<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 Additional</b>
<b>CHEM 10063 General Chemistry II Laboratory</b>	1			■	<b>Fulfills Kent Core Basic Sciences</b>
SOC 12050 Introduction to Sociology	3			■	Fulfills Kent Core Social Sciences and domestic diversity
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>Semester Three: [16-17 Credit Hours]</b>					
<b>BSCI 30140 Cell Biology</b>	4	■		■	
<b>MATH 12002 Analytic Geometry and Calculus I</b>	5			■	<b>Fulfills Kent Core Mathematics and Critical Reasoning</b>
CHEM 20481 Basic Organic Chemistry I (4) <i>or</i> CHEM 30481 Organic Chemistry (3)	3-4			■	See note 2 on page 3
CHEM 30475 Organic Chemistry Laboratory I	1	■		■	
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>Semester Four: [14-17 Credit Hours]</b>					
<b>BSCI 30005 Career Pathways in Biology</b>	1	■		■	
<b>BSCI 30156 Elements of Genetics</b>	3	■		■	
BSCI 40600 Writing in the Biological Sciences	1	■	C	■	Fulfills writing intensive course requirement
CHEM 20482 Basic Organic Chemistry II (2) <i>or</i> CHEM 30482 Organic Chemistry II (3)	2-3			■	See note 2 on page 3
CHEM 30476 Organic Chemistry Laboratory II	1	■		■	
MATH 12003 Analytic Geometry and Calculus II (5) <i>or</i> MATH 30011 Basic Probability and Statistics (3)	3-5			■	Some medical programs require a full year of calculus; check with the medical school and faculty advisor
Kent Core Requirement	3				See Kent Core Summary on page 2
<b>Semester Five: [15-16 Credit Hours]</b>					
<b>BSCI 30030 Human Physiology (4) <i>or</i> BSCI 40430 Animal Physiology (3)</b>	3-4	■		■	
PHY 13001 General College Physics I (4) <i>and</i> PHY 13021 General College Physics Laboratory I (1) <i>or</i> PHY 23101 General University Physics I (5)	5			■	Fulfills Kent Core Basic Sciences
Kent Core Requirement	3				See Kent Core Summary on page 2
BSCI Elective (upper division)	4	■		■	See note 1 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 Six: [16 Credit Hours]</b>					
<b>Note: Pre-med students should take the MCAT if applying to medical school summer or fall of the senior year (consult with advisor)</b>					
<b>BSCI 30171 General Microbiology</b>	4	■		■	
CHEM 30284 Introduction to Biological Chemistry (4) <b>or</b> CHEM 40245 Biochemical Foundations of Medicine (4)	4	■		■	
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			■	
BSCI elective (upper division)	3	■		■	See note 1 below
<b>Semester Seven: [15 Credit Hours]</b>					
BSCI 40163 Evolution	3	■		■	
Foreign Language (Elementary I)	4-5				Fulfills College General Requirement
BSCI Elective (upper division)	3	■		■	See note 1 below
General Elective	5				
<b>Semester Eight: [14 Credit Hours]</b>					
Foreign Language (Elementary II)	4-5				Fulfills College General Requirement
BSCI Elective (upper division)	4	■		■	See note 1 below
General Electives (3 credit hours must be upper division)	6	■			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/PSYC 11762 or SOC 12050	BSCI 40600	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>	Fulfilled in this major with PSYC 11762 and SOC 12050	0
<b>Basic Sciences (6-7 credit hours)</b> <i>Must include one laboratory</i>	Fulfilled in this major with BSCI 10110, CHEM 10060 and CHEM 10062	0
<b>Additional (6 credit hours)</b>	Fulfilled in this major with BSCI 10120 and CHEM 10061	0

**Highly Recommended BSCI Electives:** BSCI 30518 Vertebrate Anatomy, BSCI 40174 Immunology, BSCI 40517 Medical Histology, BSCI 40433 Mammalian Physiology I and BSCI 40434 Mammalian Physiology II

**Note 1: BSCI electives (14 credit hours)**

May include up to 6 credit hours of the following:

BSCI 40099 Senior Honors Thesis [ELR]	1-3	BSCI 40192 Internship in Biological Sciences [ELR]*	3-6
BSCI 40191 Senior Seminar	1	BSCI 40196 Individual Investigation [ELR]	1-3

ELR fulfills experiential learning requirement

\*No more than 4 credit hours may be S/U graded



**Note 2:** Student must stay within a single organic chemistry series.

**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 Occupational Therapy	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.

