



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 or 12022 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; courses must be taken together</b>
<b>CHEM 10062 General Chemistry I Laboratory</b>	1			■	
US 10097 Destination Kent State: FYE	1				Not required of 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: [15 Credit Hours]</b>					
<b>BSCI 30360 General Ecology</b>	4	■		■	<b>Offered in fall semesters only</b>
MATH 12002 Analytic Geometry and Calculus I	5			■	Fulfills Kent Core Mathematics and Critical Reasoning
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
<b>Semester Four: [15 Credit Hours]</b>					
<b>BSCI 30156 Elements of Genetics</b>	3	■		■	
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	2				
Geography Elective	3			■	See note 1 on page 2
Major Elective	4			■	See note 5 on page 2
<b>Semester Five: [15-16 Credit Hours]</b>					
BSCI 40374 Conservation Biology	4	■		■	Offered in fall semesters only
GEOL 11040 Earth Dynamics	3			■	Fulfills Kent Core Basic Sciences; courses must be taken together
GEOL 11041 Earth Dynamics Laboratory	1			■	
GEOG 39002 Statistical Methods in Geography <b>or</b> GEOL 42035 Scientific Methods in Geology	3	■		■	
Foreign Language (Elementary I)	4-5				Fulfills College General Requirement
<b>Semester Six: [13-16 Credit Hours]</b>					
Foreign Language (Elementary II)	4-5				Fulfills College General Requirement
Geography Elective	3	■		■	See note 1 on page 2
Geology Elective	3-4	■		■	See note 2 on page 2
Zoology Elective	3-4	■		■	See note 3 on page 2
<b>Semester Seven: [15-16 Credit Hours]</b>					
<b>BSCI 40163 Organic Evolution</b>	3	■		■	
BSCI 40600 Writing in Biological Sciences	1	■	C	■	Fulfills writing-intensive course requirement
Botany Elective	4	■		■	See note 4 on page 2
Geology Elective	3-4	■		■	See note 2 on page 2
General Elective (lower or upper division)	4				



**Critical requirements are boldface in shaded areas**

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
<b>Semester Eight: [17 Credit Hours]</b>					
Geography Elective	3	■		■	See note 1 below
Major Electives	10	■		■	See note 5 on page 3
General Elective (lower or upper division)	4				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	Diversity Course Global / Domestic	Writing-Intensive	Minimum Major GPA	Minimum Overall GPA
121	42	36	Kent Core	BSCI 40600	2.0	2.0

**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>Additional (6 credit hours)</b> <i>Must be selected from two Kent Core categories</i>	4 credits fulfilled in this major with BCSI 10120; may fulfill diversity requirement	2
<b>Basic Sciences (6-7 credit hours)</b> <i>Must include one laboratory</i>	Fulfilled in this major with BCSI 10110, CHEM 10060, CHEM 10061, CHEM 10062, CHEM 10063, GEOL 11040, 11041	0

**Note 1: Geography electives (9 credit hours), choose from the following:**

GEOG 31062 Fundamentals of Meteorology	3	GEOG 41082 Geography of Soils	3
GEOG 31064 Principles of Climatology	3	GEOG 49070 Geographic Information Science	3
GEOG 41066 Climate Change and Its Impact	3	GEOG 49080 Advanced Geographic Information Science	3
GEOG 41073 Conservation of Natural Resources	3	GEOG 49230 Remote Sensing	3
GEOG 41074 Resource Geography	3		

**Note 2: Geology electives (6-8 credit hours), choose from the following:**

GEOL 32066 Geomorphology	4	GEOL 42069 Hydrogeochemistry	3
GEOL 41077 Geology of the National Parks	3	GEOL 42078 Engineering Geology	4
GEOL 42067 Introductory Hydrogeology	3	GEOL upper-division course with advisor approval	3-4

**Note 3: Zoology electives (3-4 credit hours), choose from the following:**

BSCI 30560 Invertebrate Zoology	4	BSCI 40515 Animal Behavior	3
BSCI 30580 Entomology	4	BSCI 40525 Wildlife Resources	3
BSCI 30582 Ornithology	4	BSCI 40556 Vertebrate Zoology	4
BSCI 40439 Environmental Physiology	4		

**Note 4: Botany electives (4 credit hours), choose from the following:**

BSCI 30267 Plant Physiology	4	BSCI 40272 Plant Anatomy	4
BSCI 30274 Forestry	3	BSCI 40275 Systematic Botany	4
BSCI 30275 Local Flora	4	BSCI 40277 Morphology of Lower Plants	4
BSCI 30277 Economic Botany	2		

**Note 5: Major electives (14 credit hours), choose from the following:**

BSCI upper-division courses	3-14	Maximum 11 credit hours for non BSCI course electives:	
BSCI 30140 Cell Biology *	4	ANTH 48835 Primate Ecology and Conservation	3
CHEM 20481 Basic Organic Chemistry I *	4	CHEM 30476 Organic Chemistry Laboratory II	1
CHEM 30475 Organic Chemistry Laboratory I *	1	CS 10051 Introduction to Computer Science	4
CHEM 30481 Organic Chemistry I *	3	MATH 12003 Analytic Geometry and Calculus II	5
CHEM 30482 Organic Chemistry II *	3	* Recommended for students continuing onto the graduate program	

**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	20022 Basic Microbiology Lab
10002 Life on Planet Earth	11020 Anatomy and Physiology II for Allied Health	26002 Ecological Principles of Pest Mgmt
10003 Laboratory Experience in Biology	16001 Horticultural Botany	26003 Plant Identification and Selection I
10010 Lake Erie Environmental Science	20001 Zoological Foundations of Medicine	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

#### 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 (2.00) grade. Visit [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic) 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.

