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 Division | Min. Grade | Important Notes |
| :---: | :---: | :---: | :---: | :---: |
| Semester One: [16 Credit Hours] |  |  |  |  |
| Students not placed into MATH 12002 (required in semester 3) should take MATH 11010 or 12022 in first year of study |  |  |  |  |
| BSCI 10110 Biological Diversity | 4 |  |  | Fulfills Kent Core Basic Sciences |
| CHEM 10060 General Chemistry I | 4 |  |  | Fulfills Kent Core Basic Sciences; courses must be taken together |
| CHEM 10062 General Chemistry I Laboratory | 1 |  |  |  |
| US 10097 Destination Kent State: FYE | 1 |  |  | Not required of transfer students with 25 credits |
| Kent Core Requirement | 6 |  |  | See Kent Core Summary on page 2 |
| Semester Two: [15 Credit Hours] |  |  |  |  |
| BSCI 10120 Biological Foundations | 4 |  |  | Fulfills Kent Core Additional |
| CHEM 10061 General Chemistry II | 4 |  |  | Fulfills Kent Core Basic Sciences |
| CHEM 10063 General Chemistry II Laboratory | 1 |  |  | Fulfills Kent Core Basic Sciences |
| Kent Core Requirement | 6 |  |  | See Kent Core Summary on page 2 |
| Semester Three: [15 Credit Hours] |  |  |  |  |
| BSCI 30360 General Ecology | 4 | ■ |  | Offered in fall semesters only |
| MATH 12002 Analytic Geometry and Calculus I | 5 |  |  | Fulfills Kent Core Mathematics and Critical Reasoning |
| Kent Core Requirement | 6 |  |  | See Kent Core Summary on page 2 |
| Semester Four: [15 Credit Hours] |  |  |  |  |
| BSCI 30156 Elements of Genetics | 3 | ■ |  |  |
| Kent Core Requirement | 5 |  |  | See Kent Core Summary on page 2 |
| Geography Elective | 3 |  |  | See note 1 on page 2 |
| Major Elective | 4 |  |  | See note 5 on page 3 |
| Semester Five: [15-16 Credit Hours] |  |  |  |  |
| 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 orGEOL 42035 Scientific Methods in Geology | 3 | $\square$ |  |  |
| Foreign Language (Elementary I) | 4-5 |  |  |  |
| Semester Six: [13-16 Credit Hours] |  |  |  |  |
| Foreign Language (Elementary II) | 4-5 |  |  |  |
| Geography Elective | 3 | $\square$ |  | See note 1 on page 2 |
| Geology Elective | 3-4 | $\square$ |  | See note 2 on page 2 |
| Zoology Elective | 3-4 | $\square$ |  | See note 3 on page 2 |
| Semester Seven: [15-16 Credit Hours] |  |  |  |  |
| BSCI 40163 Organic Evolution | 3 | $\square$ |  |  |
| BSCI 40600 Writing in Biological Sciences | 1 | $\square$ | C | Fulfills writing-intensive course requirement |
| Botany Elective | 4 | $\square$ |  | 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 Division | Min. Grade | Important Notes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Semester Eight: [17 Credit Hours] |  |  |  |  |  |  |  |  |
| Geography Elective |  |  | 3 | $\square$ |  | See note 1 below |  |  |
| Major Electives |  |  | 10 | $\square$ |  | 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 UpperDivision Hours | Minimum Kent Core Hours |  | Diversity Co lobal / Dom | stic | Writing-Intensive | $\begin{array}{r} \text { Mi } \\ \text { Major GPA } \end{array}$ | Overall GPA |
| 121 | 42 | 36* |  | Kent Cor |  | BSCI 40600 | 2.0 | 2.0 |

* In addition to the Kent Core, the College of Arts and Sciences requires for all its BS programs a minimum 8 credit hours of a foreign language.


## Kent Core Summary

| Kent Core Categories | Important Notes | Remaining <br> Credit Hours |
| :--- | :--- | :---: |
| Additional (6 credit hours) <br> Must be selected from two Kent Core categories | 4 credits fulfilled in this major with BCSI 10120; may fulfill <br> diversity requirement | 2 |
| Basic Sciences (6-7 credit hours) <br> Must include one laboratory | Fulfilled in this major with BCSI 10110, CHEM 10060, CHEM <br> 10061, CHEM 10062, CHEM 10063, GEOL 11040, 11041 | 0 |
| Composition (6-8 credit hours) <br> ENG 11002, 11011, 21011; HONR 10197, 10297 | Enrollment based on placement test | $6-8$ |
| Humanities and Fine Arts (9 credit hours) <br> Minimum one course from humanities in Arts and Sciences <br> category and minimum one course from fine arts category | May fulfill diversity requirement | 9 |
| Mathematics and Critical Reasoning (3-5 credit hours) | Fulfilled in this major with MATH 12002 |  |
| Social Sciences (6 credit hours) <br> Must be selected from two curricular areas | May fulfill diversity requirement | 0 |

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

| GEOG 31062 Fundamentals of Meterology | 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 | 3 |
| GEOG 41073 Conservation of Natural Resources | 3 | Science | 3 |
| GEOG 41074 Resource Geography | 3 | GEOG 49230 Remote Sensing |  |

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 | 2 | BSCI 40275 Systematic Botany | 4 |  |  |
| BSCI 30275 Local Flora | 4 | BSCI 40277 Morphology of Lower Plants | 4 |  |  |
| BSCI 30277 Economic Botany | 2 |  |  |  |  |
|  |  |  |  |  |  |

U N I V E R S I T Y
[AS-BS-CONS]
College of Arts and Sciences
Department of Biological Sciences
Catalog Year: 2010-2011
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


## 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 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 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 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 for course list.

