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

| Critical | Course Subject and Title | Credit Hours | Upper Div. | Min. Grade | Major GPA | Type | Term Taken |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Semester One [14 Credits] |  |  |  |  |  |  |  |
|  | BSCI 10120 Biological Foundations | 4 |  | C | - | KAD |  |
|  | MATH 11010 Algebra for Calculus | 3 |  |  |  | KMC |  |
|  | PSYC 11762 General Psychology | 3 |  |  |  | DD/KSS |  |
|  | US 10097 Destination Kent State: First Year Experience ${ }^{1}$ | 1 |  |  |  |  |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
| Semester Two [16 Credits] |  |  |  |  |  |  |  |
| Requirement: successful completion of Praxis Core Reading (score 156), Writing (score 162) and Mathematics (score 150) |  |  |  |  |  |  |  |
| ! | BSCI 10110 Biological Diversity | 4 |  | C | - | KBS |  |
| ! | CULT 29535 Education in a Democratic Society | 3 |  | C |  |  |  |
|  | MATH 11022 Trigonometry | 3 |  |  |  | KMC |  |
|  | SOC 12050 Introduction to Sociology | 3 |  |  |  | DD/KSS |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
| Semester Three [13 Credits] |  |  |  |  |  |  |  |
| ! | CHEM 10060 General Chemistry I | 4 |  | C | - | KBS |  |
| ! | CHEM 10062 General Chemistry I Laboratory | 1 |  | C | - | KBS |  |
| ! | MATH 12002 Analytic Geometry and Calculus I | 5 |  |  |  | KAD |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
| Semester Four [14 Credits] |  |  |  |  |  |  |  |
| ! | CHEM 10061 General Chemistry II | 4 |  | C | $\square$ | KBS |  |
| ! | CHEM 10063 General Chemistry II Laboratory | 1 |  | C | $\square$ | KBS |  |
| ! | EPSY 29525 Educational Psychology | 3 |  | C |  |  |  |
|  | BSCI 30156 Elements of Genetics | 3 | - | C | - |  |  |
|  | PHIL 11001 Introduction to Philosophy | 3 |  |  |  | DG/KHU |  |
|  |  |  |  |  |  |  |  |
| Requirement: minimum 2.750 cumulative GPA required by end of term and minimum 2.600 major GPA |  |  |  |  |  |  |  |
|  | BSCI 30140 Cell Biology | 4 | - | C | - |  |  |
|  | CHEM 20481 Basic Organic Chemistry I | 4 |  | C | - |  |  |
|  | CHEM 30475 Organic Chemistry Laboratory I | 1 | - | C | $\square$ |  |  |
|  | GEOL 11040 How the Earth Works | 3 |  | C | - | KBS |  |
|  | GEOL 11041 How the Earth Works Laboratory | 1 |  | C | - | KBS |  |
|  | Kent Core Requirement | 3 |  |  |  |  |  |
| Semester Six [16 Credits] |  |  |  |  |  |  |  |
| Requirement: 2.750 cumulative GPA and minimum 2.600 major GPA |  |  |  |  |  |  |  |
| Note: apply online and be accepted for Advanced Study by the second Friday of the term |  |  |  |  |  |  |  |
|  | CHEM 30284 Introductory Biological Chemistry | 4 | - | C | - |  |  |
|  | CHEM 30301 Inorganic Chemistry I | 2 | - | C | - |  |  |
|  | GEOL 11042 Earth and Life Through Time | 3 |  | C | $\square$ | KBS |  |
|  | GEOL 11043 Earth and Life Through Time Laboratory | 1 |  | C | - | KBS |  |
|  | PHY 21430 Frontiers in Astronomy | 3 |  | C | $\square$ | KBS |  |
|  | SPED 23000 Introduction to Exceptionalities | 3 |  | C |  | DD |  |
| Semester Seven [14 Credits] |  |  |  |  |  |  |  |
| Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA; Note: apply for student teaching |  |  |  |  |  |  |  |
| ! | ADED 32142 Principles of Teaching Adolescents ${ }^{2}$ | 3 | - | C |  | WIC |  |
| ! | ITEC 19525 Educational Technology | 3 |  | C |  |  |  |
|  | CHEM 30105 Analytical Chemistry I | 3 | - | C | - |  |  |
|  | PHY 13001 General College Physics I | 4 |  | C | - | KBS |  |
|  | PHY 13021 General College Physics Laboratory I | 1 |  | C | $\square$ | KBS |  |
| Semester Eight [14 Credits] |  |  |  |  |  |  |  |
| Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA |  |  |  |  |  |  |  |
| ! | ADED 32277 Teaching Science in Secondary Schools | 3 | - | C |  |  |  |
|  | CI 47330 Reading and Writing in Adolescence/Adulthood | 3 | - | C |  |  |  |
|  | GEOG 41073 Conservation of Natural Resources | 3 | - | C | - |  |  |
|  | PHY 13002 General College Physics II | 4 |  | C | - | KBS |  |
|  | PHY 13022 General College Physics Laboratory II | 1 |  | C | $\square$ | KBS |  |
| Semester Nine [16 Credits] |  |  |  |  |  |  |  |
| Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA; Note: apply for graduation |  |  |  |  |  |  |  |
| ! | ADED 42277 Topics in Secondary School Science Teaching | 3 | - | C |  |  |  |
| ! | ADED 42292 Field Work Practicum | 3 | ■ | C |  | ELR |  |
|  | CHEM 40567 Basic Concepts of Physical Chemistry | 4 | - | C | - |  |  |
|  | GEOG 31062 Fundamentals of Meteorology | 3 | - | C | $\square$ |  |  |
|  | MATH 10041 Introductory Statistics (4) or MATH 30011 Basic Probability and Statistics (3) | 3 | - |  |  | KMC |  |


| Critical | Course Subject and Title | Credit <br> Hours | Upper Div. | Min. Grade | $\begin{aligned} & \text { Major } \\ & \text { GPA } \end{aligned}$ | Type | Term Taken |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Semester Ten [12 Credits] |  |  |  |  |  |  |  |
| Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA |  |  |  |  |  |  |  |
| ! | ADED 42357 Secondary Student Teaching | 9 | $\square$ | S |  | ELR |  |
| ! | ADED 49525 Inquiry into Professional Practice | 3 | $\square$ | C |  |  |  |

## Graduation Requirements Summary

| Minimum Total Hours | Minimum Upper-Division Hours | Minimum Kent Core Hours | Minimum |  |
| :---: | :---: | :---: | :---: | :---: |
| 145 | 39 | 36 | 2.600 | 2.750 |

1. US 10097 is not required of transfer students with 25 credits or students age $21+$ at time of admission.
2. A minimum C (2.000) grade must be earned in ADED 32142 to fulfill the writing-intensive requirement.

## Special Major Notes:

The Integrated Science major is designed to be completed in five years.
Licensure Requirement (not required for graduation):
Candidates seeking Ohio licensure are required to pass specific assessments in order to apply for licensure. See Ohio Department of Education-
Educator Preparation website for more information on assessments specific to licensure type.

## University Requirements Summary

| Type | Categories | Course(s) Satisfying Category | Remaining <br> Requirements |
| :--- | :--- | :--- | :---: |
| KCM | Kent Core I. Composition <br> Enrollment based on placement test | a grade of C must be earned for both <br> courses; <br> visit www.kent.edu/catalog/kent-core | 6 |
| KMC | Kent Core II. Mathematics and Critical Reasoning <br> Enrollment based on placement test | MATH 11010 or MATH 11022 | fulfilled |
| KHUKent Core III. Humanities <br> Minimum one course from humanities in Arts and Sciences; may fulfill diversity <br> requirement | PHIL 11001 | fulfilled |  |
| KFA | Kent Core IV. Fine Arts <br> Minimum one course from the fine arts; may fulfill diversity requirement | visit www.kent.edu/catalog/kent-core | 3 |
| KFHKent Core V. Humanities or Fine Arts <br> One additional course from either the humanities or fine arts category, may fulfill <br> diversity requirement. | visit www.kent.edu/catalog/kent-core |  | 3 |
| KSS | Kent Core VI. Social Sciences <br> Must be selected from two curricular areas; may fulfill diversity requirement | SOC 12050, PSYC 11762 | fulfilled |
| KBS | Kent Core VII. Basic Sciences <br> Must include one laboratory | CHEM 10060, CHEM 10061, GEOL <br> 11040 and GEOL 11041 | fulfilled |
| KAD | Kent Core VIII. Additional <br> May fulfill diversity requirement | BSCI 10120 and MATH 12002 | fulfilled |
| DD | Domestic Diversity Course Requirement <br> Either domestic or global diversity must be from Kent Core | SPED 23000 | fulfilled |
| DG | Global Diversity Course Requirement <br> Either domestic or global diversity must be from Kent Core | PHIL 11001 | fulfilled |
| ELR | Experiential Learning Requirement <br> Either course or non-course experience approved by the appropriate faculty member | ADED 42292, ADED 42357 | fulfilled |
| WIC | Writing-Intensive Course Requirement <br> Minimum C (2.000) grade | ADED 32142 | fulfilled |

