



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
Semester One: [15 Credit Hours]					
CHEM 10060 General Chemistry I	4		C	■	Fulfills Kent Core Basic Sciences
CHEM 10062 General Chemistry Laboratory I	1		C	■	
MATH 11010 Algebra for Calculus	3				Fulfills Kent Core Mathematics and Critical Reasoning
PSYC 11762 General Psychology	3				Fulfills Kent Core Social Sciences and domestic diversity requirement
US 10097 Destination Kent State: First Year Experience	1				Not required of transfer students with 25 hours
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Two: [14 Credit Hours]					
Note: pass Praxis I Reading (score 174), Writing (score 172) and Mathematics (score 174)					
CULT 29535 Education in a Democratic Society	3		C		
CHEM 10061 General Chemistry II	4		C	■	Fulfills Kent Core Basic Sciences
CHEM 10063 General Chemistry Laboratory II	1		C	■	
MATH 11022 Trigonometry	3				Fulfills Kent Core Mathematics and Critical Reasoning
SOC 12050 Introduction to Sociology	3				Fulfills Kent Core Social Sciences and domestic diversity requirement
Semester Three: [17 Credit Hours]					
PHY 23101 General University Physics I	5		C	■	Fulfills Kent Core Additional
CHEM 20481 Basic Organic Chemistry I	4		C	■	Typically offered in fall and summer only
MATH 12002 Analytical Geometry and Calculus I	5				Fulfills Kent Core Additional
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Four: [17 Credit Hours]					
MATH 12003 Analytic Geometry and Calculus II	5		C		
PHY 23102 General University Physics II	5		C	■	Fulfills Kent Core Basic Sciences
BSCI 10110 Biological Diversity	4		C	■	Fulfills Kent Core Basic Sciences
PHIL 11001 Introduction to Philosophy	3				Fulfills Kent Core Humanities and global diversity course requirement
Semester Five: [17 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA required by end of term and minimum 2.600 major GPA					
BSCI 10120 Biological Foundations	4		C	■	Fulfills Kent Core Basic Sciences
EPSY 29525 Educational Psychology	3		C		
GEOL 11040 Earth Dynamics	3		C	■	Fulfills Kent Core Basic Sciences
GEOL 11041 Earth Dynamics Laboratory	1		C	■	
PHY 21430 Frontiers in Astronomy	3		C	■	
Kent Core Requirement	3				See Kent Core Summary on page 2
Semester Six: [15 Credit Hours]					
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					
PHY 30020 Intermediate Physics Laboratory	2	■	C	■	
GEOG 41073 Conservation of Natural Resource	3	■	C	■	
GEOL 11042 Earth History	3		C	■	Fulfills Kent Core Basic Sciences
GEOL 11043 Earth History Laboratory	1		C	■	
SPED 23000 Introduction to Exceptionalities	3		C		Fulfills domestic diversity course requirement
Kent Core Requirement	3				See Kent Core Summary on page 2



Critical requirements are boldface in shaded areas

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Semester Seven: [12 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA; Note: apply for student teaching					
ADED 32142 Principles of Teaching Adolescents	3	■	C		Fulfills writing-intensive course requirement; offered in fall only
ITEC 19525 Educational Technology	3		C		
CI 47330 Reading and Writing in Adolescence/Adulthood	3	■	C		
GEOG 31062 Fundamentals of Meteorology	3	■	C	■	
Semester Eight: [16 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA					
ADED 32277 Teaching Science in Secondary Schools	3	■	C		Offered in spring only
BSCI 30140 Cell Biology	4	■	C	■	
BSCI 30156 Elements of Genetics	3	■	C	■	
MATH 10041 Elementary Probability and Statistics or MATH 30011 Basic Probability and Statistics	3				
PHY 36001 Introduction Modern Physics I	3	■	C	■	
Semester Nine: [13-14 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA; Note: apply for graduation					
ADED 42277 Topics in Secondary School Science	3	■	C		
ADED 42292 Field Work Practicum	3	■	C		Fulfills experiential learning requirement
CHEM 40567 Basic Concepts of Physical Chemistry	4	■	C	■	Offered in fall only
PHY 32511 Electronics or PHY 36002 Applications of Modern Physics	3-4	■	C	■	
Semester Ten: [12 Credit Hours]					
Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA					
ADED 42357 Secondary Student Teaching	9	■	S		Fulfills experiential learning requirement
ADED 49525 Inquiry into Professional Practice	3	■	C		

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
148	39	36	PHIL 11001 / SPED 23000	ADED 32142	ADED 42292 or ADED 42357	2.600	2.750

Kent Core Summary

Kent Core Categories	Important Notes	Remaining Credit Hours
Composition (6-8 credit hours) <i>ENG 11002, 11011, 21011; HONR 10197, 10297</i>	Enrollment based on placement test; a grade of C must be earned for both courses	6-8
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major MATH 11010 or MATH 11022	0
Humanities and Fine Arts (9 credit hours) <i>Minimum one course from humanities in Arts and Sciences and minimum one course from fine arts</i>	3 credit hours are fulfilled in this major with PHIL 11001	6
Social Sciences (6 credit hours) <i>Must be selected from two curricular areas</i>	Fulfilled in this major PSYC 11762 and SOC 12050	0
Basic Sciences (6-7 credit hours) <i>Must include one laboratory</i>	Fulfilled in the major with BSCI 10110 and 10120; CHEM 10060, 10061, 10062 and 10063; GEOL 11040 and 11041	0
Additional (6 credit hours)	Fulfilled in this major with MATH 12002 and PHY 23101	0

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](http://www.ohio.gov/education) website for more information on assessments specific to licensure type.



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.

Experiential Learning Requirement

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 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.

