

## Roadmap: Integrated Science – Chemistry – **Bachelor of Science in Education**

[EH-BSE-ISCI-CHEM]

College of Education, Health and Human Services School of Teaching, Learning and Curriculum Studies
Catalog Year: 2013-2014

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.

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Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes			
Semester One: [14 Credit Hours]	Semester One: [14 Credit Hours]							
BSCI 10120 Biological Foundations	4		С		Fulfills Kent Core Basic Sciences			
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					Not required of transfer students with 25 credits			
Kent Core Requirement					See Kent Core Summary on page 2			
Semester Two: [16 Credit Hours]								
Requirement: successful completion of Praxis I Reading	(score	174), V	Vriting	(score	e 172) and Mathematics (score 174)			
BSCI 10110 Biological Diversity	4		С		Fulfills Kent Core Basic Sciences			
CULT 29535 Education in a Democratic Society	3		С					
MATH 11022 Trigonometry	3				Fulfills Kent Core Mathematics and Critical Reasoning			
SOC 12050 Introduction to Sociology					Fulfills Kent Core Social Sciences and domestic diversity requirement			
Kent Core Requirement	3				See Kent Core Summary on page 2			
Semester Three: [13 Credit Hours]								
CHEM 10060 General Chemistry I	4		С					
CHEM 10062 General Chemistry Laboratory I	1		С		Fulfills Kent Core Basic Sciences			
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: [14 Credit Hours]								
CHEM 10061 General Chemistry II	4		С					
CHEM 10063 General Chemistry Laboratory II	1		С	-	Fulfills Kent Core Additional			
EPSY 29525 Educational Psychology	3		С					
BSCI 30156 Elements of Genetics	3		С	•				
PHIL 11001 Introduction to Philosophy	3				Fulfills Kent Core Humanities and global diversity course requirement			
Semester Five: [16 Credit Hours]								
Requirement: minimum 2.750 cumulative GPA required	by end c	of term	and m	inimur	m 2.600 major GPA			
BSCI 30140 Cell Biology	4		С					
CHEM 20481 Basic Organic Chemistry I	4		С		Typically offered in fall and summer			
CHEM 30475 Organic Chemistry Laboratory	1		С					
GEOL 11040 Earth Dynamics	3		С		Fulfills Kent Core Basic Sciences			
GEOL 11041 Earth Dynamics Laboratory	1		С		Fullills Refit Core basic Sciences			
Kent Core Requirement	3				See Kent Core Summary on page 2			
Semester Six: [16 Credit Hours]								
Requirement: 2.750 cumulative GPA and minimum 2.600 Note: apply online and be accepted for Advanced Study			l Erida	v of the	torm			
CHEM 30284 Introductory Biological Chemistry	4	=	C	y OI LITE	Typically offered in spring and summer			
Chelyl 30204 Illifoductory biological Ghemisiry				+-	,, , ,			
CHEM 30301 Inorganic Chemistry I		_	С		Offered in Spring Only			
, ,	2	•	C		Offered in spring only			
CHEM 30301 Inorganic Chemistry I	2	•		-	Fulfills Kent Core Basic Sciences			
CHEM 30301 Inorganic Chemistry I GEOL 11042 Earth History	2		С					



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## Critical requirements are boldface in shaded areas

Course Subject and Title		Upper Div.	Min. Grade	Major GPA	Important Notes			
Semester Seven: [14 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		-	С		Fulfills writing-intensive requirement; offered in fall only			
ITEC 19525 Educational Technology	3		С					
CHEM 30105 Analytical Chemistry I	3		С		Offered in fall only			
PHY 13001 General College Physics I	4		С		Fulfills Kent Core Basic Sciences			
PHY 13021 General College Physics Laboratory I	1		С		Fullilis Refit Core basic Sciences			
Semester Eight: [14 Credit Hours]								
Requirement: minimum 2.750 cumulative GPA and minimum 2.600 major GPA								
ADED 32277 Teaching Science in Secondary Schools	3	-	С		Offered in spring only			
CI 47330 Reading and Writing in Adolescence/Adulthood	3		С					
GEOG 41073 Conservation of Natural Resources	3	•	С					
PHY 13002 General College Physics II	4		С		Fulfills Kent Core Basic Sciences			
PHY 13022 General College Physics Laboratory II	1		С		Tullins Refit Core basic sciences			
Semester Nine: [16 Credit Hours]								
Requirement: minimum 2.750 cumulative GPA and minimum	um 2.60	00 maj	or GP	A; Note	e: apply for graduation			
ADED 42277 Topics in Secondary School Science	3	-	С					
ADED 42292 Field Work Practicum	3	-	С		Fulfills experiential learning requirement			
CHEM 40567 Basic Concepts of Physical Chemistry	4		С		Offered in fall only			
GEOG 31062 Fundamentals of Meteorology	3		С					
MATH 10041 Elementary Probability and Statistics or MATH 30011 Basic Probability and Statistics	3							
Semester Ten: [12 Credit Hours]								
Requirement: minimum 2.750 cumulative GPA and minimum	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		С					

**Graduation Requirements Summary** 

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I	Minimum	Minimum Upper-	Minimum	Global / Domestic	Writing-	Experiential	Min	imum
	Total Hours	Division Hours	Kent Core Hours	Diversity Course	Intensive	Learning	Major GPA	Overall GPA
	145	39	36	PHIL 11001/ SPED 23000	ADED 32142	ADED 42292 or ADED 42357	2.600	2.750

**Kent Core Summary** 

None Gore Gunnary						
Kent Core Categories	Important Notes	Remaining Credit Hours				
Composition (6-8 credit hours) ENG 11002, 11011, 21011; HONR 10197, 10297	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)  Minimum one course from humanities in Arts and Sciences and minimum one course from fine arts	3 credit hours are fulfilled in this major with PHIL 11001	6				
Social Sciences (6 credit hours)  Must be selected from two curricular areas	Fulfilled in this major PSYC 11762 and SOC 12050	0				
Basic Sciences (6-7 credit hours) Must include one laboratory	Fulfilled in the major with BSCI 10120 , GEOL 11040 and 11041; and CHEM 10060	0				
Additional (6 credit hours)	Fulfilled in this major with CHEM 10061 and MATH 12002	0				



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#### **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.

#### **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 <a href="https://www.kent.edu/catalog/kent-core">www.kent.edu/catalog/kent-core</a> 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 <a href="https://www.kent.edu/catalog/diversity">www.kent.edu/catalog/diversity</a> 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 <a href="https://www.kent.edu/catalog/wic">www.kent.edu/catalog/wic</a> 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 <a href="www.kent.edu/catalog/elr">www.kent.edu/catalog/elr</a> 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.

