

# AYA CHEMISTRY/PHYSICS LICENSURE, BA

## Bachelor of Arts in Education, Adolescent to Young Adult Chemistry/Physics Licensure (Grades 7-12) (530509BA)

More on the Adolescent to Young Adult Chemistry/Physics Licensure major (<https://www.uakron.edu/education/academic-programs/undergraduate-programs.dot>)

## School of Education Admission Requirements For Those Persons Seeking State of Ohio Licensure

All students must complete the following requirements for admission:

- School of Education Application for Admission.** Responses to the questions on the application will help School of Education advisors offer the most effective and efficient advisement. It will also help advisors know students as individuals with unique backgrounds and experiences. Applications are available online at: <http://www.uakron.edu/education/academic-programs/how-to-apply.dot>.
- Intercollege Transfer (Undergraduate students only).** Those students enrolled in another college wishing to complete degree requirements in the School of Education should see their advisor to initiate an intercollege transfer to the School of Education. Those students may not access School of Education core courses prior to admission. Students planning to complete teacher education as part of their degree requirements in another college need not complete an ICT.
- Grade Point Average of 3.0 or better overall and 2.5 or better overall in prerequisite credit hours from specific courses identified by the School.**
- Evidence of competency in reading comprehension and writing as demonstrated by one of the following:**
  - A composite ACT score of 21 or higher, or
  - A composite SAT-R score of 1060 (Math and Verbal) or higher, or
  - A grade of "B" or higher in a course that meets the University's General Education English Composition I requirement.
- Evidence of competency in mathematics as shown by one of the following:**
  - A composite ACT score of 21 or higher, or
  - A composite SAT-R score of 1060 (Math and Verbal) or higher, or
  - A grade of "B" or better in a minimum of 3 credits of mathematics that meets the University's General Education mathematics requirement.
- Signed Criminal Background Check Acknowledgment Form**

The LeBron James Family Foundation School of Education  
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The following information has official approval of **The LeBron James Family Foundation School of Education** and **The Buchtel College of Arts & Sciences**, but is intended only as a supplemental guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. Students should refer to the Degree Progress

Report (DPR) which is definitive for graduation requirements. *Completion of this degree within the identified time frame below is contingent upon many factors, including but not limited to: class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, prerequisites, among others.* The transfer process is completed through an appointment with your academic advisor.

## Requirements Summary

Code	Title	Hours
	General Education Requirements ( <a href="https://bulletin.uakron.edu/undergraduate/general-education/">https://bulletin.uakron.edu/undergraduate/general-education/</a> )	34
	Professional Education Requirements for Undergraduate Science Students	39-44
	Content Requirements for Chemistry/Earth Licensure Students	81
	Additional Major Electives *	10-5
	<b>Total Hours</b>	<b>164</b>

\* This major requires a minimum of 164 completed credit hours.

## Recommended General Education Courses

Code	Title	Hours
Students pursuing a bachelor's degree must complete the following General Education coursework. Diversity courses may also fulfill major or Breadth of Knowledge requirements. Integrated and Applied Learning courses may also fulfill requirements in the major.		
Students are not required to enroll in the specific courses listed below. However, to facilitate successful degree completion, the academic department strongly encourages completion of the following recommendations.		
<b>Academic Foundations</b>		<b>12</b>
<i>Mathematics, Statistics and Logic: 3 credit hours</i>		
<i>Speaking: 3 credit hours</i>		
COMM:105	Introduction to Public Speaking or COMM:10 Effective Oral Communication	
<i>Writing: 6 credit hours</i>		
ENGL:111	English Composition I	
ENGL:112	English Composition II	
<b>Breadth of Knowledge</b>		<b>22</b>
<i>Arts/Humanities: 9 credit hours</i>		
<i>Natural Sciences: 7 credit hours</i>		
<i>Social Sciences: 6 credit hours</i>		
<b>Diversity</b>		
Domestic Diversity		
Global Diversity		
<b>Integrated and Applied Learning</b>		
<i>Select one class from one of the following subcategories:</i>		
Complex Issues Facing Society		
Capstone		
<i>Review the General Education Requirements page for detailed course listings.</i>		
<b>Total Hours</b>		<b>34</b>

## Professional Education Requirements for Undergraduate Science Students <sup>1</sup>

Code	Title	Hours
<b>Phase One:</b>		
EDFN:200	Introduction to Education	3
EDFN:220	Educational Psychology	3
EDSE:100	Orientation to the AYA/P-12 Multi-Age Programs	0
EDSE:320	Introduction to Teaching in the Content Area	3
EDSE:420	Instructional Techniques in Secondary Education	3
EDSE:421	Instructional Techniques in Secondary Education - II	3
EDCI:308	Instructional Design and Assessment	6
EDSE:430	Clinical Teaching I	3
EDSE:431	Clinical Teaching II	3
EDCI:440	Literacy in the Content Areas	3
EDIS:225	Introduction to Exceptionalities	3
<b>Phase Two:</b>		
EDSE:495	Student Teaching: Secondary Education <sup>2</sup>	6-11
Total Hours		39-44

<sup>1</sup> At least 39 credit hours with a grade of C or better and a GPA of 2.5 or better.

<sup>2</sup> All students must have the approval of the Student Teaching Committee, based upon approved application to student teaching, and passing OAE Content and Reading tests. Planned teaching experience in schools selected and supervised by the Office of Teacher Education and Licensure experiences. Co-requisite EDSE:496 Student Teaching Colloquium in Secondary Education. To qualify for student teaching, students must have a 2.5 GPA overall, 2.5 in education classes, and 2.5 in the student's major, in methods courses, core courses, and in their teaching field(s). Satisfactory completion of a minimum of 100 hours of field experience is also required before student teaching.

## Content Requirements for Chemistry/Physics Licensure Students

Code	Title	Hours
<b>Science Core</b>		
BIOL:111	Principles of Biology I	4
BIOL:112	Principles of Biology II	4
CHEM:151	Principles of Chemistry I	1-3
or CHEM:152	Principles of Chemistry I Laboratory	
CHEM:153	Principles of Chemistry II	3
GEOL:101	Introductory Physical Geology	4
GEOL:102	Introductory Historical Geology	4
<b>Elementary Classical Physics</b>		
PHYS:291	Elementary Classical Physics I	4
PHYS:292	Elementary Classical Physics II	4
<b>Physics</b>		
PHYS:130	Descriptive Astronomy	4
PHYS:133	Music, Sound & Physics	1-4
or PHYS:293	Physics Computations I	
PHYS:301	Modern Physics	3

PHYS:322	Intermediate Laboratory I	3
PHYS:323	Intermediate Laboratory II	3
<b>Chemistry</b>		
CHEM:154	Qualitative Analysis	2
CHEM:263	Organic Chemistry Lecture I	3
CHEM:264	Organic Chemistry Lecture II	3
CHEM:265	Organic Chemistry Laboratory I	2
CHEM:305	Physical Chemistry for the Biological Sciences	4
CHEM:380	Advanced Chemistry Laboratory I	2
CHEM:401	Biochemistry Lecture I	3
CHEM:423	Analytical Chemistry I	3
<b>Mathematics</b>		
MATH:221	Analytic Geometry-Calculus I	4
MATH:222	Analytic Geometry-Calculus II	4
STAT:260	Basic Statistics	3
Total Hours		75-80

## Additional Requirements to Add Integrated Science Licensure

These courses are not required for the Chemistry/Physics Licensure

Code	Title	Hours
BIOL:217	General Ecology	
BIOL:265	Introductory Human Physiology	
GEOL:128	Geology of Ohio	
GEOL:137	Earth's Atmosphere & Weather	
GEOL:171	Introduction to the Oceans	
GEOL:200	Environmental Geology	