

# AYA EARTH SCIENCE/PHYSICS LICENSURE, BA

## Bachelor of Arts in Education, Adolescent to Young Adult Earth Science/Physics Licensure (Grades 7-12) (530600BA)

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

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

All students must complete the following requirements for admission:

- College of Education Application for Admission.** Responses to the questions on the application will help College 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 College of Education should see their advisor to initiate an intercollege transfer to the College of Education. Those students may not access College 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 College.**
- 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 College of Education  
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## 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 Earth Science/Physics Licensure Students	73
	Additional Major Electives *	9-4
	<b>Total Hours</b>	<b>155</b>

\* This major requires a minimum of 155 completed credit hours.

## Recommended General Education Courses

Code	Title	Hours
Students pursuing a bachelor's degree must complete three tiers of General Education coursework. Tiers I and II provide students with foundational skills and breadth of disciplinary knowledge. Tier III courses require students to integrate knowledge, understand diverse perspectives, and think critically about complex issues. Courses tagged for Tier III may also fulfill major or Disciplinary Area requirements.		
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>Tier I: Academic Foundations</b>		12
<i>Quantitative Reasoning: 3 credit hours</i>		
<i>Speaking: 3 credit hours</i>		
7600:105	Introduction to Public Speaking	
	or 7600:106 Effective Oral Communication	
<i>Writing: 6 credit hours</i>		
3300:111	English Composition I	
3300:112	English Composition II	
<b>Tier II: Disciplinary Areas</b>		22
<i>Arts/Humanities: 9 credit hours</i>		
<i>Natural Sciences: 7 credit hours</i>		
<i>Social Sciences: 6 credit hours</i>		
<b>Tier III: Tagged Courses</b>		
<i>Select one class from each of the following subcategories:</i>		
Complex Systems		
Critical Thinking		
Domestic Diversity		
Global Diversity		
<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>		
5100:200	Introduction to Education	3

5100:220	Educational Psychology	3
5300:100	Orientation to the AYA/P-12 Multi-Age Programs	0
5300:320	Introduction to Teaching in the Content Area	3
5300:420	Instructional Techniques in Secondary Education	3
5300:421	Field Experience in Instructional Techniques in Secondary Education	3
5500:308	Instructional Design and Assessment	6
5500:430	Clinical Teaching I	3
5500:431	Clinical Teaching II	3
5500:440	Literacy in the Content Areas	3
5610:225	Introduction to Exceptionalities	3
<b>Phase Two:</b>		
5300:495	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. Corequisite 5300:496 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 Earth Science/Physics Licensure Students<sup>1</sup>

Code	Title	Hours
<b>Science Core</b>		
3100:111	Principles of Biology I	4
3100:112	Principles of Biology II	4
3150:151	Principles of Chemistry I	3
3150:152	Principles of Chemistry I Laboratory	1
3150:153	Principles of Chemistry II	3
3370:101	Introductory Physical Geology	4
3370:102	Introductory Historical Geology	4
<b>Elementary Classical Physics</b>		
3650:291	Elementary Classical Physics I	4
3650:292	Elementary Classical Physics II	4
<b>Earth Science</b>		
3370:137	Earth's Atmosphere & Weather	1
3370:200	Environmental Geology	3
3370:201	Exercises in Environmental Geology I	1
3370:203	Exercises in Environmental Geology II	1
3370:371	Oceanography	4
3370:455	Field Studies in Geology	3
or 3370:499	Research Problems in Geology	
<b>Mathematics</b>		
3450:221	Analytic Geometry-Calculus I	4
3450:222	Analytic Geometry-Calculus II	4

3470:260	Basic Statistics	3
<b>Physics and Earth Science</b>		
3650:130	Descriptive Astronomy	4
<b>Physics</b>		
3650:133	Music, Sound & Physics	4
or 3650:137	Light	
3650:267	Life Science Physics Computations I	1
or 3650:293	Physics Computations I	
3650:301	Elementary Modern Physics	3
3650:322	Intermediate Laboratory I	3
3650:323	Intermediate Laboratory II	3
Total Hours		73

<sup>1</sup> 73 credit hours with a GPA of 2.5 or better.

## Additional Requirements to Add Integrated Science Licensure

These courses are not required for the Earth Science/Physics Licensure

Code	Title	Hours
3100:217	General Ecology	
3100:265	Introductory Human Physiology	
3150:263	Organic Chemistry Lecture I	
3150:264	Organic Chemistry Lecture II	
3150:265	Organic Chemistry Laboratory I	