

Elementary Education Science Added Endorsement Program K-8

Student Name:

UID:

This program of the University of Iowa College of Education is approved by the state of Iowa as preparation for endorsement number 150, Science-basic K-8 when completed with or following an Elementary Education Teacher Education Program K-6 (endorsement 102).

Requirements

- [Admission to the Teacher Education Program](#), or to the Added Endorsement program as a licensed teacher.
- Completion of courses in the methods of teaching science, as listed below.
- Completion of minimum 24 semester hours in science to include courses in biology, earth and space science, and physical sciences (chemistry and physics) listed below.
- Completion of the TEP Professional Education Course Requirements and field experiences for initial licensure candidates.

Professional Education Course Requirements

Complete both of the following methods courses.

Course	Course Title	Credit	Session/Substitute
EDTL:3165	Elementary Science Methods I	3 s.h.	
EDTL:3166	Elementary Science Methods II	3 s.h.	

Science Content Course Requirements

Complete a minimum of 24 s.h. in the following areas.

Biological Science

Complete a minimum of 6 s.h. of the following or approved substitutes.

Course	Course Title	Credit	Session/Substitute
BIOL:1140	Human Biology: Nonmajors	4 s.h.	
BIOL:1141	Human Biology: Health Professionals	4 s.h.	
BIOL:1261	Introduction to Botany	4 s.h.	
BIOL:1370	Understanding Evolution	3 s.h.	
BIOL:1411	Foundations of Biology	4 s.h.	
BIOL:1412	Diversity of Form and Function	4 s.h.	
SIED:3164	Intro to Science in Society	3 s.h.	
SIED:4103	Soc & Ed Applicatns of Biological Sciences	4 s.h.	

Earth/Space Science

Complete a minimum of 6 s.h. of the following or approved substitutes.

Course	Course Title	Credit	Session/Substitute
ASTR:1070	Stars, Galaxies, and the Universe	3-4 s.h.	
EDTL:3166	Elementary Science Methods II (if taken Fall 2025 or after)	3 s.h.	
SEES:1020	The Global Environment	3 s.h.	
SEES:1030	Introduction to Earth Science	4 s.h.	
SEES:1040	Evolution and History of Life	4 s.h.	
SEES:1050	Introduction to Geology	4 s.h.	
SEES:1070	Contemporary Environmental Issues	3 s.h.	
SEES:1080	Introduction to Environmental Science	4 s.h.	
SEES:1100	Age of Dinosaurs	4 s.h.	
SEES:3080	Introduction to Oceanography	2 s.h.	
SIED:4102	Soc & Ed Applicatn of Earth Science & Envir Science	4 s.h.	
SIED:4110	Environmental Issues of the Colorado Rookies	4 s.h.	

Physical Sciences

Complete a minimum of 12 s.h. with at least 3 s.h. in chemistry and 3 s.h. in physics.

Course	Course Title	Credit	Session/Substitute
CHEM:1050	Chemistry of Our World	3 s.h.	
CHEM:1060	Technology and Society Lab	1 s.h.	
CHEM:1070	General Chemistry I	3 s.h.	
CHEM:1080	General Chemistry II	3 s.h.	
CHEM:1110	Principles of Chemistry I	4 s.h.	
CHEM:1120	Principles of Chemistry II	4 s.h.	
EDTL:3165	Elementary Science Methods I (if taken Fall 2025 or after)	3 s.h.	
SIED:4106	Soc & Ed Applicatns of Chemical Concepts	4 s.h.	
ASTR:1070	Stars, Galaxies, and the Universe	3-4 s.h.	
ASTR:1085	Citizen Astronomy	4 s.h.	
ASTR:1771	Fundamental Astronomy I	4 s.h.	
PHYS:1200	Physics of Everyday Experience	3 s.h.	
PHYS:1511	College Physics I (Algebra-based)	4 s.h.	
PHYS:1512	College Physics II (Algebra-based)	4 s.h.	
SIED:4105	Soc Ed Applicatns of Physical Sciences	4 s.h.	

ASTR:1070 Stars, Galaxies, and the Universe may be used to meet requirements for either Earth/Space or Physical Sciences, but not both.

Additional Information

This Program Guide is for planning and documentation of endorsement requirement completion. Students pursuing degree programs should consult the [General Catalog](#) and degree audit(s) for additional requirements. State requirements for licensure and endorsements are subject to change without notice; check with your advisor or the Office of Education Services for updated requirements. Course transfer and substitution may require syllabi or other documentation in addition to transcript. Revised 6/1/2026 version 4.4.

For additional information, admissions procedures, or advising referral, please contact Office of Student Services, College of Education, N201 Lindquist Center, Iowa City, IA 52242, 319-335-5359, ask-education@uiowa.edu <https://education.uiowa.edu/>