



Student Name:

UID:

State of Iowa approved preparation program for endorsement numbers 185 All Science 5-12 and 1541 Basic Science 5-12, and College of Liberal Arts and Sciences Bachelor of Science degree major, available to undergraduate students who have been admitted to the Teacher Education Program (TEP).

Requirements

- [Admission to the Teacher Education Program](#); and
- Completion of the professional education course requirements listed below; and
- Completion of a minimum of 9 s.h. in each of four science subjects, plus 10-12 s.h. in Science Education, as below; and
- Completion of College of Liberal Arts and Sciences [requirements for a bachelor's degree](#).

Science Education TEP Professional Education Course Requirements

Complete the following three courses in the first semester of enrollment

Course	Former	Course Title	Credit	Session/Substitute
EDTL:3091		Sec Ed Orientation & Classroom Management	3 s.h.	
EDTL:3095	07S:195	Teaching Reading Secondary Content Areas	1 s.h.	
EDTL:3002	07E:102	Technology in the Classroom	2 s.h.	

Complete all of the following (may be completed prior to TEP admission)

Course	Former	Course Title	Credit	Session/Substitute
EPLS:3000	07B:103	Foundations of Education	3 s.h.	
EDTL:4900	07U:100	Foundations of Special Education	3 s.h.	
PSQF:1075	07P:075	Educational Psychology and Measurement	3 s.h.	

Complete the following course

Course	Former	Course Title	Credit	Session/Substitute
EPLS:4180	07B:180	Human Relations for the Classroom Teacher	3 s.h.	

Methods and Practicum (Complete all of the following)

Complete the following course (Fall only)

Course	Former	Course Title	Credit	Session/Substitute
EDTL:4751	07S:151	Science Teaching & Practicum Early Learners	3 s.h.	

Complete the following two courses in the same semester (Spring only)

Course	Former	Course Title	Credit	Session/Substitute
EDTL:4752	07S:152	Methods of Teaching Science	3 s.h.	

Complete the following two courses in the same semester (Fall only)

Course	Former	Course Title	Credit	Session/Substitute
EDTL:4753	07S:153	Instructional Issues in Teaching Science	3 s.h.	
EDTL:4779	07S:179	Secondary School Science Practicum	2 s.h.	

Student Teaching (Register for section 0091 of all three courses)

Course	Former	Course Title	Credit	Session/Substitute
EDTL:4087	07S:187	Seminar Curriculum Student Teaching	3 s.h.	
EDTL:4091	07S:191	Observa & Lab Prac in Secondary School	6 s.h.	
EDTL:4092	07S:192	Observa & Lab Prac in Secondary School	6 s.h.	

Faculty may modify student teaching requirements for students completing additional education programs.

College level Mathematics (Choose one course in consultation with adviser)

Course	Former	Course Title	Credit	Session/Substitute

Bachelor of Science, Science Education (All Science) Course Requirements

Also satisfies content course requirements for science teaching endorsement numbers 185 All Science 5-12 and 1541 Basic Science 5-12

Biology (Choose minimum 9 s.h. from the following courses or approved substitutes)

Course	Old	Course Title	Credit	Session/Substitute
BIOL:1411	002:031	Foundations of Biology	4 s.h.	
BIOL:1412	002:032	Diversity of Form and Function	4 s.h.	
BIOL:2211	002:099	Genes, Genomes & the Human Cond	3 s.h.	
BIOL:3172	002:131	Evolution	4 s.h.	
HHP:3500	027:130	Human Physiology	3 s.h.	
BIOL:2673	002:134	Ecology (Fall)	3 s.h.	
SIED:4103	097:103	Soc Ed App of Biological Sciences (Fall only)	3-4 s.h.	

Chemistry (Choose minimum 9 s.h. from the following courses or approved substitutes)

Course	Former	Course Title	Credit	Session/Substitute
CHEM:1110	004:011	Principles of Chemistry I	4 s.h.	
CHEM:1120	004:012	Principles of Chemistry II	4 s.h.	
CHEM:2210	004:121	Organic Chemistry I	3 s.h.	
CHEM:2220	004:122	Organic Chemistry II	3 s.h.	
CHEM:2021	004:021	Basic Measurements	3 s.h.	
SIED:4106	097:106	Soc Ed App of Chemical Concepts (Spring only)	3-4 s.h.	

Earth Science (Choose minimum 9 s.h. from the following courses or approved substitutes)

Course	Former	Course Title	Credit	Session/Substitute
EES:1040	012:004	Evolution and History of Life	4 s.h.	
EES:1030	012:003	Introduction to Earth Science	4 s.h.	
EES:1050	012:005	Introduction to Geology	4 s.h.	
EES:1080	012:008	Introduction to Environmental Science	4 s.h.	
EES:3000	012:100	Geologic Training Assignment (Summer only)	3 s.h.	
EES:3070	012:107	Marine Ecosystems (Fall only)	3 s.h.	
SIED:4102	097:102	Soc Ed App of Earth Sci & Envir Sci (Fall only)	3-4 s.h.	

Physics (Choose minimum 9 s.h. from the following courses or approved substitutes)

Course	Former	Course Title	Credit	Session/Substitute
PHYS:1511	029:011	College Physics I (Algebra-based)*	4 s.h.	
PHYS:1512	029:012	College Physics II (Algebra-based)*	4 s.h.	
PHYS:1200	029:006	Physics of Everyday Experience	3 s.h.	
ASTR:1070	029:050	Stars, Galaxies, & the Universe	3-4 s.h.	
SIED:4105	097:105	Soc Ed App of Physical Sciences (Spring only)	3-4 s.h.	

Physics (PHYS:1701 and PHYS:1702) or Introductory Physics (PHYS:1611 and PHYS 1612) may be substituted for College Physics (PHYS:1511 and PHYS 1512).

Science Education

Complete the following

Course	Former	Course Title	Credit	Session/Substitute
SIED:4135	097:135	The Nature of Science	3-4 s.h.	

Society and Educational Applications (Complete two of the following four)

Course	Former	Course Title	Credit	Session/Substitute
SIED:4102	097:102	Soc Ed App of Earth Sci & Envir Sci (Fall only)	3-4 s.h.	
SIED:4103	097:103	Soc Ed App of Biological Sciences (Fall only)	3-4 s.h.	
SIED:4105	097:105	Soc Ed App of Physical Sciences (Spring only)	3-4 s.h.	
SIED:4106	097:106	Soc Ed App of Chemical Concepts (Spring only)	3-4 s.h.	

Adviser Signature: _____

Date: _____

This Program Guide is for planning and documentation of program completion. State requirements for licensure and endorsements are subject to change without notice; check with your adviser or the Office of Education Services for updated requirements. Course transfer and substitution may require syllabi or other documentation in addition to transcript. 12/13/2016 TN/DLT.

For additional information, admissions procedures, or advising referral, please contact Office of Education Services, College of Education, N310 Lindquist Center, Iowa City, IA 52242, 319-335-5359, FAX: 319-335-5364, edu-educationservices@uiowa.edu, <http://www.education.uiowa.edu>