

B.S. in Science with Teacher Certification – Earth Science Specialization

Standard High School Certificate

The Science with Teacher Certification major prepares students for teaching careers in the sciences (biological sciences, chemistry, earth sciences and physics) at the secondary level (grades 9-12). For students also wanting to be eligible to teach middle school sciences, additional Middle Level Education courses are required.

This major requires that students follow and meet the requirements for Admission, Retention and Graduation from Teacher Certification programs as described in the "Teacher Certification Programs" section of this catalog and as explained at the University Admission to Teacher Education Meeting which all students must attend. Students must gain University Approval to Take Teacher Education Courses no later than the end of their first semester Junior year. Additional information on Admission, Retention and Graduation for Teacher Certification programs can be found on the College of Education & Professional Studies website at <http://www.eiu.edu/ceps/teached>.

All students must pass the Illinois Certification Test of Basic Skills for selection into teacher education and should complete this requirement no later than their sophomore year.

Students must receive a "C" or better in all professional education courses and maintain a minimum cumulative and major GPA of 2.65 to continue in the program.

Students have two options for completing the professional education coursework: Regular Secondary Education Program and Integrated Secondary Education Program (ISEP). The Integrated Secondary Education Program is strongly recommended for the Science with Teacher Certification major. For more information regarding these two options please consult with your advisor. Information is also available in the Teacher Certification Program section of this catalog.

The BS in Science with Teacher Certification (Earth Sciences Specialization) degree program prepares students for a career as a secondary science teacher with emphasis in the earth sciences.

The BS in Science Teacher Certification with Earth Sciences Specialization Major:

Required Core Courses (74 Hours)

<p>___ BIO 1100 General Biology (4 hrs)</p> <p>___ BIO 1200G General Botany (4 hrs)</p> <p>___ BIO 1300G Animal Diversity (4 hrs)</p> <p>___ CHM 1310G General Chemistry I (3 hrs)</p> <p>___ CHM 1315G General Chemistry Laboratory I (1 hr)</p> <p>___ CHM 1410 General Chemistry II (3 hrs)</p> <p>___ CHM 1415 General Chemistry Laboratory II (1 hr)</p> <p>___ CHM 2730 Quantitative Analysis (3 hrs)</p> <p>___ CHM 3100 Practicum in Chemistry (1 hr)</p> <p>___ ESC 1300G Introduction to Earth Sciences (4 hrs)</p> <p>___ ESC 1400G Weather and Climate (4 hrs)</p> <p>___ ESC 2450G Oceanography (3 hrs)</p> <p>___ ESC 3200 Human Impacts on the Environment (3 hrs)</p> <p>___ ESC 3410 Climatology (3 hrs)</p> <p>or GEL 3510</p>	<p>___ GEL 1430 Historical Geology (4 hrs)</p> <p>___ GEL 2440 Mineralogy (4 hrs)</p> <p>___ GEL 3405 Petrology (4 hrs)</p> <p>___ GEL 3420 Principles of Geomorphology (3 hrs)</p> <p>___ GEL 3510 Principles of Sedimentation (3 hrs) or ESC 3410</p> <p>___ GEL 4490 Invertebrate Paleontology (3 hrs)</p> <p>___ PHS 3400 Methods of Teaching Physical Sciences (3 hrs)</p> <p>___ PHY 1055G Principles of Astronomy (3 hrs)</p> <p>___ PHY 1056G Principles of Astronomy Laboratory (1 hr)</p> <p>___ PHY 1151G Principles of Physics I (3 hrs)</p> <p>___ PHY 1152G Principles of Physics I Laboratory (1 hr)</p> <p>___ PHY 1161 Principles of Physics II (3 hrs)</p> <p>___ PHY 1162 Principles of Physics II Laboratory (1 hr)</p>
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Professional Education Core Courses (25 - 31 Hours)

For the regular program:

<p>___ EDF 2555 Diversity of Schools and Societies: Social and Global Perspectives (3 hrs)</p> <p>___ EDF 4450 Philosophy and History of Education (3 hrs)</p> <p>___ EDP 3331 Theories of Learning and Development for Secondary Teachers (3 hrs)</p> <p>___ SED 2000 Inquiry Into Teaching (1 hr)</p>	<p>___ SED 3330 Instruct. Tasks in the Secondary School. (3 hrs)</p> <p>___ SPE 3500 Education of Individuals with Exceptional Learning Needs: Access to the General Curriculum (3 hrs)</p> <p>___ STG 4000 Multicultural/Disabilities Practicum (1 hr)</p> <p>___ STG 4001 Student Teaching (12 – 16 hrs)</p>
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Or, for the ISEP:

<p>___ EDF 2555 Diversity of Schools and Societies: Social and Global Perspectives (3 hrs)</p> <p>___ SED 2000 Inquiry Into Teaching (1 hr)</p> <p>___ SED 3000 ISEP Level I (3 hrs)</p>	<p>___ SED 3100 ISEP Level II (3 hrs)</p> <p>___ SED 4000 ISEP Level III (3 hrs)</p> <p>___ STG 4001 Student Teaching (12 – 16 hrs)</p>
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Footnote: Major GPA based on all biological sciences, chemistry, earth sciences, and physics courses taken at EIU.

SUGGESTED FOUR YEAR PLAN OF STUDY FOR THE B.S. in Sciences with Teacher Certificate – Earth Sciences Specialization

Those who complete this degree will be certified to teach biological sciences, chemistry, earth sciences, and physics

FIRST YEAR

Fall Semester (14 – 18 SH)

__ENG 1001G	(3 SH)	Composition & Language
__ESC 1300G	(4 SH)	Earth Sciences
__BIO 1100	(4 SH)	General Biology
__GEN ED Humanities	(3 SH)	
__FOR LANG if needed	(0-4SH)	

Spring Semester (14 - 15 SH)

__ENG 1002G	(3 SH)	Composition & Literature
__GEN Ed. Humanities or Fine Arts–Cult Div	(3 SH)	
__ESC 1400G	(4 SH)	Weather & Climate
__GEL 1430	(4 SH)	Historical Geology
__FOR LANG if needed	(0-4 SH)	

MUST EARN 30+ SH FOR SOPHOMORE STANDING

Selection to Teacher Education programs should occur following the freshman year but no later than the end of the sophomore year (for transfer students this should occur no later than the end of their first semester at EIU). Selection requires that students pass the Illinois Certification Test of Basic Skills.

SECOND YEAR

Fall Semester (17 SH)

__SPC 1310G	(3 SH)	Introduction to Speech Communication
__GEN ED. Math	(3 SH)	
__PLS 1153G	(3 SH)	American Government & Constitution
__GEL 2440	(4 SH)	Mineralogy
__CHM 1310G	(3 SH)	General Chemistry I
__CHM 1315G	(1 SH)	General Chemistry Laboratory I

Spring Semester (16 SH)

__SED 2000 (R, A)	(1SH)	Inquiry Into Teaching
__EDF 2555 (R, A)	(3 SH)	Diversity of Schools & Societies:
__BIO 1200G	(4 SH)	Practical Botany
__CHM 1410	(3 SH)	General Chemistry II
__CHM 1415	(1 SH)	General Chemistry Laboratory II
__GEL 3405	(4 SH)	Petrology

MUST EARN 60+ SH FOR JUNIOR STANDING

THIRD YEAR

Fall Semester (14 - 17 SH)

__SED 3000 (A)	(3 SH)	Level I: ASEP
__BIO 1300G	(4 SH)	Animal Diversity
__PHY 1151G	(3 SH)	Principles of Physics I
__PHY 1152G	(1 SH)	Principles of Physics I Laboratory
__ESC 2450G	(3 SH)	Oceanography
__GEN ED. Fine Arts	(3 SH)	

Spring Semester (13 – 19 SH)

__SED 3100 (A) ¹	(3 SH)	Level II: ASEP
__SED 3330 (R) ¹	(3 SH)	Instructional Tasks/Secondary School
__EDP 3331 (R) ¹	(3 SH)	Theories of Learning & Development
__SPE 3500 (R) ¹	(3 SH)	The Education of Individuals w/Exceptional
__GEL 3420	(3 SH)	Principles of Geomorphology
__PHY 1161*	(3 SH)	Principles of Physics II
__PHY 1162*	(1 SH)	Principles of Physics II Laboratory
__GEN ED. Soc/Beh Sci	(3 SH)	

MUST EARN 90+ SH FOR SENIOR STANDING

*Check prerequisites; additional math classes may be required.

University Approval to Take Teacher Education Courses should occur at the end of the first semester junior year with Formal University Admission to Teacher Education occurring at the end of the junior year. See the Teacher Certification Program section of the catalog for more information.

FOURTH YEAR

Fall Semester (13 – 16 SH)

__PHS 3400 ¹	(3 SH)	Methods of Teaching Physical Sciences
__EDF 4450 (R)	(3 SH)	Philosophy & History of Education
__PHY 1055G	(3 SH)	Principles of Astronomy
__PHY 1056G	(1 SH)	Principles of Astronomy Laboratory
__CHM 2730	(3 SH)	Quantitative Analysis
__GEL 4490	(3 SH)	Invertebrate Paleontology

Spring Semester (13 SH)

__ESC 3200	(3 SH)	Human Impacts on the Environment
__ESC 3410 or GEL 3510	(3 SH)	Climatology / Principles of Sedimentation
__CHM 3100	(1 SH)	Practicum in Chemistry
__Senior Seminar ¹	(3 SH)	
__GEN ED. Soc/Beh Sci	(3 SH)	

Departmental Approval to Student Teach must be granted prior to Student Teaching. Students must also pass the Illinois Certification Subject Area test for their major prior to student teaching.

FIFTH YEAR

Fall Semester (15 SH)

__STG 4001	(12-14 SH)	Student Teaching
__STG 4000 (R)	(1 SH)	Multicultural/Disabilities Practicum
__SED 4000 (A)	(3 SH)	Level III: ASEP

(Major GPA based on Chemistry, Biological Sciences, Physics, and Earth Sciences courses taken at Eastern Illinois University.)

Satisfactory completion of this designation requires:

- (1) a grade of C or higher in all courses, regardless of where taken;
- (2) a major and cumulative grade-point average of at least 2.75 in all courses attempted at EIU;
- (3) at least 45 semester hours of the requirements for the social science major must be in courses taken at EIU.

Students must complete all the professional coursework under either the Regular Secondary Education Program or the Alternative Secondary Education Program. The Alternate Secondary Education Program is strongly recommended for the Science with Teacher Certification major.

*GEG electives must be chosen from: GEG 3600, 3750, 3800

R Required for Regular Secondary Education Program

A Required for Alternative Secondary Education Program

¹ Requires University Approval to Take Teacher Education Courses