

EARTH SCIENCE, B.S.E.

Interested in pursuing a career as a high school teacher? The Department of Earth Sciences offers a 126-credit program leading to the Bachelor of Science in Secondary Education in the Earth Sciences.

This program is for students interested in pursuing careers as a high school educator in the field of earth sciences including environmental earth science, geology, meteorology, and oceanography. Students obtain certification in earth science upon completion of the program and successful completion of state examinations. Education courses and student teaching experiences are offered in conjunction with the department of Educational Foundations in the College of Education and Human Services (Educational Foundations | Millersville University (<https://www.millersville.edu/edfoundations/>)).

Major in Earth Science, BSE

| Code | Title | Hours |
|--|---|-----------|
| Credits Required for Major | | |
| | true | |
| Minimum GPA 2.0 for Major | | |
| | true | |
| Minimum Residency 50% of Major Courses | | |
| | true | |
| ESCI 221 | Physical Geology (C- minimum) | 4 |
| ESCI 222 | Historical Geology | 4 |
| ESCI 241 | Meteorology (C- minimum) | 4 |
| ESCI 245 | Environmental Meteorology | 3 |
| ESCI 261 | Introduction to Oceanography (C- minimum) | 4 |
| Ocean Resources | | 3 |
| ESCI 366 | Marine Resources and Policy | |
| Planetary Geology or The Earth in Space - Choose 1 of the following: | | 3 |
| ESCI 428 | Planetary Geology | |
| ESCI 202 | The Earth in Space | |
| Advisor approved ESCI course | | |
| Choose one ESCI course | | |
| Total Hours | | 25 |

Professional Education

| Code | Title | Hours |
|---------------------------------------|---|-------|
| EDUCATIONAL FOUNDATIONS | | |
| EDFN 211 | Foundations Modern Education | 3 |
| EDFN 241 | Psychological Foundations of Teaching | 3 |
| REQUIRED EDUCATION COURSES | | |
| EDSE 321 | Issues in Secondary Education | 3 |
| EDFN 330 | Instructional Technology, Design & Assessment | 3 |
| EDSE 435 | Teaching of Science in Secondary Schools | 3 |
| ACCOMMODATIONS AND ADAPTATIONS | | |
| EDSE 340 | Content Area Literacy for Diverse Classrooms | 3 |

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|----------|---|---|
| SPED 346 | Secondary Students w/Disabilities in Inclusive Settings | 3 |
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STUDENT TEACHING

| | | |
|----------|-----------------------------|---|
| EDSE 471 | Student Teaching Seminar | 3 |
| EDSC 461 | Student Teaching in Science | 9 |

Total Hours **33**

Req Related for Earth Science, BSE

| Code | Title | Hours |
|--|---------------------------------------|-----------|
| MATHEMATICS | | |
| MATH 160 | Precalculus | 4 |
| MATH 161 | Calculus 1 (C- minimum) | 4 |
| PHYSICS | | |
| PHYS 131 | Physics 1 with Algebra (C- minimum) | 4 |
| PHYS 132 | Physics 2 with Algebra | 4 |
| General Astronomy or Intro to Astronomy Astrophysics - Choose 1 of the following: | | 3 |
| PHYS 117 | General Astronomy | |
| PHYS 317 | Introduction to Astronomy | |
| CHEMISTRY | | |
| CHEM 111 | Introductory Chemistry 1 (C- minimum) | 4 |
| CHEM 112 | Introductory Chemistry 2 | 4 |
| BIOLOGY | | |
| Demonstrated Competency in Biology | | |
| Competency may be demonstrated by: 1) a course grade of 'A' or 'B' in AP Bioogy; 2) a score of 3 or better in the national AP exam; 3) a successful score on the CLEP exam; 4) a successful score on a General Biology challenge or placement examination; 5) a passing grade for General Biology (BIOL 100) | | |
| Principles of Ecology | | 3 |
| BIOL 241 | | |
| Total Hours | | 30 |

Advanced Professional Studies, BSE

| Code | Title | Hours |
|---|--------------------------------|-------|
| *Clearances are valid for one year from the date that appears in the header of this degree audit in the field 'Clearance Date.' Clearances cannot expire in the middle of a semester. | | |
| APS REQUIREMENTS | | |
| English Composition - Choose 1 of the following: | | 3 |
| ENGL 110 | English Composition | |
| ENGL 110H | Hnrs:English Composition | |
| English Literature - Choose 1 of the following: | | 3 |
| ENGL 230 | Introduction to Literature | |
| ENGL 231 | World Literature 1 | |
| ENGL 232 | World Literature 2 | |
| ENGL 233 | Early British Literature | |
| ENGL 234 | Later British Literature | |
| ENGL 235 | American Literary Tradition I | |
| ENGL 236 | American Literary Tradition II | |
| ENGL 241H | H:Explorations in World Lit | |
| ENGL 242 | Reading Our World: | |
| ENGL 292 | Science Fiction | |
| ENGL 333 | African-American Literature 1 | |

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|-----------|--------------------------------|
| ENGL 333H | Hnrs:African American Lit 1 |
| ENGL 334 | African American Literature 2 |
| ENGL 334H | Hnrs:African American Lit 2 |
| ENGL 336 | New Dimensions to World Lit |
| ENGL 338 | Folklore and Literature |
| ENGL 401 | Old Eng Lang and Literature |
| ENGL 402 | Middle Eng Lang and Literature |

Mathematics

Two Mathematics courses are required for BSE students. You have taken 0 course(s). It is preferable to take two courses designated as G2. Click here to search for MATH courses on the current web schedule. BIOL 375 will fulfill one Mathematics course for BSE BIOL students.

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|------------|---|---|
| EDFN 211 | Foundations Modern Education | 6 |
| & EDFN 241 | and Psychological Foundations of Teaching | |

48 earned (transcript) credit hours are required

APS registration status

You ARE NOT eligible to register for courses requiring APS status.

ACT 126 - Educator Ethics Training

You must submit your Educator Ethics Training.

Pre-Service Testing Required

Pre-Service Testing Status is indicated by one of the following: 1.) PSTA - Pre-Service Testing Accomplished: Verified passing pre-service test scores meet the requirement. 2.) PSTI - Pre-Service Testing Incomplete: Non-passing pre-service test scores were submitted prior to the August 1, 2015 policy change. Passing scores must still be achieved in order to meet the PA certification requirements. 3.) PSTU - Pre-Service Testing Unverified: Unofficial copies of pre-service test scores were submitted. Official scores must be sent from the testing company in order to meet PA certification requirements. 4.) PSTX - Pre-Service Testing Waived: Per PDE - ACT 136, the Pre-Service Testing Requirement has been waived.

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Your GPA is below 3.0 - please see an advisor

If you are given the 2.8 GPA Exception for graduation and you graduate with a GPA lower than 3.0, you must have higher certification test scores in order to meet PA state certification requirements.

No dispositions-related holds

If the requirement above is checked as complete, then there are currently no dispositions-related holds on your APS Status. Registration for APS courses is permitted when all APS requirements have been met. If it is incomplete, you have a hold and APS registration will not be allowed.

Full Admission to APS

When all requirements are met, you must submit application for admission to APS status. Click here for the application.

Total Hours

12