

Secondary Education - Earth and Space Science

Effective Fall 2013

Students seeking Secondary Education Certification in Earth and Space Science must declare majors in both Geoscience (Earth Science) and Secondary Education (Earth and Space Science) and complete the full Geoscience (Earth Science) course sequence as well as the Secondary Education Professional Course and Certification requirements. Students must consult their advisers in both departments each semester regarding course selection and other certification requirements.

A total of 125-128 Credits are required for a Bachelor of Science in Education with a specialization in Earth and Space Science. Required courses include:

Required by Earth and Space Science for Secondary Education Major (53 credits)

BIOLOGY.114	Concepts in Biology I
CHEM.115	Chemistry for the Sciences I
CHEM.116	Chemistry for the Sciences II
EGGS.100	Intro to Environmental Science
EGGS.120	Physical Geology
EGGS.130	Historical Geology
EGGS.242	Map Use and Analysis
EGGS.255	Meteorology
EGGS.259	Oceanography
EGGS.260	Earth Materials
PHYSICS.110	Intro to Astronomy
PHYSICS.111	Introductory Physics I or PHYSICS.211 Gen Physics I
PHYSICS.112	Introductory Physics II or PHYSICS.212 Gen Physics II

Electives (6 credits minimum)

EGGS.265	Geomorphology
EGGS.320	Remote Sensing of the Earth
EGGS.365	Intro to Paleontology
EGGS.368	Stratigraphy & Sedimentation
EGGS.369	Structural Geology
EGGS.370	Surface Hydrology
EGGS.420	Planetary Science
EGGS.460	Aqueous Geochemistry
EGGS.470	Groundwater Hydrology
EGGS.480	Applied Geophysics
EGGS.490	Special Topics in Geology
EGGS.493	Senior Research
MARSCI.250	Wetlands Ecology (or other approved Marine Science courses)

Required by Education (40 credits)

COMMSTUD.103	Public Speaking or COMMSTUD.104 Interpersonal Communication
EDFOUND.204	Educational Technology

EDFOUND.206	Teachers, Schools & Society
EDFOUND.251	Psychological Foundations of Ed
EDFOUND.291	Principles of Teaching
EDFOUND.311	Classroom Meas. & Assessment
EDFOUND.406	Multicultural Education
EDFOUND.427	Classroom Mgt. & Eff. Discipline
EDFOUND.497	Student Teaching: 1st Experience
EDFOUND.498	Student Teaching: 2nd Experience
PROFSTUD.320	PDS (replaces EDFOUND.311 & SECED.351)
PSYCH.101	General Psychology
SECED.453	Teaching Science in Sec Sch (fall only)

Required by PDE (27 credits)

ENGLISH.101	Foundations of College Writing I
ENGLISH_____	Literature (151, 152, 156, 226, 227, 236, 237, 246, 247, or 257)
MATH_____	MATH.123, 141, or EGGS.150
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PROFSTUD.494	ELL Strategies
PSYCH.212	Adolescent Psychology
SPECED.101	Introduction to Except Individuals
SPECED.275	Linking Assessment
SPECED.358	Methods of Instruction for Students with Disabilities

Meeting General Education Goals:

Credit toward General Education Goals is met with General Education Points (GEPs). Courses can offer a maximum of 4 GEPs. Some courses offer GEPs toward more than one General Education Goal. The range of courses awarding GEPs, and the degree to which major requirements and general education requirements may be satisfied simultaneously, will change as more courses are approved for General Education credit. See www.bloomu.edu/mycore

Course Number	Course Title	GEPs
***Goal 1: Communication; minimum 7 GEPs, from minimum of 3 disciplines.		
COMMSTUD.103/104	Public Speaking or Interpersonal Communication	3
EDFOUND.291	Principles of Teaching	2
ENGLISH.101	Foundations of College Writing I	3
*Goal 2: Information Literacy; minimum 2 GEPs		
EDFOUND.204	Educational Technology	3
**Goal 3: Analysis, Quantitative Reasoning, & Problem Solving; minimum 5 GEPs, from minimum of 2 disciplines.		
BIOLOGY.114	Concepts in Biology 1	1
CHEM.115	Chemistry for the Sciences 1	1
EGGS.150	Quantitative Methods in Earth Sci.	3
MATH_____	MATH.123 or 141	3
**Goal 4: Cultures & Diversity; minimum 5 GEPs, from minimum of 2 disciplines.		
EDFOUND.291	Principles of Teaching	1
EDFOUND.406	Multicultural Education	2
SPECED.101	Intro to Exceptional Individuals	2

**Goal 5: Natural Sciences; minimum 5 GEPs, from minimum of 2 disciplines.		
BIOLOGY.114	Concepts in Biology I	3
CHEM.115	Chemistry for Sciences I	3
**Goal 6: Social Sciences; minimum 5 GEPs, from minimum of 2 disciplines.		
EDFOUND.206	Teachers, Schools, and Society	1
PSYCH.101	General Psychology	3
SPECED.275	Linking Assessment	1
**Goal 7: Humanities; minimum 5 GEPs, from minimum of 2 disciplines.		
ENGLISH ____	Literature (151, 152, 156, 226, 227, 236, 237, 246, 247, or 257)	2
MUSIC.101 or THEATRE.102/103	Music Listening or Introduction to Theatre or Theatre Appreciation	3
*Goal 8: Second Language Competency; minimum 2 GEPs; Select one of the two options.		
ASLTERP.155	American Sign Language 1	2
_____ 102	Competency test or any second language 102 level	
*Goal 9: Physical Activity & Health; minimum 2 GEPs.		
*Goal 10: Responsible Citizenship; minimum 2 GEPs.		
EDFOUND.406	Multicultural Education	1
SPECED.101	Intro to Exceptional Individuals	1

*GEPs for this goal may come from just 1 discipline. **GEPs must come from at least 2 disciplines. ***GEPs must come from at least 3 disciplines.

Additional Notes on the Secondary Education Major:

Admission Packet, for Admission into the Teacher Education Program: due by 60 credits, signed by your Education advisor and submitted to Teacher Education Admission Packets Coordinator. Forms and information available from Education Studies.

- Eligible test scores:** After April 2, 2012: **PAPA (Pre-service Academic Performance Assessment)** www.pa.nesinc.com: Reading, score of 220 Writing, score of 220 Math, score of 220
or Praxis I: Academic Skills Assessment if taken on or before April 2, 2012 (and retakes until April 2, 2014):
Reading, score of 172 Writing, score of 173 Mathematics, score of 173
- Cumulative GPA of 3.0, with a C or better** in all professional education and specialization courses.
- 6 credits of college-level math** and **6 credits in English composition and literature**
- Completion of early field experience:** five days/30 hours, non-credit, w/ appropriate diversity in contexts: forms required
- Two recommendations** from Teacher Education faculty: standardized form required
- Professional liability insurance** (available through PSEA, at www.PSEA.org)
- Tuberculosis Screening** results, from a test taken within the last two years (likely repeated before student teaching).
- A resume** that follows the sample format: format available from Education Studies
- Criminal checks:** Act 34 (Criminal Record Check) Act 151 (Child Abuse History Check)
Act 114 FBI Clearance: register at www.pa.cogentid.com; register under Department of Education; fingerprinting available at BU bookstore. Clearances are valid for 1 year for one year: will need to repeat before student teaching

Student Teaching—Placement Card and Eligibility Packet:

- **Student Teaching Placement Card**—intent to student teach:
 - for fall** student teaching, due **by February**
 - for spring** student teaching, due **by September**
- **Student Teaching Eligibility Packet:** Download checklist and forms from the Student Teaching tab under Student Resources on the College of Education homepage.
- **Student Teaching Eligibility Packet is due:** signed by your Education advisor, to the Student Teaching Placement Office:
 - April 1** for fall student teaching
 - October 1** for spring student teaching