# **B.S.ED.: Earth and Space Science**

Effective Summer 2020

As per PRP3604: All students earning a first baccalaureate degree will take at least 30 of their last 45 credits at Bloomsburg University, no more credits are required than the 30 credits. All first baccalaureate students will take at least 50% of credits required for the Major from a PASSHE university. Bloomsburg University may require up to a maximum of 50% of the Major credits. Program exceptions to the policy are to be approved by the Office of the Chancellor.

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 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                                 |
|-------------|---|
|             | . 5,  |
| 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 |

Geomorphology

#### **Electives (6 credits minimum)**

EGGS.265

| LUUJ.20J   | deomor photogy  |
|------------|---|
| 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)

| • •          | •                                       |
|--------------|---|
| EDFOUND.204  | Educational Technology                  |
| EDFOUND.206  | Teachers, Schools & Society             |
| EDFOUND.291  | Principles of Teaching                  |
| EDFOUND.406  | Multicultural Education                 |
| EDFOUND.427  | Classroom Mgt. & Eff. Discipline        |
| EDFOUND.497  | Student Teaching: 1st Experience        |
| EDFOUND.498  | Student Teaching: 2nd Experience        |
| PROFSTUD.301 | Teaching, Learning and Assessment       |
| PROFSTUD.498 | Student Teaching Seminar                |
|              | Practicum                               |
| 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 286) |
| 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 <a href="https://www.bloomu.edu/mycore">www.bloomu.edu/mycore</a>

| Course Number   | Course Title   | GEPs |
|---|--|------|
| ***Goal 1: Communication; minimum 7 GEPs, from minimum of 3 disciplines.                    |  |      |
| EXERSCI.211   | Methods and Materials in Elementary School Phys. Ed.             | 1    |
| EDFOUND.291   | Principles of Teaching   | 2    |
| ENGLISH.101   | Foundations of College Writing I                                 | 3    |
| ENGLISH   | Literature (151, 152, 156, 226, 227, 236, 237, 246, 247, or 286) | 1    |
| *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: Na   | **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 286)           | 2 |
| MUSIC.101/105 or   | Music Listening, Music Literature, Introduction to                         | 3 |
| THEATRE.102/103  | Theatre or Theatre Appreciation  | 3 |
| *Goal 8: Second Language Competency; minimum 2 GEPs.                           |  |   |
| 102  | Any second language 102 level  | 2 |
| *Goal 9: Physical Activity & Health; minimum 2 GEPs.                           |  |   |
| EXERSCI.211  | Methods and Materials in Elementary School Phys. Ed.                       | 2 |
| *Goal 10: Responsible Citizenship; minimum 2 GEPs.                             |  |   |
| EDFOUND.406  | Multicultural Education  | 1 |
| SPECED.101   | Intro to Exceptional Individuals   | 1 |

<sup>\*</sup>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:**

| <b>Admission Packet, for Admission into the Teacher Education Program:</b> due by 48 credits, signed by your Education advisor and submitted to Teacher Education Admission Packets Coordinator. |
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| McCormick 3103A Forms and Information available Online from www.bloomu.edu/teaching-learning   |
| ☐ Eligible test scores: PRAXIS (www.ets.org), PAPA (www.pa.nesinc.com):  |
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| <ul> <li>PRAXIS Core Academic Skills for Educators (Reading score: 156; Writing score: 162;</li> </ul>   |
| Math score: 142)   |
| <ul> <li>PAPA – Pre-service Academic Perf. Assessment (Reading score: 220; Writing score:</li> </ul>   |
| 220; Math score: 193)  |
| <ul> <li>SAT (Old): 500 or higher in Reading, Writing and Math.</li> </ul>   |
| <ul> <li>ACT: Before 9/2015; Composite Score: 23; English/Writing Score: 22; Math Score: 21</li> </ul>   |
| After 9/2015; Reading Score: 22; Writing Score: 21; Math Score: 21   |
| <ul> <li>PRAXIS II: Grades 7-12 field of concentration (www.ets.org)</li> </ul>  |
| ☐ 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/40 hours, non-credit, w/appropriate diversity  |
| in contexts: forms required  |
| ·  |
| ☐ <b>Two recommendations</b> from Teacher Education faculty: standardized form required  |
| ☐ Professional liability insurance (available through PSEA, at <u>www.PSEA.org</u> )   |

|        | <b>Tuberculosis Screening</b> 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 <a href="www.pa.cogentid.com">www.pa.cogentid.com</a> ; 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 |
| Studer | nt 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  |
|        | <b>Student Teaching Eligibility Packet:</b> Download checklist and forms from the Student Teaching tab under Student Resources on the College of Education homepage.   |
| П      | Student Teaching Eligibility Packet is due: signed by your Education advisor, to the Student   |
|        | Teaching Placement Office, 3103A McCormick:  |
|        | April 10 for fall student teaching   |
|        | October 1 for spring student teaching  |