

Secondary Education - Physics

Effective Fall 2013

Students seeking Secondary Education Certification in Physics must declare majors in both Physics (BA) and Secondary Education (Physics) and complete the full Physics (BA) 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 122-125 credits are required for a Bachelor of Science in Education degree with a specialization in Physics. Required courses include:

Required by Physics for Secondary Ed. Major (50 credits)

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| CHEM.115 | Chemistry for the Sciences 1 |
| CHEM.116 | Chemistry for the Sciences 2 |
| COMPSCI.116 | Algorithmic Processes for Computers (or any computer programming course) |
| EGGS.105 | Environmental Issues & Choices |
| MATH.225 | Calculus III |
| MATH.322 | Differential Equations |
| PHYSICS.123 | Contemporary Physics |
| PHYSICS.211 | General Physics I |
| PHYSICS.212 | General Physics II |
| PHYSICS.302 | Mechanics: Dynamics (Offered alternate years) |
| PHYSICS.310 | Modern Atomic Physics |
| PHYSICS.314 | Electricity & Magnetism (Offered alternate years) |
| PHYSICS.315 | Electronics |
| PHYSICS.318 | Optics (Offered alternate years) |
| PHYSICS.400 | Advanced Physics Lab (Offered alternate years) |

Required by Education (40 credits)

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| 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)

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| ENGLISH.101 | Foundations of College Writing I |
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| ENGLISH _____ | Literature (151, 152, 156, 226, 227, 236, 237, 246, 247, or 257) |
| MATH.125 | Calculus I |
| MATH.126 | Calculus II |
| 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 |
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| ***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. | | |
| CHEM.115 | Chemistry for the Sciences 1 | 1 |
| MATH.125 | Calculus I | 2 |
| MATH.126 | Calculus II | 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. | | |
| CHEM.115 | Chemistry for Sciences I | 3 |
| EGGS 105 | Environmental Issues & Choices | 1 |
| MATH 125 | Calculus I | 1 |
| **Goal 6: Social Sciences; minimum 5 GEPs, from minimum of 2 disciplines. | | |
| EDFOUND.206 | Teachers, Schools, and Society | 1 |
| EGGS.105 | Environmental Issues & Choices | 1 |
| PSYCH.101 | General Psychology | 3 |
| **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 | |

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| *Goal 9: Physical Activity & Health; minimum 2 GEPs. | | |
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| *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