## Secondary Education - Mathematics

Effective Fall 2013
Students seeking Secondary Education Certification in Mathematics must declare majors in both Mathematics and Secondary Education (Mathematics) and complete the full Mathematics 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 120-122 credits are required for a Bachelor of Science in Education degree with a specialization in Mathematics. Requirements include:

Required by Math for Secondary Ed. Major ( 46 credits)
INTSTUDY. 100 University Seminar for Math Students
MATH. 125 Calculus I
MATH. 126 Calculus II
MATH. 185 Discrete Math
MATH. 225 Calculus III
MATH. 226 Calculus IV
MATH. $231 \quad$ College Geometry
MATH. $241 \quad$ Probability and Statistics
MATH. $310 \quad$ Abstract Algebra or MATH. 421 Advanced Calculus
MATH. 314 Linear Algebra
MATH. 360 Number Theory
MATH $\qquad$ Any one Math course numbered 308 or higher. MATH 311 is strongly recommended.
MATH $\qquad$ Any one Math course numbered 308 or higher.
MATH. 410 Mathematical Modeling

## Choose one of the following options:

COMPSCI. 121 and COMPSCI. 122
COMPSCI. 121 and any CS course 300 or higher
COMPSCI. 123 and COMPSCI. 223

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. $452 \quad$ Teaching Math in Sec Sch (Spring only)

| Required by PDE (21 credits) |  |
| :--- | :--- |
| ENGLISH. 101 | Foundations of College Writing I |
| ENGLISH | Literature (151, 152, 156, 226, 227, 236, 237, 246, 247, or 257) |
| 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 |

Free Elective if Needed ( 1 credit)

## 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 or CHEM. 115 | Concepts in Biology I or 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. |  |  |
| BIOLOGY. 114 or CHEM. 115 | Concepts in Biology I or Chemistry for the Sciences 1 | 3 |
| MATH. 125 | Calculus I | 1 |
| PHYSICS. 110 | Introduction to Astronomy | 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 Assessments | 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.
$\square$ 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
$\square$ Cumulative GPA of 3.0, with a C or better in all professional education and specialization courses.
$\square 6$ credits of college-level math and 6 credits in English composition and literature
$\square$ Completion of early field experience: five days/30 hours, non-credit, w/ appropriate diversity in contexts: forms required
$\square$ Two recommendations from Teacher Education faculty: standardized form required
$\square$ Professional liability insurance (available through PSEA, at www.PSEA.org)
$\square$ Tuberculosis Screening results, from a test taken within the last two years (likely repeated before student teaching).
$\square$ A resume that follows the sample format: format available from Education Studies
$\square$ 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:

$\square$ Student Teaching Placement Card-intent to student teach:
for fall student teaching, due by February
for spring student teaching, due by September
$\square$ Student Teaching Eligibility Packet: Download checklist and forms from the Student Teaching tab under Student Resources on the College of Education homepage.
$\square$ 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

