## B.S.ED.: Mathematics

Effective Fall 2017
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 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 121 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 (45 credits) |  |
| :--- | :--- |
| MATH. 125 | Calculus I |
| MATH. 126 | Calculus II |
| MATH. 185 | Discrete Math |
| MATH. 225 | Calculus III |
| MATH. 231 | College Geometry |
| MATH. 241 | Probability and Statistics |
| MATH. 314 | Linear Algebra |
| MATH. 360 | Number Theory |
| MATH. 405 | Abstract Algebra or MATH. 421 Advanced Calculus |
| MATH. 410 | Mathematical Modeling |
| MATH_ | Any one Math course numbered 208 or higher, not including MATH 300-307. |
| MATH | Any one Math course numbered 308 or higher. |
| COMPSCI. 121 OBJ Oriented Programming or COMPSCI.115 Python Programming |  |
| COMPSCI. 122 Graphic Interface in Java or COMPSCI. 215 Advanced Python Programming or |  |
| MATH. 320 Comp. Programming for Math or COMPSCI. 300 or higher |  |

Required by Education ( 40 credits)
EDFOUND. 204 Educational Technology
EDFOUND. 206 Teachers, Schools \& Society
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. 498 Student Teaching Seminar
Practicum
PSYCH. $101 \quad$ 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 286) |
| 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. |  |  |
| ASLTERP. 155 | American Sign Language 1 | 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 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 286) | 2 |
| MUSIC.101/105 or THEATRE.102/103 | Music Listening, Music Literature, 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 | 2 |
| *Goal 9: Physical Activity \& Health; minimum 2 GEPs. |  |  |
|  | EXERCISE.114, 226, 230, 241, 250, 270 or DANCE.117, or NURSING. 100 or 217 or HONORS. 217 | 2 |
| *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 48 credits, signed by your Education advisor and submitted to Teacher Education Admission Packets Coordinator. McCormick 3103A Forms and Information available Online from www.bloomu.edu/teaching-learning
$\square$ Eligible test scores: PRAXIS (www.ets.org), PAPA (www.pa.nesinc.com):
0 PRAXIS Core Academic Skills for Educators (Reading score: 156; Writing score: 162; Math score: 142)
o PAPA - Pre-service Academic Perf. Assessment (Reading score: 220; Writing score: 220; Math score: 193)
o SAT (Old): 500 or higher in Reading, Writing and Math.
o ACT: Before 9/2015; Composite Score: 23; English/Writing Score: 22; Math Score: 21 After 9/2015; Reading Score: 22; Writing Score: 21; Math Score: 21
o PRAXIS II: Grades 7-12 field of concentration (www.ets.org)
$\square$ 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/40 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, 3103A McCormick:

April 10 for fall student teaching
October 1 for spring student teaching

