# Bloomsburg University - Department of Educational Studies and Secondary Education Bachelor of Science in Secondary Education and Biology 

| Courses | Cr. | Taken: | Courses | Cr. | Taken: |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Biology Courses Required for Major | 35 |  | General Education - Total Credits: | 38 |  |
| 50.114 Concepts in Biology I | 4 |  | Communication ${ }^{2}$ - 9 Credits |  |  |
| 50.115 Concepts in Biology II | 4 |  | 1) 20.101 Composition 1 | 3 |  |
| 50.242 Microbiology | 4 |  | 2) 50.290 Writing in Biology | 3 |  |
| 50.271 Cell Biology | 4 |  | 3) 25.103 Public Speaking or 25.104 Interpersonal Comm. | 3 |  |
| 50.332 Genetics | 3 |  | Quantitative - 3 Credits |  |  |
| 50.333 Molecular Biology (3) or 52.341 Biochemistry I (4) | 3 |  | 1) 53.141 Introduction to Statistics | 3 |  |
| 50.351 Ecology | 3 |  | Values - 3 Credits |  |  |
| 50.479 Physiology Laboratory | 1 |  | 60.406 Multicultural Education | 3 |  |
| Physiology Elective; choose one of the following 5 courses: | 3 |  | Fitness-2 Credits |  |  |
| 50.472 Animal Cell Phys; 50.474 Vertebrate Systems Phys; |  |  | 1) | 1 |  |
| 50.477 Plant Physiology; 50.478 Microbial Phys; 50.480 Comp Animal P |  |  | 2) | 1 |  |
| Field Course Elective; choose one of the following 6 courses: | 3 |  | Group A (Humanities) ${ }^{\mathbf{2}} \mathbf{- 9}$ additional Credits |  |  |
| 50.200 Dendrology; 50.252 Field Zoology; 50.253 Freshwater Biology; <br> 50.263 Field Botany; 50.457 Entomology; 50.459 Ornithology |  |  | 1) 25.103 Public Speaking or 25.104 Interpersonal Comm. 2) | 3 |  |
| Biology Elective (minimum 3 credits) |  |  | 3) | 3 |  |
| (Consult advisor; 50.340 Evolution strongly recommended) |  |  | 4) Select one Language course from the following: | 3 |  |
| 1) | 3 |  | 10.101 French 1; 11.101 German 1; 12.101 Spanish 1; 13.102 Rus |  |  |
| 2) |  |  | 14.102 Italian II; 18.102 Latin II; 19.102 Chinese II |  |  |
|  |  |  | Group B (Social Sciences) - $\mathbf{1 2}$ Credits |  |  |
| Required Collateral Science Courses | 19 |  | 1) 45.211 Prin. Sociology | 3 |  |
| Select one Earth Science course from the following: | 3 |  | 2) 48.101 General Psychology | 3 |  |
| 51.100 Environmental Geology; 51.120 Physical Geology; |  |  | 3) 48.212 Adolescence | 3 |  |
| 51.130 Historical Geology; 51.255 Meteorology; 51.259 Oceanography |  |  | 4) 70.101 Introduction to Exceptional Individuals | 3 |  |
| 52.115 Chemistry for Sciences $1^{1}$ | 4 |  | Group C (Nat. Sci. \& Math) - 0 Additional Credits |  |  |
| 52.116 Chemistry for Sciences II | 4 |  | Satisfied by major requirements $50.114,50.115,52.115,5$ |  |  |
| 52.230 Fundamentals of Organic Chemistry | 4 |  |  |  |  |
| 54.111 Introductory Physics | 4 |  | TOTAL CREDITS FOR PROGRAM | 121 |  |
| Courses Required for Secondary Education | 29 |  |  |  |  |
| 60.204 Educational Computing \& Technology or 60.350 Instructional Design Systems or 60.351 Virtual Learning Communities | 3 |  | Optional University seminar (09.100) Total credits with Seminar | $\begin{gathered} 1 \\ 122 \end{gathered}$ |  |
| 60.206 Teachers, Schools and Society | 2 |  | Two Approved Diversity Courses (satisfied by major |  |  |
| 60.251 Psychological Foundations of Education | 3 |  | Satisfied by 70.101 and 60.406 required by major |  |  |
| 60.291 Principles of Teaching | 3 |  | Note 1: A placement test is required for 52.115 ; students who ne | equisit |  |
| 60.311 Classroom Measurement \& Assessment | 3 |  | course (52.101 Intro to Chemistry) will need more than 124 credit |  | program. |
| 60.453 Teaching of Science | 3 |  | Note 2: Students must count one Communications course under |  |  |
| 60.497 Teaching in Education: First Experience | 6 |  | as allowed by General Education Policy, to complete program with |  |  |
| 60.498 Teaching in Education: Second Experience | 6 |  | This program shows 25.103 or 25.104 double counted as an exam |  |  |

