## PHYSICS MAJOR, EDUCATION TRACK

## Requirements

The Education track is designed for students interested in becoming high-school physics teachers. The requirements are designed to assist students who wish to pursue the Education minor, the 5 -year integrated degree program, or a M.Ed. elsewhere.

Students on the Education Track must complete the following classes:

| Code | Title | Credits |
| :--- | :--- | ---: |
| EDUC 2201 | Explorations in Education | 3 |
| MATH 2217 | Statistics I | 3 |
| Physics Core Course (Educational Cognate) | 3 |  |
| PHYS 3222 | Modern Optics | 3 |
| PHYS 3385L | Advanced Lab in Physics | 3 |
| Total Credits |  | $\mathbf{1 5}$ |


| Plan of Study |  |  |
| :---: | :---: | :---: |
| Course | Title | Credits |
| First Year |  |  |
| Fall |  |  |
| CHEM 1171 | General Chemistry I | 3 |
| CHEM 1171L | General Chemistry I Lab | 1 |
| MATH 1141 | Calculus I for Chemistry, Engineering, and Physics Majors | 4 |
| PHYS 1171 | General Physics I | 3 |
| PHYS 1171L | General Physics I Lab | 1 |
| Core Curriculum |  | 6 |
|  | Credits | 18 |
| Spring |  |  |
| CHEM 1172 | General Chemistry II | 3 |
| CHEM 1172L | General Chemistry II Lab | 1 |
| MATH 1142 | Calculus II for Chemistry, Engineering, and Physics Majors | 4 |
| PHYS 1172 | General Physics II | 3 |
| PHYS 1172L | General Physics II Lab | 1 |
| Core Curriculum |  | 6 |
|  | Credits | 18 |
| Second Year |  |  |
| Fall |  |  |
| EDUC 2201 | Explorations in Education | 3 |
| MATH 2243 | Calculus III for Chemistry, Engineering, and Physics Majors | 4 |
| PHYS 2285 | Modern Physics | 3 |
| Core Curriculum |  | 6 |
|  | Credits | 16 |
| Spring |  |  |
| MATH 2217 | Statistics I | 3 |


| MATH 2251 | Ordinary Differential Equations | 3 |
| :---: | :---: | :---: |
| PHYS 2226 | Classical Mechanics | 3 |
| PHYS 2285L | Modern Experimental Methods Lab | 2 |
| Core Curriculum |  | 3 |
|  | Credits | 14 |
| Third Year |  |  |
| Fall |  |  |
| PHYS 3241 | Thermal and Statistical Physics | 3 |
| PHYS 3271 | Electricity and Magnetism | 3 |
| Core Curriculum |  | 6 |
| Free Elective |  | 3 |
|  | Credits | 15 |
| Spring |  |  |
| PHYS 3215 | Computational Physics | 3 |
| PHYS 3222 | Modern Optics | 3 |
| PHYS 3385L | Advanced Lab in Physics | 3 |
| Core Curriculum |  | 3 |
| Free Elective |  | 3 |
|  | Credits | 15 |
| Fourth Year |  |  |
| Fall |  |  |
| PHYS 4998 | Theoretical/Experimental Capstone | 2 |
| Physics Core Cour | rse (Education Cognate) | 3 |
| Physics Elective |  | 3 |
| Core Curriculum |  | 3 |
| Free Elective |  | 3 |
|  | Credits | 14 |
| Spring |  |  |
| PHYS 4999 | Theoretical/Experimental Capstone | 2 |
| Free Elective |  | 12 |
|  | Credits | 14 |
|  | Total Credits | 124 |

