|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Physics** | | | | | | | | |
| **Degree:  Bachelor of Science** | | | | | | | | |
| **Major:  Physics** | | | | | | | | |
| **2019-2020** | | | | | | | | |
| Students requiring developmental course work based on low entrance exam scores (ACT, SAT, ASSET, COMPASS) may not be able to complete this program of study in eight (8) semesters.  Students having completed college level courses prior to enrollment will be assisted by their advisor in making appropriate substitutions.   A minimum of 124 credit hours, of which 45 hours must be upper division credit (3000-4000 level), is required for this degree (developmental courses are excluded).   Mandatory state and institutional assessment exams will be required during your degree program. | | | | | | | | |
| **Year 1** | | | |  | **Year 1** | | | |
| **Fall Semester** | | | |  | **Spring Semester** | | | |
| **Course No.** | **Course Name** | **Hrs** | **Gen Ed** |  | **Course No.** | **Course Name** | **Hrs** | **Gen Ed** |
| **PHSC 1003** | First Year Experience Course | **3** |  |  | **CS 2114** | Structured Programming I | **4** |  |
| **ENG 1003** | Composition I | **3** | X |  | **ENG 1013** | Composition II | **3** | X |
| **MATH 2204** | Calculus I | **4** | X |  | **PHYS 2044** | University Physics II | **4** |  |
| **PHYS 2034** | University Physics I | **4** | X |  | **MATH 2214** | Calculus II | **4** |  |
| **elective** | elective | **1** |  |  |  |  |  |  |
| **Total Hours** |  | **15** |  |  | **Total Hours** |  | **15** |  |
| **Year 2** | | | |  | **Year 2** | | | |
| **Fall Semester** | | | |  | **Spring Semester** | | | |
| **Course No.** | **Course Name** | **Hrs** | **Gen Ed** |  | **Course No.** | **Course Name** | **Hrs** | **Gen Ed** |
| **Gen Educ** | General education required course | **3** | X |  | **elective** | elective | **2** |  |
| **Gen Educ** | General education required course | **3** | X |  | **CHEM 1013** | Chemistry I | **3** |  |
| **PHYS 3153** | Mechanics | **3** |  |  | **CHEM 1011** | Chemistry I Lab | **1** |  |
| **PHYS 3303** | Modern Physics | **3** |  |  | **PHYS 3203** | Electromagnetic Theory | **3** |  |
| **MATH 3254** | Calculus III | **4** |  |  | **MATH 4403** | Differential Equations | **3** |  |
|  |  |  |  |  | **Gen Educ** | General education required course | **3** | X |
| **Total Hours** |  | **16** |  |  | **Total Hours** |  | **15** |  |
| **Year 3** | | | |  | **Year 3** | | | |
| **Fall Semester** | | | |  | **Spring Semester** | | | |
| **Course No.** | **Course Name** | **Hrs** | **Gen Ed** |  | **Course No.** | **Course Name** | **Hrs** | **Gen Ed** |
| **BIOL 2013** | Biology of the Cell | **3** | X |  | **PHYS 4353** | Mathematical Physics | **3** |  |
| **BIOL 2011** | Biology of the Cell Lab | **1** | X |  | **PHYS 3253** | Optics | **3** |  |
| **Gen Educ** | General education required course | **3** | X |  | **SCOM 1203** | Oral Communication | **3** | X |
| **CHEM 1023** | Chemistry II | **3** |  |  | **Elective** | elective | **3** |  |
| **CHEM 1021** | Chemistry II Lab | **1** |  |  | **Elective** | elective | **3** |  |
| **PHYS 459V (V=2)** | Research in Physics | **2** |  |  |  |  |  |  |
| **Elective** | elective | **2** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **Total Hours** |  | **15** |  |  | **Total Hours** |  | **15** |  |
|  |  |  |  |  |  |  |  |  |
| **Year 4** | | | |  | **Year 4** | | | |
| **Fall Semester** | | | |  | **Spring Semester** | | | |
| **Course No.** | **Course Name** | **Hrs** | **Gen Ed** |  | **Course No.** | **Course Name** | **Hrs** | **Gen Ed** |
| **Elective** | elective | **2** |  |  | **PHYS 4693** | Research in Physics - Capstone | **3** |  |
| **Elective** | elective | **3** |  |  | **PHYS 3103** | Thermal Physics | **3** |  |
| **Elective** | elective | **3** |  |  | **PHYS 4553** | Quantum Mechanics | **3** |  |
| **Elective** | elective | **3** |  |  | **Elective** | elective | **3** |  |
| **Gen Educ** | General education required course | **3** | X |  | **Elective** | elective | **3** |  |
| **Total Hours** |  | **14** |  |  | **Total Hours** |  | **15** |  |
|  |  |  |  |  |  |  |  |  |
| **Total Jr/Sr Hours** | | **45** |  |  | **Total Degree Hours** | | **120** |  |
|  |  |  |  |  |  |  |  |  |
| **Graduation Requirements:** | | | | | | | | |
| Completion of HIST 2763 or HIST 2773 or POSC 2103  Completion of SCOM 1203 | | | | | | | | |
| English Proficiency (Grade of C or better in ENG 1003 and ENG 1013) | | | | | | | | |
| 2.00 GPA in Major | | | | | | | | |
| 2.00 GPA at ASU | | | | | | | | |
| 2.00 GPA Overall | | | | | | | | |
| Maximum of 31 credit hours via correspondence/extension/examination//PLA/Military/CLEP (30 hrs) or similar means | | | | | | | | |
| 45 JR/SR Hours after completing 30 hours | | | | | | | | |
| 120 Total Credit Hours | | | | | | | | |
| 18 of last 24 hours must be ASU-Jonesboro courses | | | | | | | | |
| Minimum of 57 hours from 4-year institutions | | | | | | | | |
| 32 Resident Hours if completing second degree | | | | | | | | |

[Up one level](http://registrar.astate.edu/Directory.htm) | [Home](http://www.astate.edu/) | [Degrees Offered](http://www.astate.edu/sections/academicsandresearch/degreeprograms/) | [Registrar](http://registrar.astate.edu/index.html) | [Bulletin](http://registrar.astate.edu/bulletin.htm)