Office Hours: 251 Science Building Mon-Fri 8:00am - 4:30pm (304) 696-6738 (304) 696-2494 (FAX)



Department of Physics 251 Science Building Marshall University One John Marshall Drive Huntington, WV 25755

## **The Physics Minor**

Awarded to students who have completed the following courses with at least a C average:

- PHY 201 (or PHY 211) Lecture
  - PHY 202 Lab
- PHY 203 (or PHY 213) Lecture
  - PHY 204 Lab

## Plus any two additional physics at the 300 - 400 level

- The sum of these two additional physics classes must be at least 6 credits. It is highly recommended that students wanting to earn a physics minor with the PHY 201 and PHY 203 background select from the following courses:
- PHY 304 & 405 (Optics lecture and Lab 5 credits)
- PHY 314 & 415 (Electronics lecture and Lab 5 credits)
- PHY 350 Biological Physics (3 credits)
- PHY 360 Medical Physics (3 credits)
- The math prerequisites for 304, 405, 314, 415, 350, & 360 are satisfied by the math requirements for PHY 201 & 203. If you want to minor in physics and have had more advanced math and physics courses such as MTH 229, 230, and/or 231, or PHY 211 & PHY 213 more opportunities for your 6 additional credits exist (see below list).

Course Number	Course Title	Credit Hours
PHY 211	University Physics I (CR PHY 202, MTH 229)	4
PHY 202	General Physics Lab I (CR PHY 211 or PHY 201)	1
PHY 213	University Physics II (CR PHY 204 and MTH 230, PR PHY 211 and MTH 229)	4
PHY 204	General Physics Lab II (CR PHY 213 or PHY 203)	1
PHY 300	Electricity & Magnetism I (PR PHY 213 or PHY 203 and MTH 231)	3
PHY 302	Electricity & Magnetism II (PR PHY 300)	3
PHY 304	Optics (PR PHY 213 or PHY 203, CR PHY 405 or PHY 505)	3
PHY 340	Scientific Computing (MTH 229/229H and CIT 163)	3
PHY 308	Thermal Physics (PR PHY213 or PHY 203 and MTH 231)	3
PHY 320	Intro to Modern Physics (PR PHY 213 or PHY 203, CR PHY 421 and MTH 140 or 230)	3
PHY 330	Mechanics (PR PHY 213 or PHY 203 and MTH 231)	3
PHY 421	Modern Physics Advanced Lab (CR PHY 320)	2
PHY 314	Electronic Physics (PR: PHY 203 or 213 and 204)	3
PHY 405	Optics Advanced Lab (CR PHY 304)	2
PHY 415	Electronics Lab (taken with Physics 314)	2
PHY 421	Modern Physics Advanced Lab (CR PHY 320)	2
PHY 425	Solid State Physics (CR/PR: PHY 320 or 442 or CHM 442)	3
PHY 435	Computational Physics (PR: PHY 330, MTH 231, and PHY 445 or PHY 446)	3
PHY 442	Quantum Mechanics I (PR PHY 330 and MTH 231)	3
PHY 444	Quantum and Solid State Lab (CR/PR: PHY 425, PR: PHY 442)	2
PHY 445	Mathematical Methods I (PR PHY 213 or PHY 203 and MTH 231 or consent)	3
PHY 446	Mathematical Methods II (PR PHY 445)	3