

# PHYSICS MINOR

The Physics minor offers students the opportunity to obtain a thorough introduction to the theoretical and experimental methods extensively used by physical scientists and engineers. In addition to exploring the historical and philosophical development of physics from the Greeks to the modern era, the Physics minor emphasizes the development of practical quantitative problem-solving skills which are valuable for all students regardless of major.

## Minor in Physics Requirements: 18 Credits \*

Code	Title	Credits
PHY 213	General Physics for the Physical Sciences I <sup>1</sup>	3
PHY 205	General Physics Laboratory I <sup>2</sup>	1
PHY 214	General Physics for the Physical Sciences II <sup>3</sup>	3
PHY 206	General Physics Laboratory II <sup>4</sup>	1
PHY 301	Modern Physics	3
Seven credits from the following:		7
PHY 250	Three Dimensional Design	
PHY 303	Electronics Laboratory	
PHY 397	Research Methods	
PHY 471	Classical Mechanics	
PHY 481	Electricity and Magnetism	
PHY 491	Physics Seminar	
PHY 493	Directed Independent Readings <sup>5</sup>	
PHY 495	Directed Independent Study <sup>5</sup>	
PHY 497	Directed Independent Research <sup>5</sup>	
PHY 531	Quantum Mechanics	
PHY 541	Thermodynamics And Statistical Mechanics	
PHY 551	Mathematical Physics	
PHY 553	Computational Physics	
PHY 559	Gravitation and Cosmology	
PHY 561	Nuclear Physics	
PHY 587	Laser Physics	
PHY 595	Special Topics	
<b>Total Credits</b>		<b>18</b>

<sup>1</sup> PHY 221 Advanced General Physics I:Modeling the Physical World or PHY 201 General Physics for the Life Sciences may be substituted for PHY 213 General Physics for the Physical Sciences I

<sup>2</sup> PHY 223 Project Physics Laboratory I may be substituted for the PHY 205 General Physics Laboratory I requirement.

<sup>3</sup> PHY 222 Advanced General Physics II:Modeling the Physical World or PHY 202 General Physics for the Life Sciences II may be substituted for PHY 214 General Physics for the Physical Sciences II

<sup>4</sup> PHY 224 Project Physics Laboratory II may be substituted for the PHY 206 General Physics Laboratory II requirement.

<sup>5</sup> Only a total of two credits from PHY 493 Directed Independent Readings, PHY 495 Directed Independent Study and PHY 497 Directed Independent Research may be applied toward this minor.

\* Kingfisher concentration requirements are 9 credits total consisting of PHY 213 (or PHY 201 or PHY 221), PHY 214 (or PHY 202 or 222), and PHY 301.