

PHYSICS / BACHELOR OF ARTS

Total Credit Hours: 120

Major Credit Hours: 52

This program provides students a solid foundation in physics. It gives students the opportunity to pursue other academic interests. The B.A. program can be excellent preparation for middle and high school physics teachers (see the B.A. Program for Physics Certification (<https://catalog.lewisu.edu/undergraduate/aviation-science-technology/physics/physics-major-high-school-teaching-license-9-12-bachelor-arts/>)), for pre-law students (especially for patent law), for students interested in graduate work in interdisciplinary areas like History or Philosophy of Science (with appropriate coursework in other fields), and for those interested in technical careers in industry.

Requirements

Degree Requirements

A grade of "C-" or better must be earned in a prerequisite course in order to advance to the next course in the sequence. An overall GPA of 2.0 must be earned in the major in order for a student to graduate with a B.A. in Physics.

Physics majors and minors may take a Physics class only two times. If a student has not achieved a minimum of a "C-" after the second attempt, the student may not repeat the class.

Code	Title	Hours
Core Courses		
CHEM 11000	General Chemistry 1	4
CHEM 11100	General Chemistry 1 Lab	1
MATH 20900	Calculus 1	4
MATH 23500	Calculus 2	4
MATH 25000	Calculus 3	4
MATH 30000	Differential Equations	3
PHYS 21000	General Physics 1	3
PHYS 21100	General Physics 1 Lab	1
PHYS 21500	General Physics 2	3
PHYS 21600	General Physics 2 Lab	1
PHYS 21800	General Physics 3	3
PHYS 21900	General Physics 3 Lab	1
PHYS 29600	Research Methods Seminar	1
PHYS 30000	Mechanics	4
PHYS 34100	Modern Physics	3
PHYS 36500	Intermediate Physics Laboratory	3
PHYS 46500	Capstone Project	1
PHYS 49600	Physics Seminar	1
PHYS 31000	Electricity and Magnetism	4
	or PHYS 31100 Analog and Digital Electronics	
Select one of the following Computation courses:		3
CPSC 20000	Introduction to Computer Science	
DATA 23500	Programming for Data Analysis	
CPSC 31500	Scientific Computing	

MATH 36500 Mathematical Modeling

Total Hours

52

Advanced Writing Requirement

The Advanced Writing Requirement of the General Education Curriculum is satisfied by successful completion of PHYS 49600 Physics Seminar.