



B.S. Physics 2020-2021 Catalog

University of Wyoming B.S. Physics	cr	Min Grade	Notes
USP - University Studies Program Requirements			
USP: First Year Seminar	3	C	FYS
USP: Communications I	3	C	C1
USP: Communications II	3	C	C2
USP: Communications III (PHYS 3650 included in major)		C	C3
USP: US & Wyoming Constitutions	3		V
USP: Human Culture	3		H
	3		H
USP: Quantitative MATH 2200 Calculus I	4	C	Q
USP: Physical & Natural World CHEM 1020 General Chemistry I (CHEM 1020 is a recommended course but not required)	4		PN
USP Physical & Natural World course	4		PN
Credit hours subtotal:			30
Major Courses			
PHYS 1210 Engineering Physics I	4		Can substitute PHYS 1310
PHYS 1220 Engineering Physics II	4		Can substitute PHYS 1320
PHYS 2310 Waves and Optics	4		
PHYS 2320 Modern Physics	3		
PHYS 3000 Methods of Physics	4		
PHYS 3640 Modern Electronics & Exper Technique	4		
PHYS 3650 Advanced Lab in Modern Physics and Electronics	4		C3
PHYS 4210 Classical Mechanics I	3		
PHYS 4310 Quantum Mechanics	3		
PHYS 4410 Electricity and Magnetism I	3		
PHYS 4420 Electricity and Magnetism II	3		
PHYS 4510 Thermodynamics and Statistical Mechanics	3		
PHYS 4830 Mathematical and Computational Physics I	3		
PHYS 4840 Mathematical and Computational Physics II	4		
Physics Elective (4000/ 5000 level)	3		
Credit hours subtotal:			52
Major Related Courses			
MATH 2205 Calculus II	4	C	
MATH 2210 Calculus III	4		
MATH 2250 Elementary Linear Algebra	3		
MATH 2310 Applied Differential Equations I	3		
Credit hours subtotal:			14

Elective Courses		
Electives	18	Electives should work to fulfill upper division requirement. Recommended: PHIL 3140, PHYS 4350
A&S Core Diversity in the US	3	ASD
A&S Core Global Awareness	3	ASG
Credit hours subtotal:		24
B.S. Physics credit total:		120

B.S. Physics Program Notes:

- The four year physics programs are the BS in Physics and the BA in Physics. The BS degree program prepares students for graduate school or a career in physics or a related field in the physical sciences. The BA program is primarily geared toward those who are interested in pursuing physics as a second major.
- A minimum of 120 hours is required. A minimum of 42 hours must be upper division (3000 & 4000 level).
- Electives cannot meet any other requirement for the major. Electives should be selected to satisfy the 42 hour upper division requirement.
- Degree Candidates must meet the academic requirements of the university, and must have a minimum GPA of 2.0 in all courses required for the major.
- Grades of C or better are required for all prerequisite courses.
- No more than 60 hours in the major subject may be used toward the 120 credit hours require for graduation.
- For declared physics majors, the prerequisite of MATH 2200 for PHYS 1210 is waived and concurrent enrollment approved. For declared physics majors, the prerequisite of MATH 2205 for PHYS 1220 is waived and concurrent enrollment approved.
- If intending to apply to graduate school, plan to take the physics GRE by fall semester of the senior year.
- Students are strongly encouraged to enroll in Human Culture requirement courses that correspond to the College of A&S Core required US Diversity (ASD) and Global Awareness (ASG). A list of ASD & ASG courses that transfer is available.
- Students may not take a course for S/U credit to satisfy any requirement, unless the course is offered for S/U credit only.

University of Wyoming Requirements

- Students must have a minimum cumulative GPA of 2.0 to graduate.
- Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming.
- Courses must be taken for a single letter grade unless offered only for S/U.
- University Studies Program (USP), Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

College of Arts and Sciences Requirements

- Students must take two "core" courses in addition to UW's USP requirements: Diversity in the United States (ASD) and Global Awareness (ASG).
- No more than 60 hours in the major subject may be used toward the 120 credit hours required for graduation.
- At least 30 hours in the major subject must be completed with a grade of C or better (individual majors may require more).

The University of Wyoming Office of the Registrar provides final approval of degree completion requirements prior to the awarding of any degree.