

PHYSICS (BS) - PREMEDICAL OPTION

Degree Requirements

Code	Title	Hours
General Education Requirements		
https://bulletin.southalabama.edu/programs-az/arts-sciences/#generaleducationtext		53-57
Major Requirements		
<i>Physic (BS) - Premedical</i>		
A. Complete the following:		
PH 107	Contemporary Topics in Physics	1
PH 201	Calculus-Based Physics I	4
PH 202	Calculus-Based Physics II	4
PH 303	Modern Physics	4
PH 348	Electricity and Magnetism I	3
PH 366	Physical Mechanics I	3
PH 385	Experimental Physics - W	3
PH 448	Elementary Quantum Mechanics I	3
PH 463	Thermodynamics-Stat Mechanics	3
B. Select one of the following Physics electives:		
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 349	Electricity and Magnetism II	
PH 354	Electronics	
PH 367	Physical Mechanics II	
PH 390	Special Topics -	
PH 411	Computational Methods in Phys	
PH 449	Elementary Quantum Mechanic II	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
C. Complete the following:		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
BLY 302	Genetics	3
or BMD 350	Human Genetics and Genomics	
CH 441	Biochemistry II	3
or BMD 321	Biochemistry I-Molecular Biol	
CH 441	Biochemistry II	3
or BMD 322	Biochemistry II-Metabolism	
D. Complete the following:		
PSY 120	Introduction to Psychology	3

SY 109 or SY 112	Introductory Sociology Social Problems	3
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E. Complete the following:

MA 125	Calculus I (Prerequisite to upper division Physics courses)	4
MA 126	Calculus II (Prerequisite to upper division Physics courses)	4
MA 227	Calculus III (Prerequisite to upper division Physics courses)	4
MA 238	Differential Equations I (Prerequisite to upper division Physics courses)	3

F. Complete the following:

ST 210	Stat Reason and Application	3
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Minor Requirements

A minor is required for this degree program 18-24

Students will automatically complete a Related Science Minor

A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

Notes:

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment exit exam, at no cost to the student, and an exit interview before graduation as directed by the department.

General Comments:

- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114/PH 115 and PH 201/PH 202 may not both be taken for credit.

Additional Information

Major in Physics (Premedical Option) is designed for a student intending a career in a health professional field such as Medicine. Besides Physics, the Curriculum includes extra courses in Chemistry and recommended courses in Biology, Psychology and the Social Sciences to prepare the student for the MCAT exam. Because of these additional requirements there are relative few elective hours in this program and the overall hours total is 129 hours instead of the nominal 120 hours.

Graduation Plan

(129 Total Hours)

Course	Title	Hours
First Year		
Fall		
CAS 100	First Yr Exp -	2
PH 107	Contemporary Topics in Physics	1
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125	Calculus I	4
EH 101	English Composition I	3
Hours		14

