

# PHYSICS (B.S.) PRE-MED WITH BIOLOGY

Course	Title	Hours
<b>Freshman</b>		
<b>Fall</b>		
CHEM 141 & CHML 141	GENERAL CHEMISTRY I and GENERAL CHEMISTRY LAB	4
ENG 104 or ENG 103 or ENG 111	COMPOSITION I or English Composition I with Co-requisite Support or COMPOSITION & LITERATURE FOR L	3
MATH 241	CALCULUS I WITH LABORATORY	3
PHY 198	PHYSICS STUDENT SEMINAR	0.5
UNIV 100	UNIVERSITY SUCCESS	2
Humanities & Fine Arts Option		3
<b>Hours</b>		<b>15.5</b>
<b>Spring</b>		
CHEM 142 & CHML 142	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LAB	4
ENG 105 or ENG 112	COMPOSITION II or COMPOSITION	3
MATH 242	CALCULUS II WITH LABORATORY	3
PHY 211 & PHYL 211	General Physics I and GENERAL PHYSICS LAB I	4
PHY 199	PHYSICS STUDENT SEMINAR	0.5
Pathway Option		3
<b>Hours</b>		<b>17.5</b>
<b>Sophomore</b>		
<b>Fall</b>		
BIO 111 & BIOL 111	GENERAL BIOLOGY and GENERAL BIOLOGY LAB	4
CHEM 241 & CHML 241	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LAB	4
Pathway Option		3
PHY 212 & PHYL 212	General Physics II and GENERAL PHYSICS LAB II	4
PHY 298	PHYSICS STUDENT SEMINAR	0.5
<b>Hours</b>		<b>15.5</b>
<b>Spring</b>		
BIO 112 & BIOL 112	GENERAL BIOLOGY and GENERAL BIOLOGY LAB	4
CHEM 242 & CHML 242	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LAB	4
PHY 299	PHYSICS STUDENT SEMINAR	0.5
UNIV 200	CIVIC ENGAGEMENT	1
Physics Elective		3
Pathway Option		3
<b>Hours</b>		<b>15.5</b>
<b>Junior</b>		
<b>Fall</b>		
BIO 318 & BIOL 318	INTRODUCTORY GENETICS and INTRODUCTORY GENETICS LAB	4
CHEM 431 & CHML 431	BIOCHEMISTRY I and BIOCHEMISTRY I LAB	4
PHY 311	THEORETICAL MECHANICS I	3
PHY 351	THERMAL PHYSICS	3
PHY 361	MATH MET OF PHYSICS & CHEMISTRY	3
PHY 398	PHYSICS STUDENT SEMINAR	0.5
<b>Hours</b>		<b>17.5</b>
<b>Spring</b>		
BIO 440	CELL BIOLOGY	3
Humanities & Fine Arts Option		3

BIO 470	HUMAN PHYSIOLOGY	3
PHY 330	METHODS OF EXPERIMENTAL PHYSICS	3
PHY 342	OPTICS SPECTRA & LASERS	3
PHY 399	PHYSICS STUDENT SEMINAR	0.5
<b>Hours</b>		<b>15.5</b>
<b>Senior</b>		
<b>Fall</b>		
PHY 411	ELECTROMAGNETIC THEORY I	3
PHY 422	QUANTUM MECHANICS	3
PHY 498	PHYSICS STUDENT SEMINAR	0.5
PSY 201 or Social & Behavioral Science Option		3
Physics Elective		3
<b>Hours</b>		<b>12.5</b>
<b>Spring</b>		
PHY 431	ATOMIC & NUCLEAR PHYSICS	3
PHY 499	PHYSICS STUDENT SEMINAR	0.5
Humanities & Fine Arts Option		3
Social & Behavioral Science Option		3
Statistics Option		3
<b>Hours</b>		<b>12.5</b>
<b>Total Hours</b>		<b>122</b>

## Notes:

- Candidates that transfer 12 or more hours of college credit are exempt from UNIV 100 UNIVERSITY SUCCESS; however, the student must take 2 hours of general electives to replace the UNIV course.
- Online Graduation Clearance (**to be completed during the graduating semester only**).

Code	Title	Hours
<i>Physics Electives</i>		
Students must choose six (6) hours of Physics Electives from the course option list below.		
PHY 241	INTRODUCTN TO ASTRONOMY	4
PHY 312	THEORETICAL MECHANICS II	3
PHY 362	MATH MET OF PHYSICS&CHEMISTRY	3
PHY 412	ELECTROMAGNETIC THEORY II	3
PHY 449	SPECIL TOPICS IN PHYSICS	3
<b>Code Title Hours</b>		
<b>Statistics Options (Choose one 3 credit hour course)</b>		
PSY 211	STATISTICS I	3
MATH 271	ELEMENTARY STATISTICS I	3
BIO 202	ELEMENTARY BIOSTATISTICS	3