

BACHELOR OF SCIENCE IN PHYSICS - PHYSICS OF LIVING SYSTEMS

Code	Title	Credit Hours
Wellness		
APPH 1040	Scientific Foundations of Health or APPH 10 The Science of Physical Activity and Health or APPH 10 Flourishing: Strategies for Well-being and Resilience	2
Core A - Essential Skills		
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
MATH 1552	Integral Calculus	4
Core B - Institutional Options		
CS 1301	Introduction to Computing or CS 1371 Computing for Engineers	3
Core C - Humanities		
Any HUM		6
Core D - Science, Math, & Technology		
PHYS 2211	Introductory Physics I ¹	4
PHYS 2212	Introductory Physics II ⁶	4
MATH 1551	Differential Calculus	2
MATH 1553	Introduction to Linear Algebra or MATH 1554 Linear Algebra or MATH 1555 Linear Algebra with Abstract Vector Spaces	2
Core E - Social Sciences		
Choose one of the following:		3
HIST 2111	The United States to 1877	
HIST 2112	The United States since 1877	
INTA 1200	American Government in Comparative Perspective	
POL 1101	Government of the United States	
PUBP 3000	American Constitutional Issues	
Any SS		9
Core F - Courses Related to Major		
MATH 2551	Multivariable Calculus	4
MATH 2552	Differential Equations	4
CHEM 1310	Principles of General Chemistry for Engineers or CHEM 1201 Chemical Principles I	4
PHYS 2213	Introduction to Modern Physics	3
PHYS 3201	Classical Mechanics I	3
Upper-Level Physics		
PHYS 3122	Electrostatics and Magnetostatics	3
PHYS 3123	Electrodynamics	3
PHYS 3141	Thermodynamics	3
PHYS 3143	Quantum Mechanics I	3
PHYS 4142	Statistical Mechanics	3
PHYS 4143	Quantum Mechanics II	3
PHYS 4321	Advanced Laboratory I	3

PHYS 4601	Senior Seminar I	1
PHYS 4602	Senior Seminar II	1
Physics of Living Systems Concentration		
Select 12 hours from the following courses:		12
PHYS 3250 Principles of the Physics of Living Systems		
PHYS 4251 Biophysics		
PHYS 4252 Biophysics II		
PHYS 4699 Undergraduate Research		
PHYS 4801 Special Topics or PHYS Special Topics or PHYS Special Topics or PHYS Special Topics		
Physics or Technical Electives		
Any PHYS or Technical Electives ^{2,3,4,5}		5
Free Electives		
Free Electives		19
Total Credit Hours		122

Student must have 2.0 in all PHYS classes 3000-level or higher

- ¹ If PHYS 2231 is taken, extra hour goes toward Free Electives
- ² Any PHYS course or CHEM 3411, CHEM 3412, CHEM 3511, EAS 2750, EAS 4300, EAS 4430, MATH 2106, MATH 3215, MATH 3235, MATH 4320, MATH 4347, MATH 4348, MATH 4581, NRE 3301, NRE 4610
- ³ Minimum of one class in PHYS 3211, PHYS 3226, PHYS 4322 unless both PHYS 3250 and PHYS 4252 are taken.
- ⁴ If PHYS 2232 is taken, extra hour goes toward Free Electives
- ⁵ Maximum of 4 hours of PHYS 4699
- ⁶ PHYS 4801, PHYS 4802, PHYS 4803, PHYS 4804, with permission. Maximum of 6 credit hours.