

B.S. in Applied Physics – Concentration in Physics of Living Systems (PoLS)

	First Semester		Second Semester	
1st Year	ENGL 1101 (3) MATH 1551 (2) MATH 1553 (2) CHEM 1310 or 1211K (4) <i>Optional:</i> GT 1000 (1) Core IMPACTS* (3) <i>Sub-Total (14 or 15)</i>	English Composition I Differential Calculus Intro. Linear Algebra Chemistry I Freshman Seminar	ENGL 1102 (3) MATH 1552 (4) PHYS 2231**** (5) CS 1301 or 1371 (3) APPH 1040 or 1050 or 1060 (2) <i>Sub-Total (17)</i>	English Composition II Integral Calculus Honors Physics I Computer Science I Wellness Requirement
2nd Year	MATH 2551 (4) PHYS 2232**** (5) Core IMPACTS* (6) <i>Sub-Total (15)</i>	Multivariable Calculus Honors Physics II	MATH 2552 (4) PHYS 2213 (3) PHYS 3141 (3) PHYS 2xxx** or MATH 2106 (3) Core IMPACTS* (3) <i>Sub-Total (16)</i>	Differential Equations Intro to Modern Physics Thermodynamics
3rd Year	PHYS 3143 (3) PHYS 3122 (3) PHYS 3201 (3) Core IMPACTS* (3) Free Elective (3) <i>Sub-Total (15)</i>	Quantum Mechanics I E&M I (statics) Classical Mechanics I	PHYS 3120 (3) PHYS 3123 (3) PHYS 3208 (3) Core IMPACTS* (3) PoLS Elective***** (3) <i>Sub-Total (15)</i>	Computational Physics E&M II (dynamics) Modern Optics Laboratory
4th Year	PHYS 3209 (3) PHYS 4321 (3) PHYS 4604 (1) PoLS Elective***** (3) Free Electives (6) <i>Sub-Total (16)</i>	Electronics I Advanced Laboratory I Professional Development	PHYS 4605 (1) PoLS Elective***** (6) Physics or Tech. Electives*** (1) Free Electives (6) <i>Sub-Total (14)</i>	Scientific Communication

Notes: Students must have 2.0 GPA in all PHYS classes 3000-level or higher

Pass-fail only allowed for Free Electives

Maximum of nine credit hours in PHYS 2699 or PHYS 4699

* Core IMPACTS:	Humanities electives (6 hours required) Social Sciences electives (9 hours required) History/constitution requirement: one of HIST 2111 (3), HIST 2112 (3), PUBP 3000 (3), INTA 1200 (3), or POL 1101 (3) (Credit not allowed for both INTA 1200 and POL 1101)
** PHYS 2xxx Elective:	Any 3-credit hour PHYS 2xxx course not already taken.
*** Physics or Technical Electives:	Any PHYS course or CHEM 3411, CHEM 3412, CHEM 3511, EAS 2750, EAS 4300, EAS 4430, MATH 2106 (if not already taken), MATH 3215, MATH 3235, MATH 4320, MATH 4347 MATH 4348, MATH 4581, NRE 3301, NRE 4610 Maximum of six credit hours below 3000-level.
**** Intro Physics Sequence:	Can be replaced with PHYS 2211 (4) and PHYS 2212 (4) with approval. If so, two credit hours are added to Physics and Technical Electives.
***** PoLS Electives:	12 credit hours from PHYS 3207, 4250, 4251, 4301, 4699, 4745, 4801, 4802, 4803, 4804 Maximum of 6 hours in PHYS 4801, 4802, 4803 and 4804