



Physics Program — Recommended Honors Sequence
Curriculum Requirements (Honors courses designated by the letter H)*
Catalog Year 2016-17 (Class of 2020) and beyond

FRESHMAN YEAR

Fall Semester			R	L	C	Spring Semester			R	L	C
ENL	101H	Critical Writing & Reading I	3	0	3	ENL	102H	Critical Writing & Reading II	3	0	3
PHY	113H	Classical Physics I ¹	4	2	4	PHY	114H	Classical Physics II ^{1,5}	4	2	4
PHY	109H	Freshman Seminar ²	3	0	3	MTH	152	Calculus II ⁴	4	0	4
MTH	151	Calculus I ⁴	4	0	4			University Studies ³	3	0	3
		University Studies ³	3	0	3			Free Elective	3	0	3
						17					

SOPHOMORE YEAR

Fall Semester			R	L	C	Spring Semester			R	L	C
PHY	115	Intro to Classical Physics ⁶	4	0	3	PHY	213H	Applied Modern Physics	4	0	3
PHY	225	Introductory Experiment. Physics I ⁷	2	3	3	MTH	280	Introduction to Scientific Program.	3	0	3
MTH	211	Analytic Geometry & Calculus III ⁴	4	0	4	PHY	234	Intermed. Mathematical Physics	3	0	3
		University Studies ³	3	0	3	PHY		Physics Elective	0	0	1
						13					

JUNIOR YEAR

Fall Semester			R	L	C	Spring Semester			R	L	C
PHY	313	Mechanics	3	0	3	PHY	341	Quantum Mechanics I	3	0	3
PHY	322	Electronic Devices & Circuits II	2	2	3	PHY	411	Electric & Magnetic Fields I	3	0	3
PHY		Physics Elective	3	0	3	PHY		Physics Elective	3	0	3
		University Studies ³	3	0	3	HON	301	Research Across Disciplines ³	3	0	3
		Science Elective ⁸	3	0	3			Science Elective ⁸	3	0	3
						15					

SENIOR YEAR

Fall Semester			R	L	C	Spring Semester			R	L	C
PHY	342	Quantum Mechanics II	3	0	3	PHY		Physics Elective	3	0	3
PHY	421	Advanced Laboratory	0	6	3	PHY		Physics Elective (300+ level)	3	0	3
PHY		Physics Elective (300+ level)	3	0	3	PHY		Physics Elective (300+/Capstone) ⁹	3	0	3
PHY	490H	Senior Thesis ⁹	3	0	3			Free Elective	3	0	3
		Free Elective	3	0	3			Free Elective	3	0	3
						15					

Total Credits = 120

R = Recitation & Lecture (hours) L = Laboratory (hours)

C = Number of Credits

To graduate with a Bachelor of Science degree in Physics, a minimum of 120 university credits are required. Of these, 45 credits must be approved Physics courses; 12 credits in specified courses in Mathematics; 6 credits in courses in a second Science, in Mathematics, or in Engineering; and 30 credits at 300-level or higher are required. Students are required to consult with their advisor prior to registering for courses. Honors students who earn below a grade of **B** in PHY 111/113, PHY 112/114, or PHY 213 must consult with their advisor prior to the start of the next semester to develop a strategy for academic improvement.

¹PHY 111 and PHY 112 can substitute for PHY 113 and PHY 114, respectively.²PHY 109 satisfies University Studies Cluster 1E.³See University Studies requirements for Clusters 3 and 4. Note: HON 301 meets the Cluster 4C requirement.⁴MTH 153, MTH 154, and MTH 213 can substitute for MTH 151, MTH 152 and MTH 211, respectively.⁵PHY 114 satisfies University Studies Cluster 2A requirement.⁶PHY 115 satisfies University Studies Cluster 2B requirement.⁷PHY 225 satisfies University Studies Cluster 1C (Intermediate Writing) requirement.⁸Science electives must be two courses selected from the *same* department. Courses can be selected from BIO, CHM, CIS, CEN, ECE, MNE, MTH, or Astrophysics (PHY 252 & PHY 363) and must satisfy the major requirement for the respective department. The courses must be approved by the student's faculty advisor.⁹An approved Capstone Study, such as PHY 490 Senior Thesis or certain 400-level courses, satisfies University Studies Clusters 5A+5B.

* Not listed above is PHY 152H, "Stars, Planets, and the Search for Extraterrestrial Life," which does not count for Physics major credit.