

Updated 2/22/2022

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
	<i>General Physics I</i> PHYS 141 (4) (MATH 141 w/min C-; Coreq: MATH 142 or 182. Recom: HS Physics)	<i>General Physics II</i> PHYS 142 (4)¹ (PHYS 141; MATH 142 or 182) [B1 & B3]	<i>General Physics III</i> PHYS 143 (4)¹ (PHYS 141 and MATH 142. Recom: MATH 241)	<i>Modern Physics I</i> PHYS 211 (4) (PHYS 142 & 143; MATH 241. Recom: MATH 242 or 244)	<i>Modern Physics II</i> PHYS 212 (4) (PHYS 211)	<i>Classical Mechanics I</i> PHYS 305 (4) (Jr Standing; GE Areas A & B4 w/min C-; PHYS 141; MATH 241; MATH 242 or MATH 244) [Upper-Div B]	<i>Thermal Physics I</i> PHYS 301 (4) (PHYS 211)	<i>Quantum Mechanics I</i> PHYS 405 (4) (PHYS 212; 302 or 305; 320 or 322; MATH 241; 242 or 244. Recom: MATH 344 or PHYS 321)	<i>Electromagnetic Fields & Waves I</i> PHYS 408 (4) (PHYS 143; MATH 304 or PHYS 320)		
<i>Calculus I</i> MATH 141 (4) * [B4]	<i>Calculus II</i> MATH 142 (4) (MATH 141 w/min C- or Instr. Consent) [GE Elective]	<i>Calculus III</i> MATH 143 (4) (MATH 142 w/min C- or Instr. Consent)	<i>Calculus IV</i> MATH 241 (4) (MATH 143)	<i>Linear Algebra I</i> MATH 206 (4) (MATH 143)	<i>Differential Equations I</i> MATH 242 (4) (MATH 206 and MATH 241)	<i>Methods of Theoretical Physics I</i> PHYS 320 (4) (PHYS 211; MATH 242 or 244)	<i>Methods of Theoretical Physics II</i> PHYS 321 (4) (PHYS 320)	Physics Elective (4) ^{1,2,3,4} *	<i>Senior Project I</i> PHYS 461 (2) (Instructor Consent)	<i>Senior Project II</i> PHYS 462 (2) (Instructor Consent)	Physics Elective (3) ^{1,2,3,4} *
<i>Gen Chem for Physical Science & Engineering I</i> CHEM 124 (4) (MATH 118 or MATH 330)	<i>Gen Chem for Physical Science & Engineering II</i> CHEM 125 (4) (CHEM 124)	GE (4) **	Breadth Elective (1) ^{4,5} *	<i>Electronics and Instrumentation</i> PHYS 206 (4)¹ (PHYS 143 and MATH 143)	<i>Physics on the Computer</i> PHYS 202 (4) (PHYS 143; and MATH 241 or 244)	<i>Quantum Physics Laboratory I</i> PHYS 340 (2)¹ (PHYS 206; 212; & one: PHYS 202, CSC 101, 231, or 234)	<i>Quantum Physics Laboratory II</i> PHYS 341 (2)¹ (PHYS 340)	Breadth Elective (4) ^{1,2,3,4} *	Breadth Elective (2) ^{1,2,3,4} *	Breadth Elective (2) ^{1,2,3,4} *	Physics Elective (4) ^{1,2,3,4} *
<i>Oral Communication</i> COMS 101/102 (4)** [A1] Can be taken anytime during Freshman Year			GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	
<i>Expository Writing</i> ENGL 133/134 (4)** [A2] Can be taken anytime during Freshman Year										GE (4) **	Free Elective (3) ⁷
GE (4) **	<i>Reasoning, Argumentation, & Writing</i> [A3] COMS 126, 145, ENGL 145, 147, ES 145, PHIL 126, or WGQS 145 (4)** (Completion of GE A2 with a C- or better) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years.		Free Elective (1) ⁶	Free Elective (1) ⁶		Graduation Writing Requirement GWR* (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)			Free Elective (3) ⁷	Free Elective (3) ⁷	Free Elective (3) ⁷
	Free Elective (1) ⁶	Free Elective (1) ⁶	Free Elective (1) ⁶								
16	17	17	14	16	16	14	14	16	12	15	13
										TOTAL:	180

Notes:

MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET

* Refer to current catalog for prerequisites.

**One course from each of the following GE areas must be completed: A1, A2, A3, B2, C1, C2, Lower-Division C Elective, Upper-Division C, D1, D2, Upper-Division D, Lower-Division E, F, and GE Elective. Upper-Division C and Upper-Division D should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).

USCP requirement can be satisfied by some (but not all) courses within GE categories: Upper-Division B, C1, Upper-Division C, D1, D2, Upper-Division D, or E.

† Course can be taken previously or concurrently.

¹ Major courses with lab component may not be taken as CR/NC grading: PHYS 142, PHYS 143, PHYS 206, PHYS 323, PHYS 340, PHYS 341, PHYS 342, PHYS 357, PHYS 422, PHYS 423, PHYS 426, PHYS 428, ASTR 444.

² For students anticipating an industrial career PHYS 323, PHYS 357, PHYS 423, PHYS 425, PHYS 426, and PHYS 427 are suggested.

³ For students anticipating graduate work in physics, PHYS 306, PHYS 401, PHYS 406, PHYS 409, and MATH 410 are suggested. PHYS 357 is suggested for students who anticipate becoming experimental physicists.

⁴ Complete a total of 20 units of Technical Electives. Select 11 units from Physics and 9 units from Breadth. See Catalog for more details.

Physics Elective: ASTR 444; PHYS 323, 342, 357, 422, 423, 426, 428. (Excess units will count towards Breadth Elective units.)

Breadth Elective: Any 300-400 level PHYS, ASTR, GEOL, MATH, STAT, DATA or CSC, or PHYS 220, CSC 101, CSC 231, CSC 234, CSC 235 (excludes ASTR 324).***

***Total combined elective credit in PHYS 400, PHYS 404, ASTR 400, ASTR 404, GEOL 400, and GEOL 404 limited to 8 units, with a maximum of 2 units per quarter.

⁵ PHYS 220 recommended in the Fall of sophomore year.

⁶ Supplemental Workshops (SCM 150 & MATH 151, 152, 153) are recommended in your first year. They may require concurrent enrollment in the associated courses, and they count toward free elective credit.

⁷ 12 total units of Free Elective credit required for the major. Electives can be taken at anytime. At least 9 units must be upper-division (300-400 level).

Legend:

Course Title	
Course # (Units)	
(Prerequisite)	
[GE Area]	

	Major (112)
	General Ed. (56)
	Free Electives (12)