

Four-Year Example Schedule for Physics Majors

	Fall			Jan / Spring		
Freshman	MATH 201	4	Calculus I		4	GE / Elective (Jan Term)
	FLEX	4	FLEX Course 1 (Writing)	MATH 202	4	Calculus II
	FLEX	4	FLEX Course 2 (GE)		4	GE/ Elective
	FLEX	4	FLEX Course 3 (GE)		4	GE/ Elective
					4	GE/ Elective
Sophomore	Fall			Jan / Spring		
	PHYS 203	5	Physics 1: Mechanics		4	GE / Elective (Jan Term)
	MATH 311	4	Calculus III	PHYS 204	5	Physics 2: E&M
	CHEM 201	5	Chemistry	MATH 311	4	Differential Equations
		4	GE / Elective		4	GE / Elective
				4	GE / Elective	
Junior	Fall			Jan / Spring		
	PHYS 360	5	Modern Physics (Core Class)		4	GE / Elective (Jan Term)
	PHYS 370	4	Optics (Elective)	PHYS 368	4	Quantum Mechanics (Core Class)
	PHYS 390	1	Physics Seminar	PHYS 365	4	Astrophysics (Elective)
		4	GE / Elective		4	GE / Elective
	4	GE / Elective		4	GE / Elective	
Senior	Fall			Jan / Spring		
	PHYS 342	5	Analytical Mechanics (Core Class)		4	GE / Elective (Jan Term)
	PHYS 380	4	Thermal Physics (Elective)	PHYS 322	4	Elect. & Magnetism (Core Class)
	PHYS 390	1	Physics Seminar	PHYS 499	4	Senior Project (Core Class)
		4	GE / Elective		4	GE / Elective
	4	GE / Elective		4	GE / Elective	

Core Requirements:

- PHYS 203 Physics I: Mechanics with Lab (5)
- PHYS 204 Physics II: Electricity and Magnetism with Lab (5)
- PHYS 322 Electricity and Magnetism (4)
- PHYS 342 Analytical Mechanics (4)
- PHYS 360 Modern Physics with Lab (5)
- PHYS 368 Quantum Mechanics (4)
- PHYS 390 Physics Seminar (2 semesters) (1,1) (taken during Fall semester of Junior & Senior year)
- PHYS 499 Senior Project (4) (taken Senior Year)
- Senior Comprehensive Exam (taken during last semester)

Electives: Three upper-division courses for B.S. (4,4,4), Two upper-division courses for the B.A. (4,4)

Examples: Optics, Astrophysics, Thermal Physics, Solid State Physics, Computational Methods

Supportive Requirements:

- CHEM 201 General Chemistry with Lab (5)
- MATH 201, 201, 311 Calculus I, II, III (4, 4, 4)
- MATH 315 Differential Equations (B.S. degree only) (4)

Course Offerings by Semester

Course Number	Course Title	Fall Even (2016)	Spring Odd (2017)	Fall Odd (2017)	Spring Even (2018)	Fall Even (2018)	Spring Odd (2019)	Fall Odd (2019)	Spring Even (2020)
PHYS 203	Physics I: Mechanics	█		█		█		█	
PHYS 204	Physics II: Electricity and Magnetism		█		█		█		█
PHYS 342	Analytical Mechanics (core)	█				█			
PHYS 322	Electricity and Magnetism (core)		█				█		
PHYS 360	Modern Physics (core)			█				█	
PHYS 368	Quantum Mechanics (core)				█				█
PHYS 3xx	Upper-Division Electives*	█	█	█	█	█	█	█	█
PHYS 390	Physics Seminar	█		█		█		█	
PHYS 499	Senior Project	█	█	█	█	█	█	█	█

*Note: at least one upper-division physics elective will be offered every semester. Which elective will vary from year-to-year.

Supportive Classes (Required)

CHEM 201	General Chemistry I	█		█		█		█	
MATH 201	Calculus I	█	█	█	█	█	█	█	█
MATH 202	Calculus II	█	█	█	█	█	█	█	█
MATH 311	Calculus III	█	█	█	█	█	█	█	█
MATH 315	Differential Equations		█				█		

Recommended Classes (but not required)

MATH 319	Vector Calculus				█				█
MATH 320	Linear Algebra (MATH 305 prereq)	█		█		█		█	
MATH 305	Transitions to Advanced Math		█		█		█		█
CMPS 301	Programming Concepts	█	█	█	█	█	█	█	█

Major Requirements (67 total units):

Physics classes = 46 units

Supportive classes = 21 units

General Education and Electives = 61-84 units

Total = 128-151 units

Students requiring Calculus I take it their first semester of their Freshman year. If a student tests into Calculus II, he or she can take Physics I their first semester and then take Physics II and Calculus II during the Spring semester of their Freshman year. In that case, the student would have three years to complete the upper division classes instead of two.

The four upper-division core classes are on a two-year rotation schedule, which means one core class is offered every semester. At least one upper-division physics elective will be offered each semester, but which elective will vary from year-to-year.

Because physics majors have several "free" electives in their schedule, we recommend that they take additional math classes such as Linear Algebra and Vector Calculus and at least one programming class. Also note that physics majors must satisfy the foreign language requirement as part of their GE.