Physics (B.S.)

The undergraduate degree in physics is a program created to prepare students to enter graduate studies in physics or to pursue alternative careers in education, industry, medicine, etc.

IMPORTANT:

- 3 Directed Readings can be replaced by one computer/electronic 3-credit course.
- PHYS 702 Satisfies Writing Across the Curriculum (WAC) requirement.
- **Seminar or Elective is Computer/Computational Physics course.

Type: B.S.

Freshman Year First Semester

ltem #	Title	Credits
PHYS 013	Phys for Sci & Engr Lec I	3
PHYS 024	Phys for Sci & Engr Lab II	1
MATH 156	Calculus I	4
	ENGW 101/102/104	3
	World Language and Culture Requirement (Options: See Elective 3	
	Group Descriptions)	
FRSM 001	Freshman Seminar	1
	Sub-Total Credits	15

Freshman Year Second Semester

ltem #	Title	Credits
PHYS 014	Phys for Sci & Engr Lec II	3
MATH 157	Calculus II	4
	ENGW 103/105	3
	World Language and Culture Requirement (Options: See Elective 3	
	Group Descriptions)	
	Health Education Requirement (Options: Courses under subject 1	
	code HHPL)	
	Sub-Total Credits	15

Sophomore Year First Semester

ltem #	Title	Credits
MATH 158	Calculus III	4
PHYS 015	Intro to Modern Physics	3
PHYS 025	Phys for Sci & Engr Lab III	1
	World Language and Culture Requirement (Options: See Elective 3	
	Group Descriptions)	
	Humanities Elective	3
	General Elective (Options: To be determined in consultation with 3	
	advisor)	
	Sub-Total Credits	17

Sophomore Year Second Semester

ltem #	Title	Credits
MATH 159	Differential Equations	4
PHYS 175	Thermodynamics	3
	Humanities Elective	3
SLMC 101	Principles of Speech	3
	African Diasporic Cluster	3
	Sub-Total Credits	17

Junior Year First Semester

ltem #	Title	Credits
PHYS 182	Physical Mechanics I	3
PHYS 178	Electricity & Magnetism I	3
	General Elective (Options: To be determined in consultation with 3	
	advisor)	
	Concentration Elective - Physics	3
PHYS 088	Directed Readings for Jr. I	1
	Sub-Total Credits	16

Junior Year Second Semester

ltem #	Title	Credits
	Concentration Elective - Physics	3
PHYS 702	Experimental Physics I	3
	Social Science Elective	3
	Experiential Learning - Physics	1
	Health Education Requirement (Options: Courses under subject 1 code HHPL)	
PHYS 089	Directed Readings for Jrs II	1
	Sub-Total Credits	12

Senior Year First Semester

ltem #	Title	Credits
PHYS 190	Quantum Physics I Concentration Elective - Physics Concentration Elective - Physics Humanities Elective Experiential Learning	3
	Concentration Elective - Physics	3
	Concentration Elective - Physics	3
	Humanities Elective	3
	Experiential Learning	3
	Sub-Total Credits	15

Senior Year Second Semester

Item #	Title	Credits
	Concentration Elective - Physics	3
	General Elective (Options: To be determined in consultation with 3	
	advisor)	
	Experiential Learning	3
	Experiential Learning - Physics	1
	Technical Elective	3
	Sub-Total Credits	13
	Total credits:	120

Category Descriptions

ENGW 101/102/104

Choose between ENGW 101, ENGW 102, OR ENGW 104

World Language and Culture Requirement (Options: See Elective Group Descriptions)

Foreign Language - Amharic*	3
Foreign Language - Arabic*	3
Foreign Language - Chinese*	3
Foreign Language - French*	3
Foreign Language - German	3
Foreign Language - Haitian Creole* (Options: Courses under code HACR)	3
Foreign Language - Spanish*	3
Foreign Language - Swahili*	3
Foreign Language - Wolof*	3

ENGW 103/105

<u>Health Education Requirement (Options: Courses under subject code HHPL)</u>

Humanities Elective

General Elective (Options: To be determined in consultation with advisor)

African Diasporic Cluster

African Studies Elective (Options: Courses under subject code 3 AFST)

Social Science

Concentration Elective - Physics

Social Science Elective

Experiential Learning - Physics

PHYS 196, 197

Experiential Learning

Technical Elective

Please consult with your academic advisor.

Physics Majors: (PHYS, CHEM, BIOL, CSCI, MATH, Engineering)