

**College of Arts and Sciences
Department of Physics
Bachelor of Arts Curriculum
Preprofessional Health Studies Option**

Freshman Year:

<i>Semester 1:</i>	CR	<i>Semester 2:</i>	CR
CHEM 1110/1115 General Chemistry I/Lab	4	PHYS 1610 Engineering Physics I	3
ENGL 1900 Adv. Strat. of Rhetoric & Research	3	PHYS 1620 Engineering Physics I Laboratory	1
MATH 1510 Calculus I	4	MATH 1520 Calculus II	4
PHYS 1110 Introduction to Physics	1	CHEM 1120/1125 General Chemistry II/Lab	4
BIOL 1240/1245 Principles of Biology I/Lab	4	BIOL 1260/1265 Principles of Biology II/Lab	4
Total Credit Hours	16	Total Credit Hours	16

Sophomore Year:

<i>Semester 1:</i>	CR	<i>Semester 2:</i>	CR
PHYS 1630 Engineering Physics II	3	PHYS 2610 Modern Physics	3
PHYS 1640 Engineering Physics II Laboratory	1	PHYS 2620 Modern Physics Laboratory	1
Foreign Language	3	Foreign Language	3
MATH 2530 Calculus III	4	PHYS 3110 Classical Mechanics	3
CSCI 1060 Scientific Programming	3	MATH 2660 Principles of Mathematics	3
BIOL 3020 Biochemistry & Molecular Biology	3	BIOL 3040/3060 Cell Structure & Function/Lab	4
Total Credit Hours	17	Total Credit Hours	17

Junior Year:

<i>Semester 1:</i>	CR	<i>Semester 2:</i>	CR
CHEM 2410 Principles of Organic Chem. I	3	CHEM 2420 Principles of Organic Chem. II	3
CHEM 2415 Principles of Organic Chem. I/Lab	1	CHEM 2425 Principles of Organic Chem. II/Lab	1
PSY 1010 General Psychology	3	PHYS Upper Level Course	3
SOC 1100 Introduction to Sociology	3	MATH 3120 Introduction to Linear Algebra	3
MATH 3550 Differential Equations	3	THEO 1000 Theological Foundation	3
PHIL 1050 Intro. To Philosophy: Self & Reality	3	PHIL 2050 Ethics	3
Total Credit Hours	16	Total Credit Hours	16

Senior Year:

<i>Semester 1:</i>	CR	<i>Semester 2:</i>	CR
PHYS 4610 Quantum Mechanics	3	Cultural Div. - Global Citizenship (*also fine arts)	3
PHYS Upper Level Course	3	PHYS 4890 Comprehensive Examination	0
MATH 4310 Introduction to Complex Variables	3	PHYS 4210 Electricity & Magnetism I	3
Literature 2000 Level	3	THEO 3000 or 4000 Level Course	3
HIST 1110 Origins of the Modern World to 1600	3	HIST 1120 Origins of the Modern World 1600+	3
THEO 2000 Level Course	3	PHIL 3000 or 4000 Level Course	3
		Literature 3000 or 4000 Level (*also US Div.)	3
Total Credit Hours	18	Total Credit Hours	18

Total Credit Hours: 134*

**if certain core requirements satisfy multiple core categories*

Requirements of the B. A. Degree:

- CHEM 1110/1115 General Chemistry I w/Lab _____
- CSCI 1060 Scientific Programming _____
- MATH 1510 Calculus I _____
- MATH 1520 Calculus II _____
- MATH 2530 Calculus III _____
- MATH 3550 Differential Equations _____
- MATH 2660 Principles of Mathematics _____
- MATH 3120 Introduction to Linear Algebra _____
- MATH 4310 Introduction to Complex Variables _____
- PHYS 1110 Introduction to Physics _____
- PHYS 1610 Engineering Physics I _____
- PHYS 1620 Engineering Physics I Lab _____
- PHYS 1630 Engineering Physics II _____
- PHYS 1640 Engineering Physics II Lab _____
- PHYS 2610 Modern Physics _____
- PHYS 2620 Modern Physics Lab _____
- PHYS 3110 Classical Mechanics I _____
- PHYS 4210 Electricity & Magnetism I _____
- PHYS 4610 Quantum Mechanics _____

Senior Inquiry (0-3 Cr) one of the following:

- PHYS 4840 Thesis _____
- PHYS 4880 Research Project _____
- PHYS 4890 Comprehensive Examination _____

Two additional courses selected from the following list:

- PHYS 3310 Optics/Lab _____
- PHYS 3410 Thermodynamics and Statistical Mechanics _____
- PHYS 3510 Analog & Digital Electronics/Lab _____
- PHYS 3120 Classical Mechanics II _____
- PHYS 3610 Modern Physics II _____
- PHYS 4010 Nanoscience and Nanofabrication Frontiers _____
- PHYS 4020 Experimental Physics _____
- PHYS 4220 Electricity & Magnetism II _____
- PHYS 4620 Applications of Quantum Mechanics _____

Additional Requirements for Preprofessional Health Studies:

- BIOL 1240/1245 Principles of Biology I/Lab _____
- BIOL 1260/1265 Principles of Biology II/Lab _____
- BIOL 3020 Biochemistry & Molecular Biology _____
- BIOL 3040/3060 Cell Structure & Function/Lab _____
- CHEM 1120/1125 General Chemistry II/Lab _____
- CHEM 2410/2415 Principles of Organic Chemistry I/Lab _____
- CHEM 2420/2425 Principles of Organic Chemistry II/Lab _____

Core Curriculum Requirements:

- Advanced Strategies of Rhetoric (ENGL 1900 or ENGL 1920) _____
- Foreign Language (2 courses) _____
- Cultural Diversity (2 course – U.S. Divers. & Global Citizen.) _____
- Fine and Performing Arts (1 course) _____
- Literature (2 courses) _____
- History (HIST 1110 & HIST 1120) _____
- Philosophy (3 courses; PHIL 1050, PHIL 2050, Level 3000) _____
- Theology (3 courses: THEO 1000, Level 2000, Level 3000) _____
- Social Science (2 courses) _____