

**BACHELOR OF SCIENCE IN PHYSICS
RECOMMENDED COURSE SEQUENCE - EFFECTIVE Fall 2012**

Year	Fall Semester	Spring Semester	Summer	Credits
Freshman	PHYS 1100 Fun of Physics PHYS 2303 Contemporary Physics MATH 2413 or 2417 Calculus 1 [#] CHEM 1311 General Chemistry 1 CHEM 1111 Chemistry Laboratory 1 RHET 1302 Rhetoric UNIV 1010 Freshman Seminar	PHYS 2325 or PHYS 2421 Mechanics [*] PHYS 2125 Mechanics Laboratory MATH 2414 or 2419 Calculus 2 [#] CHEM 1312 General Chemistry 2 CHEM 1112 Chemistry Lab 2 HUMA 1301 Exploration of the Humanities		Fall 15 Spring 15 - 16 Total Hrs 30 - 31
Sophomore	PHYS 2326 or PHYS 2422 Electromagnetism and Waves [*] PHYS 2126 Electromagnetism Laboratory MATH 2415 or 2451 Multivariable Calculus MATH 2418 Linear Algebra HIST 1301 Themes in American History	PHYS 3411 Theoretical Physics MATH 2420 Ordinary Differential Equations. PHYS 4311 Thermodynamics/Statistical Mechanics PHYS 3325 Electronics PHYS 3125 Electronics Laboratory		Fall 15 - 16 Spring 15 Total Hrs 60 - 62
Junior	PHYS 4301 Quantum Mechanics 1 PHYS 3416 Electricity and Magnetism PHYS 3330 Numerical Methods and Computational Techniques GOVT 2301 Government 1 HIST 1302 Issues in American History	PHYS 4302 Quantum Mechanics 2 PHYS 3312 Classical Mechanics PHYS 4373 Physical Measurements Lab Social Science Elective 3 credit hours Elective – 3 credit hours	REU	Fall 16 Spring 15 Total Hrs 91 - 93
Senior	PHYS 4352 Concepts of Modern Physics PHYS Elective - 3 credit hours GOVT 2302 Government 2 Electives - 3 credit hours Advanced elective (Non-physics) - 3 credit hours	PHYS 4328 Optics PHYS 4390 or PHYS 4399 Advanced Writing (or Thesis) PHYS Elective - 3 credit hours AP 1301 Exploration of the Arts Advanced elective (Non-physics) - 3 credit hours		Fall 15 Spring 15 Total Hrs 121 - 123

Notes:

[#] Either math sequence MATH 2413, 2414, 2415 or MATH 2417, 2419, 2451 required.

[#] MATH 2413 is a prerequisite for and MATH 2414 is a corequisite for PHYS 2325.

[#] MATH 2414 is a prerequisite for PHYS 2326.

^{*} **PHYS 2421 Honors Physics I** is a recommended substitution for PHYS 2325.

^{*} **PHYS 2422 Honors Physics II** is a recommended substitution for PHYS 2326.

51 Hours of upper division courses (course numbers beginning with 3 or greater) are required for all degrees.

Research Experiences for Undergraduates (REUs) during the summer are highly recommended for Physics majors planning to continue their education in graduate school. Formal REU programs exist at many universities, national laboratories, and even overseas, and usually offer a stipend typical of a graduate teaching assistantship. Announcements for REU programs usually appear online in December and application deadlines usually range from late January to early March. Requirements vary, but students are often eligible if they have completed their freshman year.