

BACHELOR OF SCIENCE IN PHYSICS with an Environmental Studies Minor – RECOMMENDED COURSE SEQUENCE - EFFECTIVE Fall 2013

Year	Fall Semester	Spring Semester	Credits
Freshman	PHYS1100: Fun of Physics PHYS2303: Contemporary Physics MATH2413 or 2417: Calculus 1** CHEM1311: General Chemistry 1 CHEM1111: Chemistry Lab 1 RHET1302: Rhetoric UNIV1010: Freshman and NATS 1101 1 st year NSM Seminar	PHYS2325: Mechanics or PHYS2421: Honors Physics I * PHYS2125: Mechanics Laboratory MATH2414 or 2419: Calculus 2 ** CHEM1312: General Chemistry 2 CHEM1112: Chemistry Lab 2 HUMA1301: Exploration of the Humanities NATS4V90: Energy and the Environment	Fall: 15 Spring: 18-19
Sophomore	PHYS2326: Electromagnetism and Waves or PHYS2422: Honors Physics II* PHYS2126: Electromagnetism Lab MATH2415 or 2451: Multivariable Calculus MATH2418: Linear Algebra HIST1301: Themes in American History Environmental Elective (3SCH)	PHYS3411: Theoretical Physics MATH2420: Ordinary Differential Equations. PHYS4311: Thermodynamics/Statistical Mechanics PHYS3327: Electronics with Lab ECON4336: Environmental Economic Theory and Policy ****	Fall: 18-19 Spring: 17
Junior	PHYS4301: Quantum Mechanics 1 PHYS3416: Electricity and Magnetism PHYS3330: Numerical Methods and Computational Techniques GOVT2305: Government 1 HIST1302: Issues in American History	PHYS4302: Quantum Mechanics 2 PHYS3312: Classical Mechanics PHYS4373: Physical Measurements Lab Social Science Elective (3SCH) Environmental Elective (3SCH)	Fall: 16 Spring: 15
Senior	PHYS4352: Concepts of Modern Physics PHYS Elective (3SCH) GOVT2306: Government 2 Upper Level Nonphysics (Environmental) Elective (3SCH) BIS3310: Environmental Project/ Internship	PHYS4328: Optics PHYS4390 or PHYS4399 Advanced Writing (or) Thesis PHYS Elective (3SCH) AP1301: Exploration of the Arts Upper level Nonphysics Elective (3SCH)	Fall: 15 Spring: 15

Notes:

*PHYS 2421 Honors Physics I is a recommended elective substitution for Phys 2325.

*PHYS 2422 Honors Physics II is a recommended elective substitution for Phys 2326.

**The MATH 2413, 2414, 2415 sequence may be electively substituted for MATH 2417 and MATH 2419. If this substitution is made, MATH 2415 is treated as a co-requirement for PHYS 2325, PHYS 2421 or PHYS 2327 in place of MATH 2419.

***PHYS 4390 or PHYS 4399 may be substituted for NATS 4310 to satisfy the advanced writing requirement.

**** ECON4336 has a prerequisite of microeconomics which may be satisfied with AP/CLEP credit or by personally contacting the professor
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 typically 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. If you wish to do an REU during the summer following your junior year, please plan to complete PHYS 4373 Physical Measurements Laboratory during a different semester.

Please review the Environmental Studies Minor course plan for recommended electives. A short list follows:

[BIS 3310](#): Environmental Studies Internship/Independent Study Capstone Project

[BIOL 4324](#): Field Ecology

[ECON 4333](#): Environmental Economics

[ECON 4332](#): Energy & Natural Resources Economics

[ECON 4396](#): World Resources and Development

[GEOS 3310](#): Environmental Geology

[HIST 4378](#): American Environmental History

[ISNS 3368](#): Weather and Climate