

Bachelor of Science in Physics (BIC)

A Suggested Sequence of Required Courses (2018-2019 Catalog)

F r e s h m a n Y e a r

Fall	Spring
_____ 0 Chapel (CHA 1088)	_____ 0 Chapel (CHA 1088)
_____ 2 BIC 1212 Examined Life I	_____ 3 CHE (1301 recommended)
_____ 3 BIC 1314 World Cultures I	_____ 3 BIC 1324 World Cultures II
_____ 4 BIC 1413 Rhetoric I	_____ 3 BIC 1323 Rhetoric II
_____ 3 MTH 1321 (if eligible) Calculus I	_____ 3 MTH 1322 Calculus II
_____ 4 PHY 1420 Physics I (Cal. Based)	_____ 4 PHY 1430 Physics II (Cal. Based)
Total: 16	Total: 16

S o p h o m o r e Y e a r

Fall	Spring
_____ 3 BIC 2330 Social World I	_____ 3 BIC 2340 Social World II
_____ 3 BIC 2334 World Cultures III	_____ 3 BIC 2344 World Cultures IV
_____ 4 CSI 1430 Intr. To Comp Sci. w/ Lab	_____ 3 MTH 2311 Linear Algebra
_____ 3 MTH 2321 Calculus III	_____ 3 MTH 3325 Ordinary Diff. Equations
_____ 3 PHY 2350 Modern Physics	_____ 3 PHY 2360 Math. And Comp. Physics
_____ 1 PHY 2135 Basic Electronics Lab	_____ 1 PHY 2190 Intr to Research
Total: 16	Total: 16

J u n i o r Y e a r

Fall	Spring
_____ 3-4 Foreign Language 1401/12 (see reverse)	_____ 3 BIC 3358 Biblical Heritage/Ethics
_____ 3 MTH 3326 Partial Diff. Equations	_____ 3-4 Foreign Language - 1402/2310 (see reverse)
_____ 3 PHY 3320 Int. Classical Mechanics	_____ 3 PHY 3330 Int. Electricity and Mag.
_____ 3 PHY 3372 Intro. To Quantum Mech. I	_____ 1 PHY 3176 Int. Physics Lab II
_____ 1 PHY 3175 Int. Physics Lab I	_____ 3 PHY 3373 Intro to Quantum Mech II
_____ 3 MTH/Science (see below)	_____ 1 Lifetime Fitness
Total: 16-17	Total: 14-15

S e n i o r Y e a r

Fall	Spring
_____ 1 PHY 4190 Dissemination of Research	_____ 3 PHY 4322 Adv. Topics in Class. Phy.
_____ 3 PHY 4340 Stat. and Thermal Physics	_____ 3 PHY 4372 or 4373 or 4374
_____ 3 PHY 4372 or 4373 or 4374	_____ 3 MTH/Science (see below)
_____ 0 PHY 4001 Exit Exam	_____ 3 Foreign Language 2320
_____ 3 Foreign Language 2310	_____ 3 Elective (if needed)
_____ 1 Lifetime Fitness	
_____ 3 MTH/Science (see below)	
Total: 14	Total: 15

*All students must graduate with a minimum of 124 hours,
36 of which must be at the 3000/4000 level.*

Notes about major requirements:

Note: Any student pursuing a major or secondary major within the Department of Physics (BA or BS, all concentrations) must complete PHY 1420 with a grade of B- or better in order to enroll in PHY 1430. A student who fails to make a B- or better in the course, yet wishes to continue as a major within the Department of Physics must petition to repeat PHY 1420. Any student pursuing a major or secondary major within the Department of Physics (BA or BS, all concentrations) must complete PHY 1430 with a grade of C or better in order to enroll in PHY 2350. A student who fails to make a C or better in the course (where a C- is insufficient) yet wishes to continue in the major within the Department of Physics must petition to repeat PHY 1430.

- MTH/Science requirement - Complete 9 hours from: BIO, CHE, CSI, GEO, MTH or STA. Some of these hours may need to be advanced level courses to fulfill the 3000-4000 level course requirement.
- Prior to taking PHY 4190, students are expected to make substantial progress on a research project. Research typically begins when PHY 2190 is taken in the sophomore year. Students involved in research during their junior year should enroll in PHY 3V95 (Undergraduate Research). In addition, students are strongly encouraged to participate in summer research opportunities.
- Many required courses are offered only one time each year in either the fall semester or the spring semester.
- Check your degree audit often through Bearweb to ensure that you are making timely progress toward your degree.
- For more information, see the undergraduate catalog.