Physics Major (B. A.) - Effective Fall 2013.

Suggested Course Sequence

Freshman Year

First Term

50:640:121 Unified Calculus I (4)
50:750:131 Elements of Physics I (3)
50:750:133 Elements of Physics Laboratory I (1)

Second Term

50:750:140 Introduction to Scientific Computing (3)
50:640:122 Unified Calculus II (4)
50:750:132 Elements of Physics II(3)
50:750:134 Elements of Physics Laboratory II (1)

Sophomore Year

First Term

50:160:115 Chemical Principles I (3)
50:160:125 Chemical Principles Laboratory (1)
50:640:468 Mathematical Methods for Scientists I (3) -OR- **50:640:221** Unified Calculus III (4)
50:750:233 Electric Circuits I (3)
50:750:235 Electric Circuits I Laboratory (1)
50:750:232 Elements of Modern Physics (3)
50:750:238 Modern Physics Laboratory (1)

Second Term

50:160:116 Chemical Principles II (3)
50:160:126 Chemical Principles Laboratory (1)
50:640:469 Mathematical Methods for Scientists II (3) -OR- **50:640:314** Elementary Differential Equations (3)
50:750:362 Biophysics (3)

Junior Year

First Term

50:750:301 Electromagnetic Theory (3)
50:750:307 Electronics (3)
50:750:309 Analytical Mechanics I (3)

Second Term

50:750:302 Electromagnetic Waves and Optics (3)
50:750:420 Method of Materials Characterization (2)

Senior Year

First Term

50:750:491 Research in Physics (3)
50:750:413 Elements of Quantum Mechanics (3)
50:750:351 Thermal Physics (3)

Second Term

50:750:492 Research in Physics (3)
50:750:406 Condensed Matter and Material Physics (3)
50:750:463 Mathematical Physics (3)

NOTE: *General Degree Requirements*, as set by the **Rutgers-Camden Faculty of Arts & Sciences**, must also be met.

The junior and senior year may be interchanged, depending on course offerings.