Biochemistry & Biophysics Concentration

The Concentration in Biochemistry and Biophysics provides a coherent, yet flexible, program of study designed to help students:

- Identify, formulate, and solve complex problems at the interface of biology and the physical sciences using state-of-the-art equipment and techniques.
- Apply knowledge of chemistry, biology, physics and mathematics to develop a coherent understanding of biological processes and solve problems in living organisms or in vitro systems derived from biological specimens.
- Learn to search, read and interpret original scientific literature, both for research and for ongoing learning.
- Recognize enduring trends in interdisciplinary science, while navigating the program of classroom and laboratory training at the interface between the physical and biological sciences. (For biochemistry) Study the importance of biological macromolecules at all levels of the natural sciences, including the cell, the organ, the organism, and larger ecological systems.
- Examine and analyze natural phenomena at the appropriate level(s) (molecular, cellular, organismal and/or ecological), using a variety of methods informed by evolutionary theory.
- Communicate findings (either orally and/or via written expression) effectively and clearly to diverse audiences.

As is the case for all Haverford College concentrations, this focused program of study is integrated into a designated list of majors, as follows:

- Biochemistry Concentration with a Biology or Chemistry major:
- Biophysics Concentration with a Physics, Astrophysics or Biology major.

Note that a complementary option is to combine a Biology major with either a Chemistry or Physics minor. However, students may not obtain both a Chemistry minor and a Biochemistry concentration, or both a Physics minor and a Biophysics concentration.

We strongly encourage students with interests in either the Biochemistry or Biophysics Concentration to meet with a faculty member on the Concentration Coordinating Committee as early as possible in their first year to help coordinate their academic program across the participating departments, and to plan when to take the many required courses. Specific information about course requirements for each concentration can be found online at: http://www.haverford.edu/biochemistry-biophysics/