## CHEMISTRY AND BIOCHEMISTRY

## Overview

The Department of Chemistry and Biochemistry offers a B.S. in chemistry and has faculty with expertise in organic, physical, analytical, and inorganic chemistry and biochemistry. The department is committed to providing its majors with a strong foundation in modern chemical theory and practice that prepares them for further study in graduate or professional schools or for employment in chemical research and industry. To this end, beyond required coursework, we have all our majors participate in ongoing research projects with faculty mentors in which they learn to work independently, develop organizational and scientific writing skills, engage in responsible and safe work habits, and are trained in the use of state-of-the-art instrumentation. Their work frequently leads to publications in peer-reviewed journals and presentations at regional and national meetings of scientific organizations. The department is accredited by the American Chemical Society (ACS) and actively supports a chapter of Sigma Xi.

The Chemistry and Biochemistry Department at FCRH is certified by the American Chemical Chemistry, and an ACS certificate of achievement is awarded to majors contingent upon certain elective choices. These include two additional laboratory courses (CHEM 4231 Biochemistry Lab I and CHEM 4432 Inorganic Chemistry Lab), at least one advanced chemistry elective lecture course, and at least two semesters of research under the supervision of a faculty member that requires a capstone research report. Chemistry majors who are enrolled in one of the preprofessional programs meet the above degree requirements subject to certain course substitutions.

Opportunities for student chemistry research participation with a faculty member are available subject to departmental approval. For first years, CHEM 1990 Introduction to Research is a zero credit P/ F course that provides an introduction to modern research practice. Upperclassmen may take CHEM 3990 Directed Research, which is a one credit P/F course, or CHEM 4990 Independent Research, which is a variable credit ( 1 credit per 5 hrs contact) graded course that requires a capstone paper subject to the ACS guidelines. Students must take at least one semester of CHEM 3990 as a prerequisite to CHEM 4990.

## For more information

Visit the Chemistry and Biochemistry department web page.

## Contribution to the Core

Chemistry and Biochemistry offers courses numbered CHEM 1100-1110, which count as a core physical science course to fulfill part of the natural science core requirement. The two course sequence CHEM 1321 General Chemistry I/CHEM 1331 General Chemistry Lab I-CHEM 1322 General Chemistry II/CHEM 1332 General Chemistry Lab II when taken in sequence will fulfill both natural science course requirements (physical and life science).

## Programs

- Biochemistry Major
- Biochemistry Minor
- Chemistry Major
- Chemistry Minor

