

## Chemistry Department Mission Statement

The Chemistry Department at CSI offers courses for students who plan to major in the physical as well as the life sciences. A major in Biochemistry and Chemistry leading to the Bachelor of Science degree is offered and are approved by the American Chemical Society (ACS). The course offerings are intended to promote scientific reasoning, to develop lab skills and prepare the student for graduate and professional schools as well as employment in industry. Although, we offer advanced degrees (thru the CUNY Graduate Center), undergraduate education is our primary mission.

Consistent with the CSI institutional goals, the Chemistry Department strives for the following goals for our students.

1. Our students will acquire in-depth knowledge of the major areas of chemistry: Analytical, Biochemistry, Inorganic, Organic and Physical. Our students should be able to solve scientific problems.
2. Our students will acquire modern laboratory skills needed to solve issues related to biochemistry and chemistry and will be strongly encouraged to participate in research projects with the faculty and attend departmental seminars allowing undergraduates to come into contact with national and international scholars.
3. Our students will develop quantitative reasoning skills as well as write reports and communicate scientific findings orally. They will apply math concepts to chemical problems and learn to work as part of a problem-solving team.
4. Our students will learn proper study procedures and regulations for safe handling and use of chemicals and apply ethical responsibilities and professional conduct.

### Chemistry Department Assessment

The department's undergraduate curriculum and evaluation for degrees in Chemistry and Biochemistry are approved by the American Chemical Society (ACS) Committee on Professional Training (CPT). This agency reviews our courses, lab facilities, instrumentation, faculty, student undergraduate research papers, etc every five years. The department recently completed its first 5 year periodic review and the Committee on Professional Training agreed to continue approval. The Committee praised the strong curriculum offered to CSI undergraduates and commended the impressive quality of student research reports submitted. Students completing all of the required courses and approved electives receive a certified ACS degree in Chemistry or Biochemistry.

The guidelines and evaluation procedures of the ACS-CPT thus serve as the assessment plan for the undergraduate chemistry programs at CSI; we therefore derive our common learning goals and objectives for our course work from these same ACS guidelines.

## Student/Classroom Assessment

The CSI chemistry faculty is aware of the ACS guidelines for course content and process skills that students need and are covered in our courses. Student assessment is evaluated using the following instruments:

- Quizzes
- Exams
- Lab reports and notebooks
- Use of modern chemical instrumentation
- Seminar presentation/library research
- Teaching evaluation
- Faculty advisor feed back
- Completion of all course work required by the department and the college