Form E-1-A for Boston College Core Curriculum

Department/Program: Chemistry

1) Have formal learning outcomes for the department’s Core courses been developed? What are they? (What specific sets of skills and knowledge does the department expect students completing its Core courses to have acquired?)

The department’s learning outcomes for chemistry core courses are in line with those that are established by the University Core Committee for the natural science core requirements. The Core Requirement Rationale can be found on the natural science core curriculum website via the following link: http://www.bc.edu/sites/core/core_requirements/natural-science.html

2) Where are these learning outcomes published? Be specific. (Where are the department’s expected learning outcomes for its Core courses accessible: on the web, in the catalog, or in your department handouts?)

The learning outcomes can be found on the chemistry department website from a link on the Undergraduate Studies page:

http://www.bc.edu/schools/cas/chemistry/academics/undergrad/chemmajor.html

The link in the menu is labeled “Core Courses in Chemistry”.

3) Other than GPA, what data/evidence is used to determine whether students have achieved the stated outcomes for the Core requirement? (What evidence and analytical approaches do you use to assess which of the student learning outcomes have been achieved more or less well?)

The type of data gathered depends on the course. Methods include:

Chemistry in the Marketplace: Questions that assess student understanding of chemistry and biochemistry principles are distributed to students on the first day of class. The same questions are distributed to students on the last day of class. The results are compared.

Intersection of Science and Painting: Questions related to the goals of the core curriculum are distributed to students at the end of the course. The student answers reflect whether or not these goals have been met.

Intersection of Science and Painting: Students are challenged to formulate questions on the material presented in readings and lecture. To encourage them to ask these questions, they are given class participation credit. Their engagement in classroom conversation and the quality of the questions is an indication of their understanding of content, their development as scientific thinkers and their appreciation for the scientific method.

Chemistry and Society: A survey was given to all students in the course.
4) **Who interprets the evidence? What is the process?** (Who in the department is responsible for interpreting the data and making recommendations for curriculum or assignment changes if appropriate? When does this occur?)

Each faculty member is responsible for analyzing the data gathered for his/her course and interpreting it. The results are discussed with the Chair of the Undergraduate Studies Committee.