Undergraduate Program Assessment

Department of Food Science

Student Learning Objectives

- A strong understanding of the basic sciences including math, chemistry, physics and biology.
- A thorough knowledge of food processing, microbiology and chemistry principles and techniques.
- An appreciation of the need for an integrated, multidisciplinary approach to Food Science.
- Critical thinking skills to solve complex problems in Food Science:
  - The ability to identify and characterize problems in Food Science.
  - The ability to develop rational and systematic approaches to solve problems in Food Science.
  - The skills to identify collect and analyze relevant data.
  - The competence and confidence to generate conclusions implement solutions and evaluate new outcomes.
  - Strong verbal and written communication skills.
  - The ability to work independently and in teams.

Assessment tools

- Indirect: graduating senior survey, course evaluations, graduating seniors group and individual exit interviews; feedback from employers; feedback from Departmental Advisory Board.
- Direct: three faculty members evaluate senior capstone course in product development.

Highlighted recent activities

- The senior capstone course in product development has been further developed into the Departmental IE Gen Ed requirement (Fd Sci 561/563) and this will be the first year (Spring 2013) that this course will be used for program assessment. In this course, students have been asked to integrate three principle disciplines of food science (food chemistry, food microbiology and food processing) during a team based product development exercise to create a unique ice cream flavor that will be manufactured and distributed by at Bart's Homemade (Amherst, MA). During the final presentation, a three faculty team, along with representatives from Bart’s and other outside judges will assess the final product. In addition, the faculty will specifically assess the ability of the student teams to integrate market research, chemistry, food safety, sensory evaluation, food analysis and food processing into a real-life product development project.

- The department is developing a Freshman Food Science course to better prepare students for upper level course offerings and speed integration of freshman into our Undergraduate program.

- The Department will continue to use Graduating Seniors Satisfaction survey and course evaluations, exit interviews and feedback from employers and departmental advisory board to assess the learning of our students.