

Departmental Assessment Plan Worksheet

Department Name ___Chemistry_____

Chair _____James Keller_____

Mission statement: *The mission statement is appropriate.*

- a. The mission statement should be clearly and succinctly stated
- b. The mission statement should connect to the learning goals

The faculty and students in the Chemistry Department form a learning community, dedicated to achieving the following goals:

1. Each student should learn sufficient chemistry to serve her or him well in life after Kenyon.
2. Each student should learn to write well by being required to answer essay exam questions, write term papers, problem set answer sheets, laboratory and research reports, all critically evaluated by faculty.
3. Each student should learn effective oral communication skills by being encouraged to ask questions in all classes and converse frequently with faculty, and required to make extended oral presentations in more advanced classes as well as in the departmental Senior Exercise.
4. Each student should become skilled at formulating and solving problems, both qualitative and quantitative, through the working of problem sets and exam questions and by engagement with laboratory and research projects.
5. Each student should learn to access, evaluate and use information from computerized information sources.
6. Each student should be encouraged to relate chemistry to other areas of inquiry and knowledge by enrolling in courses in other sciences, the fine arts, social sciences and humanities.

These goals are achieved, and our learning community is sustained, by small classes, close interaction among students and faculty and an atmosphere of mutual respect and collegiality.

Learning Goals: *Learning goals are stated in terms that describe outcomes for students.*

Formula = Students can or will X (active verb) Y(noun) See <http://www.kenyon.edu/x45365.xml>

- a. Learning goals should map onto curriculum (This is a useful exercise)
- b. Learning Goals should be measurable

See above

Measures: *Your plan is likely to provide evidence of student learning.*

- a. The evidence should be relevant to your stated learning goals
- b. The plan should specify appropriate direct and indirect measures of student learning
- c. The evidence collection process should be workable and reasonable

The Department Outcome Assessment Plan (DOAP)

I. General Education

STATUS:

1. **Chemistry Readiness Test and Survey** **in place, but modification needed**
identify skill set of incoming first-years and use for advising on course selection. Also use to compare performance to success indicators.
2. **Introductory Chemistry Assessment** **will develop 2006-07**
Standard 30-question set to assess introductory chemistry skills and content
3. **Organic Chemistry Assessment** **will develop 2006-07**
Standard 30-question set to assess introductory chemistry skills and content, and/or

The ACS Organic Chemistry exam.

II. Majors

4. **Core Content Assessment** **will develop 2006-07**
Subject tests with standard 10-questions for Biochemistry, Physical Chemistry, and Instrumental Methods.
5. **Senior Seminar papers** **will develop Fall 2006**
Primary Trait Analysis for written communication and information literacy skills
6. **Senior Exercise talks** **developed Fall 2006**
Primary Trait Analysis for oral communication and process skills
7. **Comprehensive exam?** **still discussing**
We are considering the use of the standard content assessment questions for senior honors and/or senior exercise.

III. Research

8. **CHEM 375/376 final reports/talks/posters** **still discussing**
Primary Trait Analysis for research process skills and oral communication skills
9. **Honors theses and talks** **developed Fall 2006**
Primary Trait Analysis for research process skills and oral communication skills

IV. Program

10. **Enrollment patterns** **in place as of Fall 2004**
Monitor enrollment trends, attrition rates, numbers of majors to better inform curriculum planning and course scheduling
11. **Majors meeting** **in place as of Fall 2004**
Obtain feedback from current and prospective majors on issues important to them.
12. **post-graduate admissions data** **in place as of Fall 2005**

Track GRE and MCAT scores, graduate school and medical school admissions, and student national awards and fellowships to assess how we can best prepare our graduates for life after Kenyon.

13. Alumni survey

began Fall 2004

Regularly conduct a survey of recent alumni on their perception of how their chemistry education prepared them for success in graduate school, medical school or their career choice.

Feedback: *Your plan provides a mechanism for feedback.*

- a. There should be a step in your plan for analyzing evidence, not just collecting it
- b. The evidence and analysis should inform your decisions as a department or program (e.g., curriculum, pedagogy, space and equipment needs, etc.)