

Assessment Reports Electronic Template*

Rosemont College --Undergraduate

Form updated: 3/10/09

I. General information:

Date of Report: May 17, 2010
Semesters or Academic Years Covered: 2009-2010
Division:
Department: Chemistry
Chair or Person Preparing the Report: Sue Varimbi

II. Departmental Profile:

Number of Majors: 7
Number of Faculty: 2 *full time*
 part time

Courses Offered in the Assessment Period:

CHE-0100	General Chemistry and Laboratory
CHE-0105	Organic Chemistry I and Laboratory
CHE-0200	Organic Chemistry II and Laboratory
CHE-0215	Inorganic Chemistry and Laboratory
CHE-0300	Analytical Chemistry and Laboratory
CHE-0400	Biomolecular Structure and Function
CHE-0415	Biochemical Systems and Pathways
CHE-0425	Coordinating Seminar

Factors that Affect Assessment:

1. Small number of majors which makes comparisons difficult
2. Appropriate rubrics for activities
3. Chemistry faculty turnover in the recent past

III. Assessment results

A. Learning Outcomes for Majors

This year we continued to collect data dealing with Goal I, Objectives 1.1 and 1.2 and developed rubrics for assessing Goals 2 and 3.

Goal I: Demonstrate factual and theoretical knowledge of chemistry

Objective 1.1: Describe the structure and composition of matter

Objective 1.2: Apply theoretical and mechanistic principles to the study of changes in chemical systems

B. Assessment of Majors

Goal I, Objective 1.1: On the ETS exam in chemistry 1 major scored 144 which is within 10 points of the National Average for the period of August 2006-2009, 148.1, thus satisfying outcome 1.1.2. Rosemont average for this time period is 142.9. On the comprehensive exam, the score was **90** on questions related to structure and composition of matter. This satisfies outcome 1.1.3.

Goal I, Objective 1.2: On the comprehensive exam, the score was **90** on questions dealing with applications of theoretical and mechanistic principles to the study of changes in chemical systems. This satisfies outcome 1.2.2

C. Changes Based on Assessment

While scores on the comprehensive exam are satisfactory, scores on the ETS Major Field Test are below the national average. This may be in part due to the different format; chemistry exams at Rosemont are in general not multiple-choice whereas the ETS chemistry exam is all multiple choice questions. We have also made changes in the chemistry curriculum which may result in higher scores. Student Exit Questionnaires very often suggest Physical Chemistry in the program. This change is significant since the previous curriculum has been in place for over ten years.

D. Recommendations for Improving the Assessment Process

1. Review course curricula including all syllabi
2. Implement rubrics which are now formulated and will be implemented in Fall 2010.
3. Prepare student for the ETS test by perhaps having practice tests.
4. A stable chemistry faculty to monitor all aspects of the major program.

Goal 2: Demonstrate lab knowledge and skills.

During the upcoming summer our present guidelines for a lab reports will be reformatted into rubrics for assessment.

Goal 3: Demonstrate effective communication and workplace cooperation skills.

Rubrics are now in place for Oral Presentations and for Team Work.

*This template is adapted from *Assessment Clear and Simple, A Practical Guide for Institutions, Departments and General Education* by Barbara E. Walvoord, 2004, John Wiley and Sons, Inc.