

# Assessment Reports Electronic Template\*

## Rosemont College --Undergraduate

Form updated: 3/10/09

### I. General information:

Date of Report: May 11, 2009  
Semesters or Academic Years Covered: 2008-2009  
Division:  
Department: Chemistry  
Chair or Person Preparing the Report: Sue Varimbi

### II. Departmental Profile:

Number of Majors: 9  
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. Lack of appropriate rubrics for several activities
3. Chemistry faculty turnover in the recent past

### III. Assessment results

A. Learning Outcomes for Majors

This year we collected data dealing with Goal I, Objectives 1.1 and 1.2

**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 3majors scored an average of **138.6** which is within 10 points of the National Average for the period of August 2006-June 2008 thus satisfying outcome 1.1.2. On the comprehensive exam, the average score was **87.5** 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 average score was **85.7** 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 Rosemont median of 145.9 over years 2005-2007. 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. Student comments revealed that many of the questions seemed unrelated to material covered in courses. The faculty will review the exams with possible changes to the course curricula.

## D. Recommendations for Improving the Assessment Process

1. Review course curricula including all syllabi
2. Implement rubrics which are now being formulated
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.

\*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.