

## Cover Sheet for Assessment Plans

Directions: Please complete a separate cover sheet for each degree program (e.g., Associates – Doctorate). Feel free to make copies of this sheet if needed. Those graduate programs with an integrated master's and doctoral program may submit one cover sheet. The department head and respective dean are to sign before the plans are submitted to the Provost.

Department / Unit: Chemistry

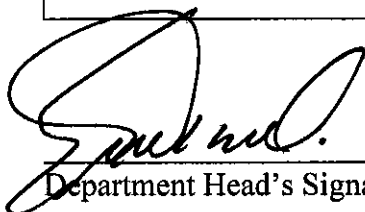
Title and Level of Academic Program: Chemistry, M.S. and Ph.D.

When submitting an Assessment Plan, please check and indicate when the faculty endorsed the plan.

Faculty have met, reviewed, and endorsed the Assessment Plans being submitted for this degree program.

Date of Endorsement:

10/20/04

  
\_\_\_\_\_

Department Head's Signature

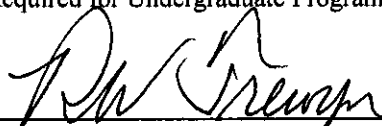
8/22/05

Date

College Dean's Signature  
(Required for Undergraduate Programs)

\_\_\_\_\_

Date

  
\_\_\_\_\_

Dean of the Graduate School's Signature  
(Required for Graduate Degree Programs)

\_\_\_\_\_

Date

8/29/05

**November 1, 2004:** Assessment plans are to be sent to the respective Dean  
**November 29, 2004:** Relevant materials are to be sent from the Deans to the Provost

Department: \_Chemistry

**Evaluative Rubric for Degree Program Assessment Plans**

Degree Program Title: \_MS and PhD Chemistry

Action Decided by the College Assessment Review Committee (CARC):

Date of Decision: \_8-16-2005\_\_\_\_\_

Decision (check one):

Revision Needed (*see first feedback section below*)

Assessment Plans Approved

Feedback on immediate actions that are needed before approval:

Recommendations and feedback for the future (e.g., reporting assessment activities and results):

Some additional details were provided in the revision, but the responses to questions 3 (When will these outcomes be assessed? When and in what format will the results of the assessment be discussed) and 4 (What is the unit's process for using assessment results to improve student learning), especially question 4, were still very vague. More detail would be desirable for documentation of assessment of graduate student learning outcomes.

Last revised 10/4/04

**Chemistry Degree Program  
Assessment of Student Learning Plan  
Kansas State University**

Check the box if your program's student learning outcomes have been modified since November 2003. If so, please email ([apr@ksu.edu](mailto:apr@ksu.edu)) or attach a hard copy to this document.

**A. College, Department, and Date**

College: Arts and Science  
Department: Chemistry  
Date: 10/28/04

**B. Contact Person(s) for the Assessment Plans**

Paul E. Smith, Associate Professor

**C. Degree Program**

M.S./Ph.D. in Chemistry

**D. Assessment of Student Learning Three-Year Plan**

**1. Student Learning Outcome(s)**

1. An ability to employ critical thinking and hypothesis driven methods of scientific inquiry.
2. A familiarity with, and application of, local, state and federal safety and chemical hygiene regulations and practices.

Relationship to K-State Student Learning Outcomes (insert the program SLOs and check all that apply):

Program SLOs	University-wide SLOs ( <u>Graduate Programs</u> )			Program SLO is conceptually different from university SLOs
	Knowledge	Skills	Attitudes and Professional Conduct	
1.	X	X	X	
2.	X		X	
3.				
4.				
5.				

**2. How will the learning outcomes be assessed? What groups will be included in the assessment?**

1. An ability to employ critical thinking and hypothesis driven methods of scientific inquiry.

All M.S. and Ph.D. students will be evaluated using data (in the form of a questionnaire) based on their performance in the preliminary exams (cumulative exams and oral proposal), their graduate student seminars taken for credit, and their final thesis defense. The questionnaire (completed by Faculty and other students attending the presentation or defense) will involve assigning point grades to various aspects of the presentation or thesis. The questions will evaluate the ability of the students to understand, present and answer questions concerning the subject matter. Obviously, we are looking for improved scores as the students progress through the Program.

2. A familiarity with, and application of, local, state and federal safety and chemical hygiene regulations and practices.

All M.S. and Ph.D. students will be evaluated using the scores obtained from our mandatory safety course CHM 601.

**3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?**

1. An ability to employ critical thinking and hypothesis driven methods of scientific inquiry.

Data will be collected between 2005 and 2007. The results will be discussed by the Faculty in 2008.

2. A familiarity with, and application of, local, state and federal safety and chemical hygiene regulations and practices.

Data will be collected between 2005 and 2007. The results will be discussed by the Faculty in 2008.

**4. What is the unit's process for using assessment results to improve student learning?**

This will be determined after the results have been assessed.

RECEIVED  
JUL 19 2005

**Template  
Degree Program  
Assessment of Student Learning Plan  
Kansas State University**

BY:.....

Instructions:

This template is a suggested guideline for creating three-year plans to assess degree-level student learning outcomes. The order and format of the information does *not* need to follow the template exactly, however the four key sets of questions (D1-D4) do need to be addressed in the three-year assessment plan.

If your program has been successfully accredited within the last four years (2000-2001 academic year or after), and if your accreditation report includes sections that specifically address the information requested in questions 2 – 4 below, then you may attach those relevant sections in lieu of providing separate responses to these questions. Please attach only the relevant sections and be sure to indicate which section(s) of the accreditation report addresses each of the questions 2 – 4. Alternatively, you may cut and paste into the template information from your accreditation reports(s) that answers these questions.

Assessment information/data needs to actually be collected within the three-year span (2005, 2006, and 2007) covered by this first round of the assessment plans. Since not all of the accrediting agencies have incorporated assessment of student learning within their approval policies, only certain sections of your reports may be applicable.

If you have any questions, please contact the Assessment and Program Review Office at [apr@ksu.edu](mailto:apr@ksu.edu) or 532-5712.

**Chemistry Degree Program  
Assessment of Student Learning Plan  
Kansas State University**

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