

UNIVERSITY ASSESSMENT COMMITTEE

Feedback to Departments on Assessment Activities Reported in 2006-2007 Annual Reports

DEPARTMENT Chemistry DATE Decemeber 2007

COMMITTEE MEMBER(S) CONDUCTING REVIEW Darla Adams, Jon Jackson

1. STUDENT LEARNING GOALS

- | | | | |
|---------------------------------------|--------------|----------------|---------------------------|
| • Were any goals referenced? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were goals well articulated? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Do goals address student learning? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

In addition to the Departmental goals, please also consider UND's Institutional and General Education goals for student learning (shown in alignment within parentheses). For each goal, use a Y (yes), N (no), or ? (qualified y/n or uncertain) to indicate whether this department has a similar or related goal.

 ? 1 Communication ("communicate effectively, both orally and in writing")

_ G | UG _ 2 Critical/creative thinking ("think critically and creatively" and "be intellectually curious and creative")

_ G | UG _ 3 Informed choices ("make informed choices")

_ G | UG _ 4 Understanding across disciplines ("understand how conclusions are reached in the natural sciences, the social sciences, and the arts and sciences" and "acquire knowledge over a broad spectrum of subject areas")

_ G | UG _ 5 Lifelong learning ("commit themselves to lifelong learning")

 ? 6 Cross-cultural appreciation ("develop some familiarity with cultures other than their own")

_ G | UG _ 7 Service/citizenship ("commit themselves to...the service of others," and "share responsibility both for their communities and for the world")

Comments regarding Departmental goals and alignment of Departmental Goals with Institutional and General Education Goals:

Undergraduate: Although goals are heavily oriented to reflect American Chemical Society (ACS) acknowledged standards, there is generally excellent overlap with institutional goals.

Graduate: See above.

2. ASSESSMENT METHODS

Were any specific assessment methods referenced? YES X NO QUALIFIED Y/N

- | | | | |
|--|-----------------|----------------|----------------------------|
| • If so, were specifically chosen assessment methods appropriately aligned with individual goals? | YES <u> </u> | NO <u> </u> | QUALIFIED Y/N <u>_ X _</u> |
| • Were both direct and indirect assessment methods used as components of a "multiple measures" approach? | YES <u> </u> | NO <u> </u> | QUALIFIED Y/N <u>_ X _</u> |

Comments:

Undergraduate:

Direct measures via ACS standardized tests — this provides both intramural accountability, as well as a benchmark with which to judge progress of students through the curriculum and compare these students with their counterparts at other ACS institutions.

Graduate:

More indirect measures utilized here, productivity and qualitative assessments made by advisory committees.

3. ASSESSMENT RESULTS

Were any assessment results reported?	YES__UG__	NO__G__	QUALIFIED Y/N ____
• If so, were the results clear in terms of how they specifically affirm achievement of goals?	YES____	NO____	QUALIFIED Y/N __X__
• If so, were the results clear in terms of how they indicate need for improvement?	YES____	NO____	QUALIFIED Y/N __X__
• Were the results tied to goals for student learning?	YES__UG__	NO__G__	QUALIFIED Y/N ____

In addition to departmental goals, some assessment results may be applicable to Institutional and General Education goals. A list of the latter goals is included below. Please indicate with a Y, N, or ? whether results reported are applicable to Institutional or General Education goal achievement. For items with a Y or a ?, please describe findings in the appropriate section below.

__ UG_	1	Communication (“communicate effectively, both orally and in writing”)
__ UG_	2	Critical/creative thinking (“think critically and creatively” and “be intellectually curious and creative”)
__ ?	3	Informed choices (“make informed choices”)
__ UG_	4	Understanding across disciplines (“understand how conclusions are reached in the natural sciences, the social sciences, and the arts and sciences” and “acquire knowledge over a broad spectrum of subject areas”)
__ UG_	5	Lifelong learning (“commit themselves to lifelong learning”)
__ ?	6	Cross-cultural appreciation (“develop some familiarity with cultures other than their own”)
__ UG_	7	Service/citizenship (“commit themselves to...the service of others,” and “share responsibility both for their communities and for the world”)

Comments regarding results and the application of results to Departmental, Institutional and General Education Goals:

Undergraduate:

Performance of students (majors and non-majors alike) on standardized national exams is basis for the department’s (justifiable) general feeling of contentment with respect to instructional quality and student achievement.

Graduate: Problem area identified and discussed – no results reported.

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?	YES____	NO____	QUALIFIED Y/N __X__
• If so, do curricular or other improvements/ changes arising from assessment results directly address goals for student learning?	YES____	NO____	QUALIFIED Y/N __X__

Comments:

Undergraduate:

Where student performance on ACS exams lags behind other subject areas, the department is keen to resolve perceived area of laboratory/instructional need

Graduate:

Evaluating exceptional graduate students in the department has been identified as a potential concern — moving the exceptionally good ones through more quickly, better helping address the needs/ of students with exceptional shortcomings remains a challenge.

SUMMARY

Strengths

- ☒ X A specific plan for assessment is in place.
- ☒ X Student learning goals are well-articulated.
- ☒ X Assessment methods are clearly described.
- ☒ X Assessment methods are appropriately selected.
- ☒ X Assessment methods are well-implemented.
- ☒ X Direct and indirect methods are implemented.
- ☐ ?_ Results are reported.
- ☐ ?_ Results are tied to closing the loop.
(Decision-making is tied to evidence.)

Areas for Improvement

- ☐ No specific plan for assessment is in place.
- ☐ Student learning goals are not well-articulated.
- ☐ Assessment methods are not clearly described.
- ☐ Assessment methods are not appropriately selected.
- ☐ Assessment methods are not well-implemented.
- ☐ A single type of assessment methods predominates.
- ☒ G No results are reported.
- ☐ Results are not clearly tied to closing the loop.
(Decision-making is not directly tied to evidence.)

OVERALL SUMMARY AND RECOMMENDATIONS:

Chemistry was re-accredited by the American Chemical Society in 2006 — overall student achievement is measured by national standardized exams and shows that chemistry instruction and student learning are overall very good. If we make the claim that graduate student achievement can indirectly be linked to faculty productivity/achievement, the department reports good progress in this area — although specific results relative to grad program would be helpful.

Reviewer(s):	Name	<u>Jon Jackson; Darla Adams</u>
	Department	<u>Anatomy & Cell Biology; Nursing</u>
	Phone Number	<u>777-4911; 777-4509</u>
	e-mail	<u>jackson@medicine.nodak.edu; darlaadams@mail.und.edu</u>

Section 1: _Y Section 2: __Y__ Section 3: ___?___ Section 4: ___?___

Coding Key:

- Y = yes, this is done appropriately and well
- N = no, this is not done at all, or it is not done in relationship to student learning
- NA = no information available
- ? = action or progress is apparent; however, evidence is lacking that this is completely and appropriately done