

## UNIVERSITY ASSESSMENT COMMITTEE

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

DEPARTMENT Biology 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.

   **G | UG**    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")

   **?**    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")

   **?**    5 Lifelong learning ("commit themselves to lifelong learning")

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

   **?**    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:** Revisions of the departmental goals for students graduating with a bachelor's degree in Biology have resulted in an impressively coherent alignment of Departmental goals with Institutional & Gen Ed. goals for student learning.

**Graduate:** Graduate program goals appropriate for MS, PhD candidates, and are addressed in professional terms, such as dealing with professionalism and/or ethics (for e.g., #7 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>X</u> | NO <u>  </u> | QUALIFIED Y/N <u>  </u> |
| • Were both direct and indirect assessment methods used as components of a "multiple measures" approach? | YES <u>X</u> | NO <u>  </u> | QUALIFIED Y/N <u>  </u> |

#### *Comments:*

##### **Undergraduate:**

A good deal of effort is made through the use of a direct measures of student learning via a major's pre-test, which is also taken at the conclusion of the student's program — areas where little improvement are noted serve as the basis for adjusting curricula, or for setting new requirements for the major, so as to better achieve the department's learning goals.

##### **Graduate:**

A new assessment plan is in place and will be implemented in the 08 academic year, with preliminary results available in the 2008 annual report.

### 3. ASSESSMENT RESULTS

Were any assessment results reported? YES X NO \_\_\_\_ 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 X NO \_\_\_\_ 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")  
? 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:**

It is clear that the results received from the initial round of assessment have provoked a great deal of deep-thinking and attention to course activities that promote critical thinking and epistemological understanding on the part of their upper level students. The results of departmental discussions on what to do about this information will be telling as to how these goals get prioritized.

##### **Graduate:**

As mentioned above, the department recently (Spring 2007) approved a new assessment methodology for their graduate program — it is being implemented during the current (08) academic year — the plan describes the idea that preliminary results from the assessment of 08 academic year data will be available in the 07-08 annual report.

### 4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported? YES X NO \_\_\_\_ QUALIFIED Y/N \_\_\_\_

- If so, do curricular or other improvements/changes arising from assessment results directly address goals for student learning? YES X NO \_\_\_\_ QUALIFIED Y/N \_\_\_\_

#### *Comments:*

##### **Undergraduate:**

Admirable, dexterous work in adapting curricula to address demonstrated needs in student understanding across the discipline of biological science.

##### **Graduate:**

Given the efforts undertaken and the assessment methods chosen, it seems appropriate expect that the results of graduate program assessment will also lead to effective change in programming/curricula to respond to perceived needs based on the results of student learning assessment through direct and indirect measures. Of particular interest will be the results of the annual review of student progress, which on the graduate level, seems a large and detailed undertaking.

## SUMMARY

### *Strengths*

- ☒ A specific plan for assessment is in place.
- ☒ Student learning goals are well-articulated.
- ☒ Assessment methods are clearly described.
- ☒ Assessment methods are appropriately selected.
- ☒ Assessment methods are well-implemented.
- ☒ 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.
- ☐ 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:

The Faculty of the Department of Biology have made great strides in assessing their program and changing the program to reflect addressing departmental and institutional learning outcomes. The adaptations they have made to their undergraduate program as a result of the initial round of assessment data should provide new data for the next annual report cycle — such data should inform the entire campus as to the effectiveness of program assessment in bringing value to the degrees we offer in various disciplines. Our committee's actions should be to support these efforts and to help them publicize them across campus, as well as in appropriate venues beyond our own walls.

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Section 1: Y      Section 2: Y      Section 3: Y      Section 4: Y

### 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