Core Curriculum Assessment Annual Report

General Information

1. Name / Number of Course / Sequence:
   PHYS 1000: Foundations of Physics

2. SLO(s) being assessed:
   Student will understand and appreciate methods and issues of science and technology

3. Department:
   Physics

4. Department Representative:
   Dr. Chin-Che Tin

5. AGSC Content Alignment:
   AREA III: Science and Math

Assessment Information

6. Assessment Method: [Explain how assessment for the measures associated with this SLO – not grading for the course as a whole was conducted.]

   The department has identified the following assessment areas: homework problems, laboratory experiences, classroom interactive sessions and test/exam questions. Faculty may elect to use any or all of these assessment areas to evaluate the effectiveness of their teaching. The faculty teaching PHYS 1000 used final examination as the primary assessment tool. The questions satisfying the five measures for SLO-10 were included in the final examination. Up to five problems that relate well to each of these five measures associated with SLO 10 (i.e. a maximum of 25 problems) were included in the final examination and the % of correct responses were collected.
7. **Findings:** [What assessment data did each assessment method produce?]

The average score of the class for Fall 2010 was 61%.

The average score of the class for Spring 2010 was 59%.

8. **How did you or will you use the findings for improvement:** [What questions / issues/ concerns did your data raise for the faculty teaching the course? What discussion did the faculty have about the findings? What future actions to improve student attainment of this outcome will the department / program take as a result of this analysis?]

Several questions received scores of less than 50% which means that majority of the students did not grasp the concepts covered by those questions well. These scores are lower than those using other assessment methods, such as assignments, because the questions were actual exam questions given under strict, formal testing environment. The instructor felt that more frequent reviews would be helpful in improving student performance. Student motivation is also an important factor.

Although the scores are lower than those of other assessment methods, these scores are consistent with test and exam scores in other introductory courses in the Physics Department.

9. **Additional comments:** [What else would you like the Committee to know about your assessment of this course or plans for the future?]

A different instructor is currently teaching this course. This instructor will be using a different assessment method.

10. **Core Curriculum General Education Committee Comments:**

    more clear and systematic approach to assessing student learning seems called for here. There is no mention of using the findings to revise pedagogical methods-- just someone else may teach the course and use a different assessment method. No connection is drawn between the scores (which are very low) and the SLO measures. The plan to use a different assessment method is problematic because there is no indication of "why" or details about what will be done.