DeAnza College **SLO ARCHIVE**

Student Learning Outcomes for PHYS 50

Preparatory Physics

Team Members:

Team Leader:
Eduardo Luna () in PHYS

Other members:

1. David Newton (x8668) PHYS

Additional team members/notes about team:

Ronald Francis, David Newton,

Additional Notes:

Outcomes:

Outcome 1 Phase I: Statement

Critically examine new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of mechanics

Outcome 1 Phase II: Assessment Strategy Used:

Assessment Quarter: Spring 2011
Assessors: Eduardo Luna
Assessment Tools: *No tools assigned*.
Sections being assessed: 61

Outcome 1 Phase III: Reflect & Enhance

Number of people involved in Phase III: 1

Changes:

Methods:
As assessment tools we used selective new un-encountered problems on the lecture final. Assessment was then based on the scores obtained on these selective problems on an

individual and overall class basis. The following problem on the lecture final was used as an assessment:A car goes around a curve on a road that is banked at an angle of 40 degrees. Even though the road is slick, the car will stay on the road without friction between the tires and the road when its speed is 26 m/s. Calculate the radius of the curve.

Findings and Conclusions:
a) About 50% of the class was able to solve the problem correctly, 20% partially got it correct, and 30% did not know how to solve it.b) 30% of the class needed to improve their analytical and problem solving skills.c)70% success (partial) was acceptable for the class, but not outstanding.d)Areas for improvement would be to further help students develop their analytical and problem solving skills using the principles/laws/theories of classical mechanics.e) Based on previous performances for such a class, the results are reasonably acceptable.

Enhancement (Planned Actions)
Part I:
The assessment results suggested areas of student learning improvement. In order to improve student learning and success, the instructor should address the SLOs and the assessment results in an effective pedagogical approach.

Part II:
Supplementing our teaching methods with computer-based technology and traditional physics demonstrations would be ideal to help students understand physics principles from a conceptual and practical viewpoint.

SLO Created: 02/25/2010 Last Modified: 09/05/2011