

Physics and Engineering PLO 2: Application

Program learning outcome 2: Students will apply physical principles, mathematical reasoning, and computational techniques to solve real-world problems

Measure: Embedded Assignment given in upper division mastery class on a rotating basis. Juried as a department.

Criteria for success : At least 65% of students will achieve an average score of 3 or higher on criteria described in application rubric.

Observations: Data was collected in the spring in PHY401 (Thermodynamics) as a part of an exam. This multi-part question on PN-junctions in semiconductors was reviewed by each of the department members. The rubric used for evaluation is under development, and has not yet been applied to this data. This should be completed by Fall of 2012 at the latest.

Longitudinal Data: This is our first year of gathering data using this measure.

Additional comments: In addition to this direct measure we may want to consider an additional indirect measure. We may want to consider asking questions regarding this to our alumni (though it may be difficult to isolate the impact of PLNU versus graduate studies.)