Science Division
Course Outcomes Assessment
SP 14

Course Title: PHY 112 – Applied Physics
Program Team: Paul Jozik

Expected Learning Outcomes:

1. Use mathematical models as a medium for quantitative reasoning and describing physical reality.
2. Use graphical models to analyze laboratory data.
3. Apply the classical conservation laws as a basis of deriving and understanding physics principles.
4. Describe physics concepts verbally, graphically, and mathematically
5. Solve problems individually and collaboratively
6. Use software to analyze physics experiments
7. Access, process, analyze and synthesize scientific information.

Assessment (How do or will students demonstrate achievement of each outcome?)

four examinations* and a comprehensive final

*Each of the four examinations included points accrued for successful completion of laboratory and problem-solving activities.

Validation (What methods have you used or will you use to validate your assessment?)

Students passing with a 75% or better

Results (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?

Follow-up (How have you used or how will you use the data to improve student learning?)

Budget Justification (What resources are necessary to improve student learning?)

No additional resources needed.

Course: PHY 112 **SLOA Data** **Faculty Team: P. Jozik**

	SP 2012	SP 2013	SP 2014	SP 2015		
# Active students	17	17	14			
%W	6%	0	0			
*% walk-away Fs No final exam/grade = F	6%	0	0			
% Success (A,B,C)	76%	88%	93%			
Mean Common Lab Practical Score						
Common Comprehensive Final Exam Score Median Score	80 84	83 85	82 85			
Mean course grade	2.63	2.65	2.86			
Item Analysis **Weakest Content Areas**						

*% Walk-away Fs = Did not take the final exam and received a grade of F.

Content Areas