Science Division Course Outcomes Assessment FA 13

Course Title: PHY 202 – General Physics II, 4 credits

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 202 SLOA Data Faculty Team: P. Jozik

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	SP	SP	SP	SP	SP	SP	
	2010	2011	2012	2013	2014	2015	
# Active students	14	11	17	12	12		
%W	14%	9%	6%	8%	0		
*% walk-away Fs No final exam/grade = F	0	9%	0	0	0		
% Success (A,B,C)	69%	91%	88%	83%	100%		
Mean Common Lab Practical Score	81%	81%	85%	80%	80%		
Median Score	84%	82%	90%	82%	83%		
Common Comprehensive Final Exam Score	70%	81%	84%	80%	84%		
Median Score	74%	86%	90%	80%	88%		
Mean course grade	2.38	2.64	3.19	2.82	3.17		
Item Analysis Weakest Content Areas	nuclear						

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

Content Areas