

Science Division
Course Outcomes Assessment
SP 14

Course Title: PHY 204 – Principles of 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 204
Jozik**

SLOA Data

Faculty Team: P.

	SP 2010	SP 2011	SP 2012	SP 2013	SP 2014	SP 2015		
# Active students	7	10	14	20	26			
% W	0	10%	7%	0	4%			
*% walk-away Fs <small>No final exam/grade = F</small>	0	0	0	15%	4%			
% Success (A,B,C)	100	70	86	60%	88%			
Mean Common Lab Practical Score	89%	84%	85%	85%	87%			
Median Score	85%	86%	82%	87%	89%			
Common Comprehensive Final Exam Score	70%	70%	78%	73%	74%			
Median Score	74%	74%	80%	77%	72%			
Mean course grade	3.14	2.50	2.77	2.15	2.68			
Item Analysis Weakest Content Areas								

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

Content Areas