

Science Division Course Outcomes Assessment SP 17
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Course Title: PHY 205 – Principles of Physics 3, 4 credits

Program Team: Paul Jozik

Expected Learning Outcomes:

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

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

two lecture exams and assignments

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?)

A large proportion of the students are achieving success in this course. A common relationship is that students who do not complete assigned problems make up a disproportionately large portion of the students who begin the course and either do not complete the course or do not achieve success by the end of the semester.

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

I look for weaknesses in the students' performance on the individual problems on each exam and in their assignments. Adjustments are where deemed appropriate.

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

No additional resources needed.

Course: PHY 205**SLOA Data****Faculty Team: P. Jozik**

	SP 2010	SP 2011	SP 2012	FA 2012	SP 2013	SP 2014	SP 2015	SP 2016	FA 2016	SP 2017
# Active students	8	9	10	1	6	17	9	11	1	11
% W	12%	33%	10%	0	0	5%	0	6%	0	0
*% walk-away Fs No final exam/grade = F	0	0	0	0	0	0	0	0	0	0
% Success (A,B,C)	83%	67%	90%	100%	83%	76%	78%	100%	100%	91%
Mean Common Lab Exam Score	**	**	**	**	**	**	**	**	**	**
Common Final Exam Score	Median 71%	84%	76%	82%	80%	69%	75%	85%	78%	77%
Median Score		88%	74%	82%	84%	69%	77%	86%	78%	78%
Mean course grade	2.83	3.17	2.78	3.00	2.50	2.38	2.44	3.18	3.00	2.64
Weakest Content Areas										

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

** PHY-205 is not a laboratory course.