

Course Report Questions

Action Plan Report by Expected Action

Pierce College

Date: 10-10-2019

Summary

Term	Total Action	Completed Action	Incomplete Action
Spring 2019	1218	392	826

Detail by Expected Action

Expected Action: Since the previous course report, discuss any changes to course SLOs, SLO assessment methods, and/or the course (i.e., curriculum, pedagogy, etc.), as well as the impact of those changes.

Action Type: 1. Course Changes Since the Last Course Reports

Course Level Responses			
Course	Respondent	Action Taken	Date
School of Math and Sciences >> Physics and Planetary Sciences			
[PHYSICS006] GENERAL PHYSICS I Spring 2019	Wessling, Margaret	<p>Several years ago, we made the decision to eliminate one of our SLOs, which related to lab performance. This change was in response to the shift in focus of SLO assessment to evaluating individual students as opposed to the average performance of the class as a whole. Students normally work in groups of 3-4 for labs in this course, and the group's work is graded collectively; we thus concluded that the lab SLO would not give useful data on the performance of individual students. (The eliminated SLO continued to appear in eLumen for a number of semesters after we made this change, leading instructors to report "NA" for their entire class.)</p> <p>Professor Adrian Soldatenko has taken the lead on revising the Physics 6/7 sequence. Much progress has been made in incorporating techniques from PER and other education research. Active learning has become more central to the design of Physics 6/7, in particular through the use of tutorials and "clicker" questions. Prof. Soldatenko has changed textbooks to a more readable text that highlights the importance of experiment and observations in the understanding of physics. He spends time in class going over some of the experiments demonstrated in the text using videos of the experiment, actual demonstrations, and/or interactive lecture demos. Figures from the text are reviewed using methods from Reading Apprenticeship (RA).</p>	2019-07-12

Expected Action: Discuss the process in place to ensure that SLO assessment is equivalent across different course sections. For example, some departments use the same SLO assessment instrument for all course sections.

Action Type: 2. Collaborative Review

Course Level Responses			
Course	Respondent	Action Taken	Date
School of Math and Sciences >> Physics and Planetary Sciences			
[PHYSICS006] GENERAL PHYSICS I Spring 2019	Wessling, Margaret	However, each of our long-term instructors has tried to develop a consistent process for their own sections, and Professor Soldatenko has been advising newly-hired adjuncts on his teaching and assessment methods. Most recently, Professor Soldatenko measured the qualitative SLO by looking at student performance on the three multiple choice exams given over the course of the semester and a qualitative question on the final exam. Students who had a combined multiple choice score above the average or scored above 70% on the qualitative final exam question were considered to have successfully accomplished the qualitative outcome. For the quantitative SLO, results were assessed for a single problem on the final that involved a multi-part calculation. Scoring above 70% on any one part or a combined score above 60% was considered a successful achievement of the SLO.	2019-07-12

Expected Action: Discuss SLO performance* within the course since the previous course report, including whether any benchmarks for SLO performance were met.

*Please see the College Outcomes Committee's guide for viewing SLO performance data in eLumen.

Action Type: 3. SLO and Course Assessment

Course Level Responses			
Course	Respondent	Action Taken	Date
School of Math and Sciences >> Physics and Planetary Sciences			
[PHYSICS006] GENERAL PHYSICS I Spring 2019	Wessling, Margaret	Performance for both SLOs (conceptual and quantitative) appears to be holding relatively steady, at around 75-85% success each semester (aside from a slight dip in spring 2018). Setting a default benchmark at 70%, we conclude that the benchmark is met for both SLOs across this reporting period.	2019-07-12

Expected Action: Given current SLO performance*, discuss any changes planned to SLO performance benchmarks for this course moving forward.

Action Type: 4. Planned Revisions to Benchmarks

Course Level Responses			
Course	Respondent	Action Taken	Date
School of Math and Sciences >> Physics and Planetary Sciences			
[PHYSICS006] GENERAL PHYSICS I Spring 2019	Wessling, Margaret	No changes are planned to the benchmarks; we would like to be able to make comparisons on a consistent basis to the extent possible.	2019-07-12

Expected Action: Discuss any proposed plans for improvement for the course to improve SLO performance, including but not limited to changes to course SLOs, SLO assessment methods, and/or the course (i.e., curriculum, pedagogy, etc.)

Action Type: 5. Plans For Improvement

Course Level Responses			
Course	Respondent	Action Taken	Date
School of Math and Sciences >> Physics and Planetary Sciences			
[PHYSICS006] GENERAL PHYSICS I Spring 2019	Wessling, Margaret	Professor Soldatenko has been using the method of "backward design" to help develop activities for Physics 6/7. This is a process in which the instructor starts with an assessment (e.g., a specific test question) in mind, and considers how an activity would help students develop the skills and knowledge needed to succeed on the given assessment task. This is not intended to mean "teaching to the test," but rather means evaluating the structure and effectiveness of each activity to ensure that assessment of the students is authentic and truly captures what they have learned in the class.	2019-07-12

Expected Action: What other actions within the department are planned to improve the course, including SLO performance?

Action Type: 5. Plans For Improvement

Course Level Responses			
Course	Respondent	Action Taken	Date
School of Math and Sciences >> Physics and Planetary Sciences			
[PHYSICS006] GENERAL PHYSICS I Spring 2019	Wessling, Margaret	Professors Soldatenko and Wessling will continue reading the physics education literature for new ideas relevant to Physics 6/7, and testing these ideas in their classes.	2019-07-12

Expected Action: Additional Comments

Action Type: 6. Additional Comments

Course Level Responses			
Course	Respondent	Action Taken	Date
School of Math and Sciences >> Physics and Planetary Sciences			
[PHYSICS006] GENERAL PHYSICS I Spring 2019	Wessling, Margaret	None	2019-07-12