

Assessment of Student Learning Plan (ASLP): Physics Program

2015-16 Academic Year

A. College, Department, Date

College Science, Technology, and Health
Department Physics
Date July 2016

B. Contact Person for the Assessment Plan

Name and title: Paul Nakroshis, Physics Chair

C. Degree Program

Name of Degree Program: BA in Physics

D. Assessment of Student Learning: Program Assessment

Step 1: Identify the Student Learning Outcomes (SLO's)

- a. Do you have your student learning outcomes published on your department's website? No

Please list 3-5 of the most important student learning outcomes for your program. **What will students know by the end of your program?**

1. Apply & integrate physics knowledge and skills in order to understand real world problems
2. Use computational, analytical, and experimental approaches to understand physical systems
3. Communicate clearly in written and oral presentations
4. Develop group work and team-based learning strategies
5. Engage in open-ended research in physics and astronomy

Please identify **which of your student learning outcome(s) were assessed this past academic year**. (One or more of the outcomes and corresponding assessment plans could come from your department's CORE Course Blueprint(s).

**In PHY 240/242, our intermediate physics lab assesses students ability to:*

- write effectively*
- give oral presentations*
- work in groups*
- engage in open-ended research*

**In PHY 121, assess the learning of students via a national physics education instrument*

Do you have a **matrix or curriculum map** showing when your student learning outcomes are assessed and in which courses? No

Step 2: Assessment Methods Selected and Implemented

- a. Identify which direct measures (other than course grades), that were used to determine whether students achieved the stated learning outcomes for the degree.

**Within PHY 240/242: students are given feedback on their written reports and oral presentations*

**In PHY 121: we use the Force Concept Inventory to assess pre-post learning gains*

- b. Briefly describe when you implemented the assessment activity, and if a scoring rubric was used to evaluate the expected level of student achievement. (This information may be shown on your curriculum map).

**Have been assessing PHY 240/242 for 20 years*

**Began pre-post testing in PHY 121 last year*

Step 3: Using the Assessment results to Improve Student Learning

- a. Briefly describe your unit's process of reviewing the program assessment results (i.e. annual process by faculty committee, etc).
- b. What changes have been or will be made to improve student learning, as a result of using the program assessment results?

**We could stand to put some effort into this process, will put into place when Prof LaSala returns from Sabattical in Spring 2017.*

- c. Date of most recent program review/self-study? 2012

E..Course Assessment Activities: *Is your program able to report any assessment-related activities at the Course-Level... (i.e. created grading rubrics to use in required courses, examined student progress in entry-level courses, developed a new course, etc)? Please briefly explain any assessment projects.*

Attached PHY 240/242 Syllabus

F. Community Engagement Activities in your departmental curriculum:

- a. Does your department have a student learning outcome that is related to any community engagement activities? If so, please state the outcome. NO
- b. Please indicate what community engagement activities are included in your program's curriculum, and whether the activities are required or optional for students in your major.

<u>Community Engagement Activity</u>	<u>Required/Optional</u>
Student-Faculty Community Research Project	Optional
Internship, or a Field Experience	Optional
Independent Study (community-related project)	Optional
Capstone Course (community-related project)	Optional
Service-Learning (course-based)	Optional
Interdisciplinary Collaborative Project (community related)	Optional
Student Leadership Activities (related to a team project)	Optional
Students/Faculty Community Leadership (advisory boards, committees, conference presentations)	Optional

c. Please list any courses (i.e. EDU 400) that have a community engagement activity in your program.

Entry-level courses:

Mid-level courses:

Upper-level courses:

**(not sure of your definition of "community")*