

Minutes for Physics Meeting

Friday January 7, 2022 9:30-10:30am

In attendance: Dr. Young, Dr. Shojaei, Dr. Hankins and Dr. Harrington.

Meeting led by Dr. Jessica Young. Dr. Young used a power point that will part of the minutes.

Please see exhibit 1: Power Points

The meeting was open to discussion about 2021 PLO Data Collected for Assessment Planning

She directed our attention to ANSAC being Physics and EAC being Engineering.

Dr. Young feels like expectations were met for 2021

Dr. Young provided a handout, Exhibit 2, that addressed ATU Physics Program Outcome

Regarding #1 Solve Problems, #2 Design, #3 Communication, #4 Ethics, #5 Teamwork, #6 Experiment and #7 Acquire and apply new knowledge.

Students met program Expectations at 75%

- 1) Ethics: Physics II Labs and Adv Physics Lab was little less than expected**
- 2) Design: Labs were a little less than Ethics**

Data indicates we were fine.

Round 90% for Physics II Labs

Dr. Shojaei was not quite satisfied due to student interaction during Covid

Dr. Hankins seemed happy with student interaction and outcomes. Dr. Young commented that Dr. Hankins did most of the work on this.

Dr. Young mentioned this will be assessed again in a couple years so we need to be thinking about this.

Needs for this year was discussed

PLO 2 & 4

- 1. Finish analysis for 2021 data**
- 2. Review of performance**
- 3. Evaluate assessment data**
- 4. Report finds**
- 5. Take Action**

Dr. Shojaei expressed that we should get started on the assessment process now.

Dr. Young spoke for PLOs 1, 3, 6 needs work, solve problems communication, mapped assessment and experiment.

- 1. Map educational strategies related to performance indicator**
- 2. Review mapping**
- 3. Develop and Review Assessment methods**

Dr. Young suggested Data Collecting being in 2023

Dr. Young expressed PLO's 5 & 7 should have done

2022 Data Needed, for this PLO 5 teamwork; PLO 7 Need new Knowledge

PLO 7 has been ignored because Dr. Young expressed she was unsure of and did not quite understand. But, has been researching and is more clear

She brought up where to assess Teamwork

Physics Labs, Ask Students to do their work as teams then do an overall assessment.

Dr. Young asked if there should be more teamwork or Speakers for the groups.

Dr. Hankins injected that he had been giving them options on teamwork

All present felt that they should only worry about assessing teamwork for Optics and Physics II now.

In the Fall assessing for Physics I

Dr. Harrington agreed.

How to assess Teamwork?

Dr. Young is going to proceed with info from Michael Young in Engineering.

Dr. Shojaei likes the methods for measuring attainment and believes there should be focus on Rubric and evaluate each other as a better functioning team.

Dr. Harrington thoughts were that it would be good to do these 2 times a year, middle of the semester and then again at the end of the semester with check off lists.

Dr. Young, Dr. Shojaei, Dr. Hankins and Dr. Harrington were all in agreeance that they should survey at beginning of the semester. This would help motivate students to be more aware that they were being assessed.

We discussed teaching methods involving 1 student doing all computer vs rotating students for learning excel, etc. Defining rolls for students in the lab would be best.

Dr. Shojaei interjected that students need to learn and know through rotation the skills early in the semester, middle and then at the end, evaluate if improvement is happening.

Dr. Harrington and Dr. Hankins suggested coming back in this semester week 1 no lab, week 2 & 3 Labs in Physics I

Dr. Young felt we should distinguish between our students vs others.

Separate out Physics and Engineering components according to data size

Pier numbers are more important

Dr. Shojaei mentioned separating students and the need

Dr. Young has concerns for Data efficiency and separating students. She stated Lumping them together for the University.

Dr. Hankins brought up Evaluating team work in upper classes

Dr. Shojaei suggested just using Physics I for this semester

Dr. Young said Physics II-3 years ago plan, 2nd Lab (actual)

Action Item all – Not applied to Lab Survey Questions

Physics II Goal: To meet before mid-terms on how Survey should look. Dr. Young will send Rubrics, etc. for midterm and end of term surveys. 2nd & 3rd Lab

Plan for teamwork on #7

Dr. Hankins suggested Projects for Physics I & II. Maybe, try this semester in Physic I?

Put in Syllibi that may or may not happen for students to be prepared either way.

Test this semester, collect Data for 2nd Semester.

Dr. Shojaei asked if we decided to report all #7 to University? Collect or report?

Dr. Young We need to publish on Website this semester.

If you can assess #7 (PLO) this semester for ABET maybe a project this semester at the end and collect Data would work.

Dr. Young handed out an exhibit #3 for Timeline accreditation process. She feels we are on track.

She said the Capstones need to be well defined. Only use PHYS495x Senior Research vs new Course.

All agreed with Dr. Young

