

Annual Program Review Template 2023

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1. Number of full-time faculty in the program.

2.5

2. Number of part-time faculty in the program.

7

3. Number of staff in the program.

1 - Shared with both Astronomy and Engineering.

4. Do the above numbers reflect any staffing changes?

We had a FT retirement in Spring 2023, the department is asking for a new hire.

5. Refer to the most recent Comprehensive Program Review, what were the identified actions for improvement? Identify any current and/or new Strategic Goals.

In our most recent Comprehensive, we identified that our program, like physics programs across the country, had large difficulties in terms of gender parity and serving both the LatinX and African-heritage populations. We expressed the desire to move away from double-lab lectures. Most interventions to help these underserved populations involve forming a better sense of community, which is difficult in large lectures (seat counts are set to 56, and drift into the 60s when we take more students). Cultivating an identity as a scientist is also seen as a valuable tool when facing these issues, going to single-lab lectures would allow us to better blend the lecture/lab format, which could be helpful in this arena. The department would be willing to move the seat count for many of our classes from 28 to 32, but would need to hold 28 for when we did teach double-lab lectures.

6. What actions identified in the Comprehensive Program Review (or most recent Annual Program Review if no Comprehensive Program Review) have you completed this year?

Our instructors have done professional development for DEI, and we continue to implement effective-practices such as highlighting the contributions of people from minoritized populations, being open and honest about our field's struggles with inequities, being respectful with pronouns, minimizing the use of sports or military examples/homework problems, and intentional hiring of presenters for the Physics Show to disrupt harmful stereotypes for young people. Taken together we hope these efforts create a more supporting environment.

The action of not teaching double-lab sections has not been taken for two reasons. The first is the current economic state of the college. Physics instructors do not receive any compensation for teaching these large-lectures, in essence they teach free overload. This is true for many lab science departments at Foothill. The second is that it would be difficult to teach the needed number of single-section lectures with our current staffing levels.

7. Explain your implementation timeline and if there have been any changes or updates.

The implementation timeline would depend upon many factors. The first is budgetary. Given the upcoming cliff we do not foresee the college having flexibility with class size. The second is staffing, we need at least

one more FT in order to move in this direction, possibly two given that we'll have a faculty member on Article 18 starting next year. Finally, this is an action that should be taken across all lab-science departments. If Physics is no longer teaching large classes for no additional compensation, the same should be true for both Chemistry and Biology.

8. Explain the evidence the program used to evaluate progress and provide an update on progress.

The evidence is our class schedule, we continue to offer double-lab lectures as the default, and only offer single-lab lectures to capture enrollment when there is not enough demand to offer a double. Once we have moved to single-lab lectures, overall success rates and disaggregated gaps should be examined for progress.

9. Click the link and follow the instructions to the Disproportionate Impact dataset, then respond to the prompt below.

https://foothilldeanza-my.sharepoint.com/:b:/g/personal/20078222_fhda_edu/EctjgGNEurtMlb1n6ZQ5k3kBNTejiE9G_kGSHMhfM1tsrA?e=yDcC7c

Identify the groups that are experiencing a disproportionate impact in the most recent year (highlighted in orange). In the text box below, provide the percentage point gap and the number of additional successes needed to erase the percentage point gap for each group.

Both the Latinx and Low Income populations are disproportionately impacted in the most recent year. Latinx has a 22-point gap and would need 31 additional successes to erase the gap. The numbers for Low Income are 15% and 51. Given that we teach roughly 50 sections, this is something that is achievable. Note that in Northern California public high schools the percentage of students who are Latinx is strongly correlated to the number who are SES disadvantaged, and these demographic groupings act as a predictor for physics offerings at those high schools. That being said, our department needs to address how to better serve these populations.

10. Use this opportunity to reflect on your responses in this document. Include your closing thoughts.

The Physics Department is enthusiastic about possibly hiring a new instructor for the department and continuing to create a sense of community for our students. With the addition of single-lab lectures instructors have the option of creating blended lab-lectures where students are able to get hands-on experience in every class meeting. These experiences often capture the attention of students that might otherwise lose interest in a lecture only format. We believe this will benefit all of our students, but will have a bigger impact on students from backgrounds that are traditionally underrepresented in Physics.

Click on the link below to view the Annual Program Review Rubric.

https://foothilldeanza-my.sharepoint.com/:w:/g/personal/20078222_fhda_edu/Ec2dqPH1B2RHinzFtnIz6sYB7-DOzW9lv1KkGyWdLuZkbg?e=CIfFMU

This form is completed and ready for acceptance.

Rubric Annual Program Review

Criteria

The program's responses...

- align with the program's goals
- align with data
- are informed by data
- are within the control of the program
- have measurable outcomes

Meets Expectations

Needs Improvement

Feedback

It is well acknowledged that having the double lectures across all of the lab disciplines at the college provides a platform that prevents community building within the classroom. It is also acknowledged that financially, we are not necessarily in the right place to negotiate this issue at the time being. The physics department did request a new full-time faculty member to help with adding new ideas and new faces to the program, and the school accepted this request through the faculty prioritization process. This hiring committee is currently formed and meeting, and is hopeful to find a new FT hire.

This form is completed and ready for acceptance.