Foothill Annual Program Review 2024

Annual Program Review Template 2024

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

6

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

17

3. Number of staff in the program.

0

4. Do the above numbers reflect any staffing changes?

No

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

We need to develop a comprehensive plan to address lack of equal representation in gender and ethnicity in our department.
To improve student representation by gender and race currently we are offering outreach courses such as tailored classes in Umoja and Puente learning communities, offering introductory courses, attracting and retaining more female students and working with SLI to better dissect the success of our student population.

New strategic goal:

AI and Machine Learning have quickly emerged as areas of significant opportunity for our department. We must meet the demand in these areas by developing new courses and certificates, as well as shore up our department by increasing our full-time capacity to teach the courses that are currently in the catalog and those we plan to add.

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?

- Working with Office of Retention Services.
- Incorporating consistent approach in our courses. For example, SimpleSyllabus, creating assessments for our introductory courses, incorporating GitHub to create more relevance.
- Stanford code-in-place model is fully integrated with CS 49, including section leader model. CS 49 has been selected as a MESA cluster course because of our "unparalleled commitment for student learning and success."
- Scheduled Non-credit Basic Skills (NCBS) 449, mirrored which will allow students to take the class if financial considerations are an issue.
- Committing to a schedule of in-person course offerings of core language courses that can be completed by students within one academic year.
- Adding CS 8 introduction to data science for student exposure industry trends, with curricular and academic support from U.C. Berkeley.
- Met with current and future dual enrollment students. Continuing to teach dual enrollment courses.
- Working on STEM 13-55 Implementation activities to help faculty get professional development and classroom materials.
- Quarterly reflection on recruitment and retention.

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

We are on track with initiatives proposed in our comprehensive program review.

We have CS 8 scheduled to debut in winter 2025, two new ML/AI classes in Fall 2025, and we plan to add five ML/AI classes for Fall 2026. We are working to develop two new certificates in ML/AI, and possible adding two new degrees in ML/AI.

We would also like to review drops before census. We would like to understand why students are dropping, and explore what supports could improve this metric.

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

Evidence of progress is in department meeting notes, course catalog and schedules, and disproportionate impact dataset.

This spring we will work with Stanford to significantly increase enrollment in CS 49 and NCBS 449.

This winter we are also marketing our Web Applications Certificate, and rolling out new courses to support that program.

We are working with the Silicon Valley Educational Foundation and with other non-profit groups to expand our reach to underrepresented students, dual enrollment student, and veterans.

We have approval to hire one full time instructor, and we are seeking approval for one more. This is due to the increased number of sections we plan to offer, as well as the significant work we need to do in curriculum development.

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/ETXoAp44fMFCppHXvzpIFgcB5ogzcvUXLknHrIXo1ghkHg?e=H8axR7

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.

For non-instructional programs that do not have program specific disproportionate impact student data, please provide an update on the program's 13-55 project (i.e., project description, students served, implementation timeline).

We see an equity gap in the following groups:

Male (3 point gap, 71 additional successes needed)

Black (20 point gap, 31 additional successes needed)

Latinx (14 point gap, 89 additional successes needed)

Veteran (16 point gap, 9 additional successes needed)

Low Income (15 point gap, 191 additional successes needed)

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

We are celebrating the fact that our success rates for women is higher than for men, extending and expanding a trend that we have witnessed for the past three years. However, women still represent only 30% of our student enrollment, vs. 48% at the college level.

We have reigned in the equity gap for black students, from a dismal 30 point gap last year. This is some measure of progress, more of a return to prior results, but the gap is still unacceptable and this remains our greatest opportunity to improve. We should strengthen our partnership with Umoja and create more support structures for this group.

Similarly we can work with Puente, MESA and the VRC to provide supports to Latinx and veteran students.

Addressing the impact to these groups should help to move the needle on Low Income success as well.

We also believe that our expanded offerings in data science will broaden interest in computer science from underrepresented groups. Computer science has often been viewed as a lonely field, disconnected from a social context. Data Science contextualizes computer science into other disciplines, and into issues of social importance.

The opportunity in Machine Learning and Artificial Intelligence is enormous, and we believe it is limited only by our capacity to add sections and create new curriculum. We have non-profit and industry partners expressing a strong need for increased offerings in these areas.

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

End of Annual Program Review Template 2024

Computer Science-FH

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

- [x] Meets Expectations
- [ ] Needs Improvement

Feedback

The CS department has had consistent strong enrollment over the past 5 years and as we see the workforce needs change, the CS department has worked very hard to address the changing landscape. Though this is a consistent challenge in a field with rapid changes in the real world, the department has most recently been working on new courses in AI and ML in conjunction with SVLG to produce new and innovative curriculum. As is mentioned in the APR, we are offering CS 8A - Introduction to Data Science, for the first time this upcoming winter '25 quarter. We started by offering one section, which quickly filled, so decided to add another section. This shows the demand in a field that continues to grow, which is consistent with the department's plans in creating programs around AI and ML.

Starting in the 25-26 academic year, the department will also start offering new courses in web application development (CS 84A, 77A, and 77B), part of a new certificate in Web Application Development. This will allow yet another pathway for students to gain skills that can help them go directly into the workforce.

The department will be losing a full-time faculty member after spring '25 who had previously filed paperwork for Article 20. In part, the department is currently looking to hire at least one new full-time faculty member who will also have an emphasis on AI and ML, to supplement for the upcoming vacancy, but also address the needs of the college to have content expertise in the emerging field.

The department has outlined in its APR the disproportionate impacts on several populations including Latinx and African American students in their course successes. Though the idea that was suggested in the APR in working more closely with Puente, Umoja, and MESA all have their benefits, we must also realize that not all students in these populations will necessarily be part of any of those learning communities. I challenge the department to continue their dedication in increasing the success rates in these populations, and to also lower drop rates during the the add/drop period for their courses.

Lastly, I want to highlight what was stated in the APR in regards to the partnership with Stanford's Code in Place model. There have been tremendous efforts in this partnership that have shown great success. We will look to offer triple the enrollment using this model in CS 49 in the spring '25 quarter.

This form is completed and ready for acceptance.