

# Faculty Request Form - Spring 2024

## Department/Area and Name of Submitter

undefined

### Details on Faculty Positions Requested

\* if requesting more than one position within the same area, please provide the area's priority ranking for each position to help inform RAPP of the priority preferences as determined by the area.

Position Name	Replacement or Growth	Retirement/Resignation Date	Instruction, Non-Instruction, Both	If Both, indicate the ratio	*Area Ranking
Physics Instructor	Growth		Instruction		1

### Guiding Principles

De Anza College's mission and Educational Master Plan serve as guiding principles for programs to facilitate continuous development, implementation, assessment and evaluation of their program effectiveness as part of ongoing planning efforts.

De Anza identified the following areas within its Educational Master Plan:

- Outreach, Retention, Student-Centered Instruction and Services, Civic Capacity for Community and Social Change

Through its Equity Plan Re-Imagined, it identified the following framework to work towards narrowing long-standing equity gaps:

- **Racial Equity:** Faculty members, classified professionals and administrators should: recognize the realities of race and ethnicity for students of color. Develop intersectional understanding of the ways in which institutional racism shapes educational access, opportunity and success for Black, Filipinx, Latinx, Native American, Pacific Islander and other disproportionately affected students.
- **Student Success Factors:** The College should ensure students: Feel connected to the college; Have a goal and know what to do to achieve it; Actively participate in class and extracurricular activities; Stay on track – keeping their eyes on the prize; Feel somebody wants them to succeed and helps them succeed; Have opportunities to contribute on campus and feel their contributions are appreciated.

Based upon these guiding principles, please provide information for each of the following areas:

#### A. Instructional Faculty

### Faculty Position Request Data Sheet

Limits: From 2018-19 to 2023-24



### Fill Rates

Physical Sciences/Math/Engin - Physics-FD

	2018-19	2019-20	2020-21	2021-22	2022-23
Enrollments	1,974	2,215	2,176	2,123	1,955
Sections	60	66	73	70	66
Fill Rate	94%	94%	84%	84%	81%

Average Section Fill Rate over time

### Success and Equity

Physical Sciences/Math/Engin - Physics-FD

	2018-19	2019-20	2020-21	2021-22	2022-23
Success Rate	63%	68%	68%	69%	66%
Withdraw Rate	20%	21%	23%	20%	17%
Equity Gaps	-11%	-20%	-16%	-12%	-17%

Success and Equity Trends

### Faculty Load Ratios

Physical Sciences/Math/Engin - Physics-FD

	2018-19	2019-20	2020-21	2021-22	2022-23
Full Time	42%	38%	34%	27%	41%
Part Time	41%	44%	48%	60%	48%
Overload	17%	17%	17%	12%	11%
FTEF (full time only)	3.0	2.9	3.0	2.3	3.4

Faculty Load Ratios

Data is for the academic year, including summer term and early summer/second spring terms for Foothill College. Enrollments include students who are counted for apportionment for the report years (i.e., Apprenticeship, noncredit and other students who do not necessarily have a reported grade). Cross-listed courses are included in the home department. Some courses may continue to be listed but no longer have data due to renumbering or because the course was not offered in the past five years.

## 1. How does the department use the data listed above to develop, adapt, and improve teaching and learning to respond to the needs of changing environments, populations served, and evolving institutional and state priorities?

The department is committed to improving student equity. We've used collected data to analyze the enrollment trends and success rates in the physics department. We've developed a plan to increase the success rate of targeted students.

## B. Non Instructional Faculty

1. Describe the data used to develop, adapt, and improve teaching, learning, and/or support to enable this position to respond to the needs of changing environments, populations served, and evolving institutional and state priorities (this may include a description of the population served, student needs and experiences from surveys or focus groups, or ratios related to the number of students served relative to current occupational standards).

N/A

## C. Instructional and Non Instructional Faculty Justifications

### 1. How does this request align with the goals in the Educational Master Plan?

1. Having 4th full-time faculty will allow the physics department to identify more targeted students needing help and support and thus increase the success rate and help reduce the equity gap.
2. To increase retention we have held meetings to discuss a plan that focuses on early intervention (first two weeks of classes) for targeted groups. Another full-time faculty will also facilitate outreach efforts by forming a physics club, having physics seminars, arrange field trips to local tech companies and research facilities, and overall provide a exposure to real life applications of physics and science.
3. We plan to increase the number of physics demonstrations in the classroom and we have also purchased computer-based equipment to to further increase our student-centered instruction.

### 2. How does this request align with the College's Equity Plan Re-Imagined?

1. A 4th full-time instructor will help increase identifying the number of students of color and other target students that need additional support to succeed in their physics education.
2. A 4th full-time instructor will also help to reinforce how institutional racism shapes educational access, opportunity and success for targeted minority students in STEM courses. This is a topic the has been discussed in our department meetings and we have developed a strategy to address the issue as noted in

### 3. How does the program use data to develop, adapt, and improve teaching, learning, and/or support to respond to the needs of students, changing environments, other populations served, and evolving institutional and state priorities? - NOTE, THIS IS A DUPLICATED QUESTION WITH A.1 and B.1, PLEASE DISREGARD THIS QUESTION.

N/A

### 4. How does the position support on-going college operations and/or student success?

Another full-time instructor will give the department more class-room contact with more students and thus help to increase the number of identified targeted students and improve the success rate by reaching out to these students and address their needs.

### 5. Why is the position needed and how would the position contribute to the health, growth, or vitality of the program?

The position is needed to help support the sharp increase in enrollment in the physics department and address the equity in the minority, targeted students. Historically minority,

targeted students have significantly been underrepresented in STEM degrees and we need a 4th full-time instructor to address this inequality. The turn-around rate for hired part-time instructors is large and we are constantly having difficulty I for high quality teachers

6. Describe the current staffing and history of staffing in your area and how the current staffing affects the health, growth, or vitality of the program.

As already mentioned, we only have 3 full-time instructors and 12 part-timers. We were already given a 4th full-time position about 14 years ago but due to the college financial crisis of that time, the position was cancelled. Currently, due to the significant department enrollment increase and the continuing decrease ratio of full-time to part-time, it is critical to get a 4th full-time position to better address the college equity plan.

7. Explain how the work will be accomplished if the position is not filled.

The work will continue to be performed by trying to hire more part-timers or possibly cancelling class sections or reducing the amount of courses offered which will have a significant impact to the other departments. This may result in decrease enrollment in the division and as well as the college. Overall it would decrease the opportunities of education that can be offered to the students.

8. Other information, if any.

N/A

### Dean/Manager Comments

Physics has a very good reason to ask for growth position; Over the past few quarters it has been a struggle to find qualified physics instructor to teach classes and specially labs in a part-time basis. The enrollment is high and strong and not sustainable with only three full-time faculty. Part-time faculty are teaching to their maximum load limit. Our last physics full-time hire greatly added to the diversity of the department which is one reason for the increase in enrollment for the department and support of the student.

I strongly support the growth position.

This form is completed and ready for acceptance.