

CLASSIFIED STAFF NEEDS ASSESSMENT APPLICATION
Fall 2019

Name of Person Submitting Request:	Michael Lysak			
Program or Service Area:	Physics/Astronomy/Engineering			
Division:	Science			
Date of Last Program Efficacy:	Spring/Fall 2016			
What rating was given?	Continuation			
Current Number of Classified Staff:	FT:	1	PT:	1
Position Requested:	To change the present Half-Time Physics Laboratory Technician position to a Full-Time position			
Strategic Initiatives Addressed:	Student Success; Communication, Culture, & Climate			
Needs Assessment Resources (includes Strategic Initiatives):	https://www.valleycollege.edu/about-sbvc/campus-committees/academic-senate/program-review/needs-assessment.php			

Replacement ☐

Growth ☒

If you checked replacement, when was the position vacated? _____

1. Provide a rationale for your request. (Explain, in detail, the need for this position.)

In recent years, with the addition of more Physics and Astronomy classes to meet demand, the faculty course load has grown significantly (presently at about a maximum of 5.99) with the Physics/Astronomy EMP reporting an FTEF of 11.21 (2018-19, and, as a result, the corresponding responsibilities of the Physics Laboratory Technician have increased significantly as well. Presently, the Physics Lab tech is responsible for setting up 16 labs weekly, as well as assisting all Physics/Astronomy instructors (2 full time with overloads, and 9-10 part-time) with various lecture and lab demonstrations that are used to enhance the lecture and lab presentations; furthermore, only two lab rooms are available for these Physics/Astronomy labs, so each lab room gets multiple use, which demands more frequent lab equipment changes. Also, with Physics 150AB and Physics 200/201 sections being unstacked, and with the Physics 200/201 sequence changing in Fall 2020 to three semesters rather than two, even more labs will need to be set up. Further, not only does all this lab and demonstration equipment need to be maintained and/or repaired, but the Physics Lab tech also orders equipment/supplies when necessary, and assists in other Science division activities such as Science and Technology Day. The Physics Lab Tech not only supports the Physics/Astronomy/Engineering instruction, but also helps to maintain the vital outreach functions of the Planetarium. The Physics Lab Tech position is presently only half-time, and with the present/projected growth in our Physics/Astronomy program, there is a need for the Physics lab tech position to be increased to full-time in order for the Physics lab tech to properly perform all necessary tasks related to the support of lecture and lab instruction. As the department is requesting a new Physics/Astronomy instructor not only to fill the need for teaching an ever-growing number of Physics/Astronomy classes, but also to add stability and growth to the Physics/Astronomy program, this will add even more to the work load of the Physics lab tech position, and accentuates the need for the Physics Lab Tech position to be increased to full-time.

2. Indicate how the content of the department/program's latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

According to the EMP for Physics/Astronomy, some of the program goals/challenges/action plans are: increase the Physics Lab Tech position to full-time to facilitate increasing faculty needs and assist in maintaining the Planetarium program; maintain lab equipment and supplies for quality education; continue to update the Physics/Astronomy labs and their corresponding equipment needs. Such goals and challenges cannot be adequately met with a half-time Physics lab technician. The Physics/Astronomy 2016 Program Efficacy document states (pg. 29) that "... the Physics/Astronomy laboratory and lecture programs have been negatively impacted by having only part-time laboratory assistance..." Also, this Efficacy report states (pg. 27) there is a significant projected growth rate predicted for jobs in biomedical engineering, biophysics and biochemistry, physician assistants, registered nurses, post-secondary physics instructors, geoscientists, physicists, environmental engineers, civil engineers, physical scientists, nuclear engineers, and aerospace engineers, all of which would predict an increase in Physics enrollment beyond our present growth experience. The Physics/Astronomy department program has rapidly grown and expanded even beyond the capability of our half-time Physics lab technician. If the department is to maintain quality instruction and to successfully plan for such enrollment increases, we will need to increase the Physics lab tech position to full-time.

3. Indicate any additional information you want the committee to consider *(for example, regulatory information, compliance, updated efficiency, student success data, planning, etc.)*.

As stated in the 2016 Program Efficacy document (pg. 23), the productivity of the Physics/Astronomy department has grown significantly from a WSCH/Faculty Load ratio low of 591 (2011-12), peaked at 643 (2013-14), and decreased to 599 (2014-15); according to the EMP for Physics/Astronomy, the WSCH/FTEF ratio has decreased slightly to 501, whereas the FTEF has risen to 11.21. Also, the department has been more efficient in spite of having only one full-time faculty from the end of Fall 2002 up until Spring 2015. For 2018-19, the department's Success rate was 75%, and its Retention rate was 90%, a retention rate which has remained relatively constant throughout the years. As student populations increase, to maintain or improve both the success and retention rates, clearly there will be a need for the department to offer more lecture and lab sections, and as an additional full-time faculty will be important in filling that need, so too will there be a strong need for a full-time Physics lab tech to support and maintain the quality of lecture/lab instruction. Finally, in Fall of 2019, the Science Division has ranked this Classified Staff Needs request as #2 out of several requests.

4. What are the consequences of not filling this position?

Since the Physics Laboratory Technician retired at the end of 2005, the department has had to use part-time employees in order to properly perform all necessary lab tech tasks related to the support of lecture and lab instruction. In light of increasing numbers of Physics/Astronomy lecture and lab sections, without proper support from a full-time Physics lab tech, high quality instruction for our students would not be possible, and such lack of support stifles successful attempts of program growth, development and expansion, and negatively impacts enrollments, and, ultimately, productivity.