CLASSIFIED STAFF NEEDS ASSESSMENT APPLICATION Fall 2016

Name of Person Submitting Request:	Michael Lysak		
Program or Service Area:	Physics/Astronomy/	Engineerir	ıg
Division:	Science		
Date of Last Program Efficacy:	Spring 2016		
What rating was given?	Conditional		
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: (See	Student Success; Communication,		
http://www.valleycollege.edu/about-sbvc/office-of-	Culture, & Climate		
president/college planning documents/documents/strategic-			
plan-report-working-doc-8-25-15-2.pdf)			
Replacement □ Growth □X			

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

If you checked replacement, when was the position vacated?

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 4.95) with the Physics/Astronomy EMP reporting an FTEF of 9.12 (2015-16, both semesters), 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 14 labs weekly, as well as assisting all Physics/Astronomy instructors (2 full time with overloads, and 4-5 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 equipment changes. 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 position is presently only half-time, and with the present/projected growth in our Physics/Astronomy program, there will be 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. Furthermore, at the end of Spring 2017, the Planetarium Specialist will be retiring; there is uncertain replacement for this position. The department is proposing that there be a new faculty position for a Physics/Astronomy instructor who could help teach the growing numbers of Physics and Astronomy classes, add stability and growth to the Astronomy program, and work to guide and grow the Planetarium programs and resources together with maintaining and supporting all the vital Planetarium activities provided by the Planetarium Specialist. This will add even more to the work load of the Physics lab tech position.

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; maintain lab equipment and supplies for quality education; update the Physics/ Astronomy labs and their related equipment needs; update/revise the Physics/Astronomy labs and their equipment needs with Department lab technician; and upgrade the Physics Lab Tech position to full-time, and train the lab tech in all operations of the Planetarium. 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 was nearly unchanged at 597. For 2015-16, the department's Success rate was 76%, and its Retention rate was 90%; these rates have, in fact, moderately increased over 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 2016, the Science Division has ranked this Classified Staff Needs request as #5 out of six 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.