CLASSIFIED STAFF NEEDS ASSESSMENT APPLICATION
Fall 2017

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:	**0**	PT:	**1**
Position Requested:	**To change the present Half-Time Physics Laboratory Technician position to a Full-Time position**			
Strategic Initiatives Addressed: Strategic Directions + Goals	**Student Success; Communication, Culture, & Climate**			

Replacement ☐ Growth ☐X

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 5.45) with the Physics/Astronomy EMP reporting an FTEF of 9.60 (2016-17), 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 5-6 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. 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. Further, with the Planetarium Specialist retiring at the end of Spring 2017, the Physics Lab Tech has gotten special permission and is working overtime to assume many of the planetarium responsibilities, the majority of which includes the scheduling and presentation of planetarium shows for our local elementary school children, and for the general public. Until the Planetarium Specialist position is replaced, the Physics Lab Tech is working not only to support Physics/Astronomy/Engineering instruction, but also to maintain the vital outreach functions of the Planetarium; furthermore, the Physics Lab Tech is currently in the process of researching other Planetarium facilities with the goal of ultimately replacing the outdated SBVC Planetarium audio-visual projection equipment and facilities. 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 539, whereas the FTEF has risen to 9.60. 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 2016-17, the department's Success rate was 77%, 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 2017, the Science Division has ranked this Classified Staff Needs request as #3 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.