## EQUIPMENT NEEDS ASSESSMENT APPLICATION Fall 2017

Name of Person Submitting Request:	Tatiana Vasquez
Program or Service Area:	Biology
Division:	Science
Date of Last Program Efficacy:	Spring 2017
What rating was given?	Continuation
Equipment Requested	Spectrophotometers
Amount Requested:	\$6000.00
Strategic Initiatives Addressed:	Goal 1, Access
Strategic Directions + Goals	Goal 2, Student Success

NOTE: To facilitate ranking by the committee, submit separate requests for each item; however, multiple items can be submitted as one request if it is required that the equipment is packaged together.

Replacement X Additional  $\Box$ 

Are there alternative funding sources? (for example, Department, Budget, Perkins, Grants, etc.)

Yes  $\Box$  NO  $\Box$  X

If yes, what are they?

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

The spectrophotometers are equipment utilized in laboratory experimentation associated with Microbiology (Bio 270) courses. Currently we have 8 very old spectrophotometers for 6 sections of labs; there are only 5 in active use while 3 are out in need of repair. However, repair will not happen as the machine models are out of circulation. Currently the manufacturer of the machines is no longer supporting them for repair or parts. The use of 5 spectrophotometers for a lab of 28 students is unpredictable. As the remaining five machines are old. Currently, students must wait for their use and their application to experimental knowledge and data collection. This limits experimental experiences, teaching opportunities, and creativity in lab experiments. Replacement to new technology is imperative to the student performance in laboratories. Five different experiments are dependent on the use of these five machines per lab section offered in Microbiology.

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.*)

The ability of the Biology Dept. to meet and take advantage of changing technology is contingent upon having the necessary resources and take preventive measures so that students are not negatively impacted. If we are to support the community enter CTE-related fields in biology (EMP p. 2), then we must have the resources before they fail. Microbiology is directly influencing one of the major areas of our programs' purpose which is to support the nursing and professional allied health programs such as pharmacy and physician's assistant, among many others (Program efficacy report pp. 12-13). Failure of equipment could in turn have large negative impacts on supporting a regional growth in allied health careers (Program efficacy

report pp. 12-13) as the opportunity of growing number of sections (EMP p.1) would need to be scaled back.

- 3. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, planning, etc.*).
- 4. Indicate any related costs (including any ongoing maintenance or updates) and department/program's plans to support those costs.

There is a scarcity of funds available by the college to support the maintenance of this and other lab equipment. The Science division is requesting support for these costs every year.

- 5. What are the consequences of not funding this equipment?
  - Limit microbiological laboratory exercises; negative effect on our COR commitments.
  - Under preparation of students in Microbiological lab activities and skills.
  - Weaken employability and/or career success of allied health students (Program Efficacy report p. 19).