

EQUIPMENT NEEDS ASSESSMENT APPLICATION
Fall 2015

Name of Person Submitting Request:	Lorrie Burnham
Program or Service Area:	Biology
Division:	Science
Date of Last Program Efficacy:	2013
What rating was given?	Continuation
Equipment Requested	Controlled Temp, Water Baths
Amount Requested:	\$2,257
Strategic Initiatives Addressed: (See Appendix A: http://tinyurl.com/15oqoxm)	Goal 2. Student Success 2.5.2 – Persistence 2.6.3 – Increase graduation rate 2.6.3 – Increase transfer rate Goal 1. Access 1.11 – Promote lifelong learning

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 Additional

1. Provide a rationale for your request.

This request is for 4 water baths with temperature controls. This type of equipment will support several courses in the Biology Department: Cell and Molecular Biology, Organismal Biology, Evolutionary Ecology, Anatomy and Physiology I and II. The impact of this equipment is three-fold. First, it will minimize the safety hazards of working with hot/boiling water as it will maintain water in a chamber at the desired temperatures; second, it will allow students to experiment factors under variable environmental conditions; third, it will permit the practice of high technology-labs such as DNA electrophoresis which requires treatment of molecules at specific temperatures. These impacts will increase the readiness of our college students to the real world, and it will help cultivate deeper knowledge and better understanding of nature. Moreover, it will increase the safety of our faculty and classified staff. Water baths are a preferred source of heating when dealing with some chemicals.

2. Indicate how the content of the latest Program Efficacy Report and current EMP data support this request. How is the request tied to program planning? (*Reference the page number(s) where the information can be found on Program Efficacy.*)

The 2013 Program Efficacy document, Planning Section, p17-18 illustrates the high demand for Registered nurses.
2015 EMP, Program goals, plan for re-expansion.

Many biology lab experiments listed in the aforementioned courses that rely upon temperature controlled reactions for analysis will require these pieces of equipment. Therefore the necessity of water baths can be linked to any laboratory COR items where temperature controlled experiments are performed.

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

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4. Evaluation of initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources (*for example Department, Budget, Perkins, Grants, etc.*).

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5. What are the consequences of not funding this equipment?

Without this equipment, it will lessen the effects of teaching hands-on laboratories across multiple courses. These water baths will impact the different programs taught in this department. The goal of this equipment is to support existing courses which are offered in multiple sections too.

Science courses encourage critical thinking the experience of seeing what is discussed is a leap forward in the path of learning. Nothing replaces hands-on activities, especially undertakings that lead the student to go beyond structured answers. These are the kinds of activities that help a student persist in science and in Biology and improve performance in most assignments.