INSTRUCTIONAL EQUIPMENT REQUEST
2017-2018

RECEIVED
NOV 8 2017
STEMPS Division
Las Positas College

Internal Use
IE #: FALL - 28
Total $: 692.15

Requester Name: Richard Grow **Division Name:** MSEPS

SECTION 1: SUMMARY INFORMATION

Brief Title of the Request:

We need current periodic tables for the science classes (chemistry and Physic).

Equipment Location Building: 1800 **Room:** 1814, 1816, 1802, 1804, 1807, 1826,

Location Comments:

We need 2 periodic tables that can be raised up for classes that do not need the table in room 1814 and 1816.
We need posters of the periodic table that can be pined up in the lab rooms 1802, 1804, 1807, 1826 and 1831.

11/16/17 sm

SECTION 2: EQUIPMENT DESCRIPTION

The equipment is: ■ **A Replacement** ■ **An Upgrade** ☐ **New Equipment/Technology**

Describe the specific equipment requested and how it will be used to replace, upgrade or provide new technology to LPC from what is currently in place:

The periodic table in 1816 fell apart in the summer of 2017. The lecture room has no other periodic table. Room 1814 does not have a periodic table and we would like to be able to have lectures in there with a periodic table. These 2 tables should be the kind that you can raise and lower like a shade to make the board space available for different types of lecture classes. The lab rooms in chemistry and physics would like to have a periodic table that is current. The tables that we have now are very out dated due to the number of new elements discovered (6 in the last 2 years). With all of the current discoveries in science it is important that we show the students what is known at this time and not what we knew 10 - 20 years ago.

SECTION 2: EQUIPMENT DESCRIPTION (contd)

If applicable, describe the legal requirement, mandate, or safety concern for purchase of this equipment, making specific reference to the legal requirement or regulation:

There are no safety or legal concerns for this request.

SECTION 3: LPC MISSION STATEMENT AND LPC PLANNING PRIORITIES

LPC MISSION STATEMENT:

LPC is an inclusive learning-centered institution providing educational opportunities and support for completion of students' transfer, degree, basic skills, career-technical, and retraining goals.

LPC PLANNING PRIORITIES:

- **Accreditation: Establish regular and ongoing processes to implement best practices to meet ACCJC standards.**
- **Curriculum: Provide necessary institutional support for curriculum development and maintenance.**
- **Tutoring Services: Expand tutoring services to meet demand and support student success in Basic Skills, CTE, and Transfer courses.**
- **Professional Development: Coordinate available resources to address current and future professional development needs of faculty, classified professionals, and administrators in support of educational master plan goals.**

Specify how the equipment supports *LPC's Mission Statement* and *Planning Priorities*:

We want to give our students the kind of education in the science they will need to get a job working in a science lab or to transfer to a 4 year college or university. The periodic table is basic to the understanding of science. To display and teach students from the periodic table requires that we have the current periodic table available in the classroom. We need these tables to be able to keep our curriculum up to date with modern advances.

SECTION 4: EDUCATIONAL ITEMS – PROGRAM REVIEW

Specify the educational programs this equipment supports:

This supports all our chemistry lectures and labs and the physics lectures and labs. All of the chemistry classes that are used to transfer for chemistry and biology students will benefit from having current periodic tables in our lectures.

If this equipment is included in your Program Review, please include the exact wording. If equipment is not included, explain why:

From the 2017 program review:
• Additional equipment repair and maintenance funding. As our instruments and equipment get older and see more use, they tend to break down more often and require more maintenance.

and
• We need more classrooms close to the chemistry labs.
• At the very least, the three current labs need to be renovated for various reasons as specified in the Facilities section below. A better solution is to build a new set of chemistry labs as part of a new physical science and engineering building. See facilities section below.

Our periodic table in 1816 broke and the ones in the lab classes are old and out-dated due to the creation of new elements in the last 3-4 years. We are starting to use 1814 as a lecture room. Replacing the old periodic tables for new up to date periodic tables is part of the renovation of the labs.

SECTION 5: TEACHING AND LEARNING

Describe in detail the impact this equipment will have on <u>teaching</u>:

In lecture rooms 1814 and 1816 we do not even have a useable periodic table. In the lab room, where we try to explain what the students are looking at or while they are doing the assigned experiments, it helps to have up to date references. The periodic Table is essential to the understanding of all of chemistry we and other colleges teach.

Describe in detail the impact this equipment will have on <u>learning</u>:

If we do not have the educational equipment that we need to teach our students what is being done in science now, our students will be at a disadvantage to the students from other colleges. We take pride in the says here at LPC it is students first. Help us give the students the education they will need to succeed and excel as they transfer to other universities.

Each academic year, this equipment will impact: 34 **# of classes/sections** 750 **# of students**

SECTION 6: OUTCOMES (SLOs)

Using your documented SLOs, specify how the equipment will enable student learning outcomes to be achieved.

Most of our SLOs are based on the standardized American Chemical Society exams. These compare our student's knowledge to that of students from other institutions in the nation. Without up to date equipment our student's scores and ability to compete with the other students in the nation will be less than our students deserve. We sometimes discuss the need for an understanding of chemistry for both chemistry and biology, but in this case even the physics department requested to be part of this request. This demonstrates how the need for these periodic tables extents through the whole field of science.

What are the consequences related to learning outcomes if request is not funded?

Without current periodic tables, the students over-all understanding of basic concept of chemistry is lessened. Their scores on the SLOs would not be as high as we would like to see. The students we be at a disadvantage when they transfer or enter the workforce in chemistry and other sciences.

SECTION 7: TOTAL COST OF OWNERSHIP (FINANCIAL & SUSTAINABILITY)

What is the potential life span of the requested equipment?

The life span of these posters and tables would be about 10 - 20 years. The current periodic table have the 7th row complete now and creating new elements beyond this stage may take a great deal of time and cooperation.

If new storage is needed what are the storage requirements, location requirements, and costs associated with the new equipment: (NOTE: Specific storage costs should be detailed in the "*Part A: Initial Start-up Costs*" section below.)

The only cost associated with these new tables would mounting the new periodic table in room 1814. Room 1816 already has a mount for a periodic table and the labs will use the bulletin boards in the rooms.

If this equipment replaces old equipment but the old equipment will not be retired, are there on-going storage requirements, location requirements, and costs associated with the old equipment? If so, provide details.

No.

What will be required to maintain the equipment, such as regular servicing or upkeep? (Specific on-going costs should be detailed in the "*Part B: On-Going Annual Operating Costs*" sections below as applicable.)

There will be no on-going costs.

Explain how this equipment meets or exceeds basic sustainability efforts and/or provides renewable resources to the college:

These tables can be used for all science lecture classes and the chemistry and physics labs for years to come.

Part A: Initial Start-up Costs

Item	Cost	Comments
Equipment or Materials	$632.10	For 2 retractable tables and 5 posters.
Taxes (9.5%)	~~$58.47~~ $60.05	
Shipping or Delivery Charge	0	
Installation Costs *		
Miscellaneous Costs:	0	
Facilities Modifications		
Operator Training		
Maintenance & Repair Training		
Storage		
Other:		
Vendor Discount		Flinn Scientific 2 AP 8563 and 5 AP4530
Grand Total:	~~$690.57~~ $692.15	

***For items requiring installation, requesters are required to check with District Purchasing (Victoria Lamica) regarding District policies.**

Part B: On-Going Annual Operating Costs

Item	Cost	Comments
Annual Service or Maintenance		
Estimated Parts Replacement Per Year		
Outside Standardization or Calibration Costs		
Storage Costs		
New Supply Costs		
Miscellaneous Costs:		
Maintenance & Repair Labor		
Other:		
Annual Operating Costs:	$0	

Indicate the source of funding for on-going annual operating costs:

Part C: Incremental Labor Costs

OPERATOR:

Indicate the key operator: the Chemistry and Physics faculty

Is this in their current scope of duties? yes

Indicate cost to train key operator (include in Initial Start-up Costs above): N/A

Indicate amount of time per month key operator will use equipment: on average probably less than 1 hour.

MAINTENANCE & REPAIRS:

Indicate the person performing maintenance and repairs: _____

Is this in their current scope of duties? _____

Indicate cost to train for maintenance and repairs: _____

Indicate amount of time per month maintenance will be required: 0

APPROVALS

Funded requesters will be expected to respond to a brief RAC feedback survey by a requested deadline. Requests for computer-related equipment and printers must be reviewed by the LPC IT Department.

Signatures: Richard Grun

Richard Grun — **Requester**

11/08/2017 — **Date**

_____ — **IT Department (if required)**

_____ — **Date**

Nan H — **Dean/Manager**

11/9/17 — **Date**

_____ — **Vice President**

_____ — **Date**

Flinn Scientific, Inc.
"Your Safer Source for Science Supplies"
P.O. Box 219 flinn@flinnsci.com
Batavia, IL 60510 www.flinnsci.com
(800) 452-1261 FEIN No. 36-2926914

Quotation

Flinn Quote Number: 170189

Quote Date: 11/08/2017

Freight Terms: FOB DESTINATION
Payment Terms: Net 30 Days
Expiration Date: 02/28/2018

Customer RFQ:

Quote For:

LAS POSITAS COLLEGE

3000 CAMPUS HILL DRIVE
LIVERMORE CA 94551

Line #	Qty	Catalog Number	Description	Unit Price	Extended Price
	5	AP8563	PERIODIC TABLE, SIMPLIFIED	76.8000	384.00
	2	AP4530	FLINN PERIODIC TABLE, WALL	124.0500	248.10

Thank you for the opportunity to quote on your science supplies. We hope you will honor us with your order!

Subtotal	632.10
Quoted Freight	.00
Hazard Fee	.00
Sales Tax	58.47
Total	690.57

Please reference the Flinn Quote Number on your order.

By: *Jim Nesbit*
Quote Coordinator

LAS POSITAS COLLEGE Equipment, Apparatus and Service Requisition #R

FOR REIMBURSEMENT: List payee name & ssn. TAX ID#

SUGGESTED VENDOR **Flinn Scientific Inc**

FOR OFFICE USE ONLY

NAME OF STAFF MEMBER	DATE WRITTEN	DATE REQUIRED	DIVISION/ DEPARTMENT	For inventory purposes include room # where	RETURN COPY of REQUISITION TO:
Richard Grow	**8-Nov-17**	**10-Jul-05**	MSEPS	**1816, 1814, 1802, 1804, 1807, 1826, 1831**	

DESCRIPTION (PRODUCT, TYPE, SIZE, COLOR, STOCK NUMBER)	UNIT	QTY	UNIT PRICE	Air
periodic Table **AP4530**	1	2	$ 124.05	$ 248.10
Periodic Tables AP8563	1	5	$ 76.80	$ 384.00
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
Vendor Information/ Remit To: **Deliver To, include room # (optional):**				$ -
				$ -
				$ -
				$ -
				$ -
Comments:	Subtotal			$ 632.10
	Tax		$ -	$ 58.47
BT#	Shipping (if available):			

Original invoices and receipts must be attached for payment. Include current taxes unless incorporated in price.

TOTAL COST $ 690.57

ACCOUNT # _____

FUND ORG ACCT PROGRAM

Business Office

APPROVALS Nam Ho 11/9/17

Supervisor/ Coordinator/ Director

Dean/ VP/ President