

INSTRUCTIONAL EQUIPMENT REQUEST 2018-2019

Internal Use
IE #: Fall-37
Total \$: _____

Requester Name: Michal Shuldman Division Name: STEM

RECEIVED

SUMMARY INFORMATION

Title of Item: Field Biology Equipment

SEP 13 2018

STEMPS Division
Las Positas College

Equipment Location Building: 1850 Room: 1855

Location Comments:

SECTION 1: 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:

1) Thermal Imaging Infrared Camera This is new technology to LPC. The camera will be used for tracking animals on field trips. This is a standard technique in wildlife biology. 2) Sherman animal traps - this is a new piece of equipment to LPC. It is used for trapping small animals (e.g. mice). It will be used in field trips and is a standard technique for wildlife biologists. 3) Aquatic net - We currently have one net but want to increase the number of nets so that students can have hands-on experience using this to collect aquatic animals. 4) Field transect measuring tape - we currently have two of these. We would like to expand this to a class set so that groups of 4 students can set their own transect lines and take data in small group setting. 4) Tangent height guides - this is a new piece of equipment to LPC. It will allow students to estimate the height of trees and is a standard technique in forestry.

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SEP 28 2018

ADMINISTRATIVE SERVICES

SECTION 1: 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:

Not Applicable

SECTION 2: 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:*

Mission: Our program has a high transfer rate to CSU and UC. We have inclusive class offerings of a wide variety of courses in biology that draw on different student populations. These courses support biology majors and other pre-professional transfer students. The courses also satisfy specific degree and certificate requirements, fulfill general education requirements, and provide intellectual enrichment. As a program we try to stay abreast of rapidly moving technology. Proper equipment is needed for students to learn field biology skills. This new equipment will provide the students with state of the art learning opportunities and skills, which will help them to get internships and jobs locally and at their transfer institutions.

Planning Priorities: (1) Best practices for science classes involves active learning with hands-on experience. In order to accomplish this we need adequate supplies so that students can work in small groups (of no more than 4 students), rather than as an entire class.

(2) Bio 70 is a class that we have not offered in a long time. In order to run interesting new and updated courses we need to have the support of the necessary supplies and equipment. The equipment will also be used in other Biology classes.

SECTION 3: EDUCATIONAL ITEMS – PROGRAM REVIEW

Specify the educational programs this equipment supports:

This equipment supports the Biology Department and the Environmental Studies degrees. The equipment will be used in the new Field Biology Bio 70 class, which can count towards the Environmental Studies degree. Bio 70 will also offer all students a new course to fulfil their lab based science GE requirement. It will also be used in our Biology Majors sequence classes, Biology 1A - General Botany and Biology 1B - Zoology, and in Marine Biology - Bio 60.

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

This exact equipment is not included in our previous program review because Bio 70 had not completed the curriculum process or been added to the discipline plan. The primary need for the equipment is for Bio 70, although all of the equipment will also be used in Zoology (Bio 1A), Botany (Bio 1B), or Marine Biology (Bio 60).

SECTION 4: TEACHING AND LEARNING

Describe in detail the impact this equipment will have on teaching:

This equipment will allow instructors to accomplish two main goals. The first is to introduce students to current technology and techniques. For example, the thermal imaging camera is a standard technique used in wildlife biology applications. This directly relates to one of our PSLOs: Upon successful completion of an AS-T in Biology, students are proficient in standard biology lab techniques and lab safety procedures. The second goal is to increase the student's ability to be actively engaged in hand-on learning. In order to accomplish this PSLO we need to have enough supplies for groups of no more than 4 students. For example, we are asking for more field transect tapes so there will be enough for a class set. Students will be able to work in groups of 4 to learn standard field techniques, such as line-point intercept method of vegetation sampling.

Describe in detail the impact this equipment will have on learning:

Lectures can be effective at disseminating information, but they often are not effective for students learning, retaining, and being able to apply that content. For students to learn, they need to be actively engaged in an authentic context. Lab courses are an effective way to engage students in an authentic context, where students learn and use the equipment and techniques used by professionals in the field. The skills students learned impact students' future employment in science settings.

Each academic year, this equipment will impact: 4/12 # of classes/sections 288 # of students

SECTION 5: OUTCOMES (SLOs)

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

This directly relates to one of our PSLOs: Upon successful completion of an AS-T in Biology, students are proficient in standard biology lab techniques and lab safety procedures. The second goal is to increase the student's ability to be actively engaged in hand-on learning.

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

If the request is not funded the class will miss key components of entire unit on learning the skills of trapping and observing animals. The students will also miss key components of a unit on vegetation mapping. The lack of supplies will directly effect our PSLO of producing students that are proficient in standard biology techniques and lab safety procedures.

SECTION 6: TOTAL COST OF OWNERSHIP (FINANCIAL & SUSTAINABILITY)

What is the potential life span of the requested equipment?

The item with the shortest life span is the Thermal Imaging Infrared Camera. As with any electronic device it likely has a life span of 5-8 years. The other equipment (sherman animal traps, aquatic net, field transect measuring tape, and tangent height guides) could last for many years, likely more than 15, if treated properly. For example, ensuring that the metal traps don't rust, that nets are cleaned, and that transect tapes are properly wound up.

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.)

These items are small and can be stored in the cabinets of the lab rooms in the 1850 building.

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.

Not applicable

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.)

None

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

The field equipment can be re-used many times. These supplies should last the college for years. The supplies themselves are not renewable.

SECTION 6: TOTAL COST OF OWNERSHIP (contd)**Part A: Initial Start-up Costs**

<u>Item</u>	<u>Cost</u>	<u>Comments</u>
Equipment or Materials	1926.38	
Taxes (9.5%)	183.01	
Shipping or Delivery Charge	90.10	VWR - free shipping
Installation Costs *	0	
Miscellaneous Costs:	0	
Facilities Modifications	0	
Operator Training	0	
Maintenance & Repair Training	0	
Storage	0	
Other: _____	0	
Vendor Discount		VWR provides free shipping
Grand Total:		2199.49

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

Part B: On-Going Annual Operating Costs

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

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

This equipment is simple and will not require on-going costs.

SECTION 6: TOTAL COST OF OWNERSHIP (contd)

Part C: Incremental Labor Costs

OPERATOR:

Indicate the key operator: Michal Shuldman

Is this in their current scope of duties? Yes

Indicate cost to train key operator (include in Initial Start-up Costs above): None

Indicate amount of time per month key operator will use equipment: Variable, 5-10 hours

MAINTENANCE & REPAIRS:

Indicate the person performing maintenance and repairs: Gary Wilkes

Is this in their current scope of duties? Yes

Indicate cost to train for maintenance and repairs: None

Indicate amount of time per month maintenance will be required: less than 1 hour

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:

Michal I Shuldman
Requester

9/11/18
Date

IT Department (if required)

Date

nan H
Dean/Manager

9-14-18
Date

[Signature]
Vice President

9/21/18
Date



Forestry Suppliers

I submitted a request for a quote on 9/7/18. I haven't received the quote yet but, we do not receive a discount from Forestry Suppliers. The attached shopping cart with the items should be representative of the actual cost of the items. I will submit the quote when I receive it.

DECLASSIFIED

#R

#

TAX ID#

FOR REIMBURSEMENT: List payee name & ssn.

Forestry Suppliers

STEPS Division
Las Positas College

Track # 19-25

FOR OFFICE USE ONLY

RETURN COPY of REQUISITION TO:
Gary Wilkes Linda Cross

STAFF MEMBER	DATE WRITTEN	DATE REQUIRED	DEPARTMENT
Ann Hight	13-Sep-18		Biology

Room: 1856

DESCRIPTION (PRODUCT, TYPE, SIZE, COLOR, STOCK NUMBER)

Trap, vented Folding Large

Trap, vented Folding Small

Aquatic D-net

Fiberglass transect tape, 100M

Diameter tape

Tangent Height

FY18/19

Shipping (if available):

Comments:

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

ACCOUNT #

FUND	ORG	ACCT	PROGRAM
0000	0000	0000	0000

Mar 11 9/14/15

Dean, STEmps

Date _____

Business Office

VP/ President

TOTAL COST	\$ 1,422.87
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Subtotal		\$ 1,302.40
Tax		\$ 120.47

Shopping Cart

Key Code/Coupon

Key Code/Coupon

Update







If you have a promotion / key code, please enter it here, then update to see your savings.

Quick Cart

Item Number

Add Item

Already have a Forestry Suppliers stock number? Enter it here to automatically add it to your cart.

	Qty	Item#	Name	Price	Item Total	Remove
	6	36953	Forestry Suppliers Tangent Height Gauge In Stock	\$19.25	\$115.50	
	6	59571	Forestry Suppliers Metric Fabric Diameter Tape Model 283D/5M In Stock	\$38.25	\$229.50	
	4	40025	Model OTR-10m-330 Keson Open Reel Fiberglass Tape, 330'/100m In Stock	\$54.50	\$218.00	
	2	53755	Aquatic Net ☉ ☉ In Stock	\$80.95	\$161.90	
	10	35951	Sherman Folding Trap, Heavy Duty Aluminum, Large, Ventilated In Stock	\$32.25	\$322.50	
	10	35841	Sherman Folding Trap, Aluminum, Small, Solid In Stock	\$25.50	\$255.00	
Subtotal:					\$1,302.40	
Zip Code: Livermore, CA					94551	
					Estimate Shipping	
Shipping: (UPS Ground Shipping)					\$90.10	
Total:					\$1,302.40	



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LAS POSITAS COLLEGE Equipment, Apparatus and Service Requisition

SEP 14 2018 #R

#P

FOR REIMBURSEMENT: List payee name & ssn.

TAX ID#

Phone: 1-800-932-5000

VENDOR

VWR International Inc. Acct: 80248487

1310 Goshen Parkway, West Chester, PA 19380 Fax: (610)431-9174

STAFF MEMBER
Michal Shuldman

DATE WRITTEN
5-Sep-18

DATE REQUIRED

DEPARTMENT
Biology

Room: 1856

DESCRIPTION (PRODUCT, TYPE, SIZE, COLOR, STOCK NUMBER)

PRODUCT #

Thermal Imaging Infrared Camera

10753-890

Track # 19-24

FOR OFFICE USE ONLY

RETURN COPY of REQUISITION TO:
Gary Wilkes Linda Cross

UNIT PRICE
\$ 623.98

QTY
1

UNIT
ea

EXT PRICE
\$ 623.98

FY18/19

Shipping (if available):

Comments:

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

ACCOUNT #

FUND

ORG

ACCT

PROGRAM

Dean, STEmps

Date

VP/ President

Business Office

TOTAL COST \$ 681.70

Subtotal

\$ 623.98

Tax

9.25% \$ 57.72

QUOTATION

Quote Number	Valid From	Valid To	Page
8030791051	09/06/2018	10/06/2018	1 of 1
Currency	Sales Representative	Customer Reference	
USD	Daniel Im	FLIR C2 POCKET-SIZED THERMAL CAMERA	

To Place an Order

Phone : 1-800-932-5000
Fax : 1-866-329-2897
Web : www.vwr.com

When placing your order, please include your quotation number and account number to ensure you receive the correct price.

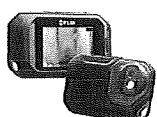
THANK YOU FOR THE OPPORTUNITY TO EARN YOUR BUSINESS.

Quote Prepared For	Contact Phone / Fax / E-Mail
Gary Wilkes	925 424 1331 gwilkes@laspositascollege.edu
Ship To : 80248487	Sold To : 80248487
LAS POSITAS COLLEGE SCIENCE DEPT 1856 GARY WILKES RM 1856 3000 CAMPUS HILL DR LIVERMORE CA 94551-7623	LAS POSITAS COLLEGE SCIENCE DEPT 1856 GARY WILKES RM 1856 3000 CAMPUS HILL DR LIVERMORE CA 94551-7623

Additional Information :

This account is set up as only being charged for freight if requested for overnight AIR.

No shipping charges.

Row	VWR Catalog Number	Product Description	Qty	UOM	Unit Price	Extended Price
10	10753-890	FLIR C2 POCKET-SIZED THERMAL CAMERA	1	EA	623.98	623.98
 Thermal Imaging Infrared Camera, Exttech Product Link : https://us.vwr.com/store/catalog/product.jsp?catalog_number=10753-890 Shipping Dimensions Weight / Size (L*W*H) per UOM : 0.290 LB / 4.900*3.100*0.940 IN UOM Component Info : EA(1items) Availability : Product Ships Directly from Manufacturer						
Quote Total :						623.98

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Identified stock status is based on product availability at time of the quote and may change at time of order. Delivery dates are based on standard lead times from suppliers.

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Customer is responsible for unloading and providing standard receiving facilities for large and/or heavy shipments. Special unloading or delivery can be arranged, provided VWR International is notified at the time of order placement. For such arrangements, please contact VWR International for a quotation. All quotes for installation assume that services related to the equipment are in place at the Customer site (including, but not limited to, gas, plumbing, electrical and ventilation) as per the equipment manufacturer's specifications prior to the installation of the equipment. Installation or other services are not included in this quotation, unless otherwise noted on the quotation.

Customer has a limited amount of time to document and report any shipping damage. Please inspect all shipments upon receipt and refer to Section 4 of VWR International's Terms and Conditions of Sale for additional information.

Items prefixed with "MISC" are subject to regulatory approval once VWR International receives acceptance from the customer. They are special order, and as such may not be returnable. Please allow 5-8 weeks delivery from the time of your first order or acceptance of this quotation.