



RECEIVED

OCT 26 2015

Instructional Equipment Request

\$124,000

VP ACADEMIC SERVICES  
LAS POSITAS COLLEGE

FALL 06

**SECTION 1: SUMMARY INFORMATION**

Timeframe for the Request: Fall: X Spring: X Year: 2015-16

Name of Requestor: Keith Level Division/ Unit: STEMPS / Engineering

Brief Title of the Request: Microscope Equipment Location: Rm 1822

**SECTION 2: DESCRIPTION**

Describe the specific equipment or materials requested and a brief explanation of how it will be used. (Please do not include cost data here.)

1) Microscope

Check one of the following:

The equipment is: X A replacement X An upgrade  New equipment

How does the equipment replace, upgrade or provide new technology to the college? What do you currently have in place?

The microscopes currently used in the ENGR 46 (Materials of Engineering) course are approximately 30-40 years old, and need to be urgently updated. It will provide some additional functionality to the course, in the form of (a) taking photographs directly from the microscope, (b) having the capability to project any images onto a screen to be viewed by the entire class, and (c) having the potential to be further upgraded with the purchase, at a later time, of additional add-ons.

If request is motivated by a mandate, legal requirement or safety concern, please describe it and why it's important. Please provide any relevant documentation.

Not applicable

**SECTION 3: EDUCATIONAL ITEMS**

Which educational programs or institutional purposes does this equipment support?

- Engineering Transfer Program
- Associates of Science in Mechanical Engineering Technology degree program
- Welding Technology Program

Is this in your Program Review?  Yes  No

If yes, please cut and paste the appropriate wording here. If not, explain why.

Continue to expand upon and improve laboratory setups/equipment used in ENGR 44 (Intro to Circuit Analysis) and ENGR 46 (Materials of Engineering)

This equipment will support all 3 programs listed above, and provides each the opportunity to expand grow in terms of content covered in each class.

## **SECTION 4: TEACHING AND LEARNING**

**Describe in detail the impact this equipment or materials will have on teaching and learning.**

The microscope will be used in the Metallurgy portion of ENGR 46 (Materials of Engineering), in the Materials Science portion of ENGR 37 (Applied Statics and Materials), and in the support of several courses in the Welding Technology program.

**Number of classes or sections (per academic year) that will be impacted:**

4 (ENGR 37, ENGR 44, WLDT xx)

**Will the Tri-Valley benefit from the equipment, and if so how?**

Some of the equipment will be used by veterans pursuing an Associates of Science Degree in Mechanical Engineering Technology, who will be eligible to be hired as Technologists by Lawrence Livermore National Laboratories. The microscope will improve the laboratory portion of ENGR 46, which will improve student preparation prior to transfer.

## **SECTION 5: SUSTAINABILITY**

**What is the potential life span of the requested equipment?:**

Microscope: Approximately 25-30 years

**How does this equipment meet or exceed basic sustainability efforts and/or provide renewable resources to the college? Please explain**

Where possible, metallic samples viewed with the microscope will be recycled.

**What will be required to maintain the equipment, such as regular servicing or upkeep? Who will perform the maintenance and are the costs included in the Finance Section?**

Our existing laboratory technician will maintain the microscope. No other maintenance will be required

**Where will the equipment be used or housed? If new storage is needed, describe the storage, location and costs to provide for it. Are these costs included in the financial section?**

The microscope will be stored in room 1822.

## **SECTION 6: OUTCOMES**

**How will equipment enable student learning outcomes to be achieved? What are the consequences related to learning outcomes if request is not funded?**

Without the microscope, students will experience a diminished laboratory experience, which is designed to support their understanding of concepts of metallurgy and microstructures within different metals, and the effect of different types of heat treatment and cold work on those microstructures.

Without the equipment, the metallurgy coverage in ENGR 46 will be severely diminished.

## SECTION 7: FINANCIAL

### Part 1

Total amount requested: \$23,862

Explain the details behind the amount requested above

Vendor	Description	Unit Cost	Qty	Total Cost
Olympus	Microscope Frame with arm	\$3305.00	1	\$3305.00
Olympus	Reflected Light Illuminator	\$1562.00	1	\$1562.00
Olympus	Observation Tube	\$1782.00	1	\$1782.00
Olympus	Nosepiece	\$1357.00	1	\$1357.00
Olympus	Eyepieces	\$450.00	1	\$450.00
Olympus	Light Sources	\$718.00	1	\$718.00
Olympus	Objectives	\$2935.00	1	\$5735.00
Olympus	Rt Hand Stage	\$546.00	1	\$546.00
Olympus	Slide holder / hand press / Specimen plate / Dust cover	\$523.00	1	\$523.00
Olympus	Color Digital Camera	\$2825.00	1	\$2825.00
Olympus	Lens Mount	\$676.00	1	\$676.00
Olympus	Olympus Stream Software	\$1786.00	1	\$1786.00

Equipment or Materials:

Delivery:

Installation:

Facilities Modification:

Sales Tax: \$2020.24

Other:

Vendor Discount (if applicable):

**Total amount:** \$23,285.24 (Attach copies of quotes or estimates)

NOTE: Requests for computer related equipment must be reviewed by LPC IT Department

IT Department Authorized Signature: \_\_\_\_\_ Not applicable \_\_\_\_\_

In addition to the amount requested above, what ongoing costs will be incurred per year? This is trying to determine the total cost of ownership.

#### COSTS

Upkeep and Maintenance: 0

Storage: 0

Other : 0

How will these ongoing costs be paid for?

Part 2

How long will this equipment last and when will it need to be replaced? When replacement is needed, how will it be paid for? (such as another IER, grant, etc.)


15-25 years

What outside sources of funding, discounts or help have you explored and what is the outcome? (items such as CTE and grants)

Possible Carl Perkins Act funding

Signatures:

  
Requestor

  
Dean  
10/21/15

  
Vice President

Request Approved:  Yes  No

Approved by:

<Approver>

Date Approved:

<mm/dd/yyyy>



Olympus America Inc.  
 3500 Corporate Pkwy  
 Center Valley PA, 18034, United States  
 Tel: (800) 225-8330  
 seg.orders@olympus.com  
<http://www.olympus-ims.com>

# Quotation

Quotation #	QT-US-M-1015017
Quote title	BX51 Metallurgical Microscope
Date	Oct 19, 2015

### Bill to:

Las Positas College  
 3000 Campus Hill Drive  
 Livermore, CA 94551, United States

### Ship to:

Las Positas College  
 3000 Campus Hill Drive  
 Livermore, CA 94551, United States

Expires	Customer Ref #	Contact Name	Contact Phone	Contact Email	Customer Fax	Ship Via
Jan 17, 2016		Andrew Lozano	925-424-1339	alozano@laspositascollege.edu		
Payment Terms	Incoterms	Currency	Sales Rep	Sales Rep Phone	Sales Rep Email	Second Sales Rep
TBD	EXW-ORIGIN	U.S. Dollar	Garrett Standish		garrett.standish@olympus.com	

P/N	Qty	Description	Tax	Unit Price	Extended Price
BX51TRF-6	1	BX51TRF-6: MICROSCOPE FRAME W/O ARM, 2 LAMP SOCKETS, ROHS	Y	3,305.00	3,305.00
5-UR720	1	BX-RLA2;REFLECTED LIGHT ILLUMINATOR WITH BF/DF SLIDER	Y	1,562.00	1,562.00
3-U234	1	U-TR30-2-2;TRINOC.OBSERV.TUBE 100:0.80:20.0:100% POSITIONS	Y	1,782.00	1,782.00
U-R265	1	U-P5BDR;5-POSITION BF/DF NOSEPIECE, 2 POS CENTERABLE,DIC	Y	1,357.00	1,357.00
2-U100H6	1	WHN10X-H-1-7;10X EYEPIECE.FOC.BX.IX HI EPNT,RET SHELF,FN:22	Y	245.00	245.00
2-U1007	1	WHN10X-1-7;10X EYEPIECE FOR BX,IX HI EYEPNT,RET SHELF,FN:22	Y	205.00	205.00
8-C406	2	JC12V100WHAL-L;12V,100W HALOGEN BULB,BHS,AH2/3,U-LH,AX-LH	Y	41.00	82.00
5-UL1227	1	U-LH100-3-7;12V/100W HALOGEN L AMPHOUSE,WEEE/ROHS COMPLIANT	Y	636.00	636.00
1-U2N222	1	MPLN5XBD;M PLAN 5X BD OBJECTIVE, NA 0.1, WD 12MM	Y	633.00	633.00
1-U2N223	1	MPLN10XBD;M PLAN 10X BD OBJECTIVE, NA 0.25, WD 6.5MM	Y	813.00	813.00
1-U2N225	1	MPLN20XBD;M PLAN 20X BD OBJECTIVE, NA 0.4, WD 1.3MM	Y	969.00	969.00
1-U2N230	1	MPLN50XBD;M PLAN 50X BD OBJECTIVE, NA 0.75, WD 0.38MM	Y	1,153.00	1,153.00
1-U2N234	1	MPLN100XBD;M PLAN 100X BD OBJECTIVE, NA 0.9, WD 0.21MM	Y	2,167.00	2,167.00
4-U133	1	U-SVRM; RIGHT HAND MECHANICAL STAGE, FOR LOW BX-LW/SH2 MOUNT	Y	546.00	546.00
4-U143	1	U-HRD-4; RIGHT RELEASE SLIDE HOLDER, DOUBLE SLIDE, THIN	Y	47.00	47.00
M-0651	1	HP;HAND PRESS FOR SPECIMEN MOUNTING	Y	162.00	162.00
4-U603	1	U-MSSP; SOLID SPECIMEN PLATE FOR U-SVRB/LB-4 STAGES	Y	279.00	279.00
OMT010IND	1	OLYMPUS INDUSTRIAL DUST COVER, 11x25x26	Y	35.00	35.00
SIS-SC30	1	E0431754;3.2MP CMOS COLOR DIGITAL CAMERA	Y	2,825.00	2,825.00
U-V105C47	1	U-TV0.5XC-3-7;CCD CAMERA ADAPTER,0.5X LENS,C-MOUNT	Y	676.00	676.00
SIS-9700320	1	E9700320; OLYMPUS STREAM BASIC 1.9.4	Y	1,786.00	1,786.00

Minimum System Requirements for Software - Olympus Stream v1.9/ Camera Models DP, SC, UC, XM, XC



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# Quotation

Quotation #	QT-US-M-1015017
Quote title	BX51 Metallurgical Microscope
Date	Oct 19, 2015

PN	Qty	Description	Tax	Unit Price	Extended Price
		<p>Supported Computers: Dell Precision T3610/T5610/T7610 series, HP Z230 (w/i5 processor), Z420, Z620 or Z820            Operating System: Windows 8.1 Professional (32 and 64 bit), Windows 7 Ultimate, Windows 7 Professional (32 and 64 bit)            CPU: Intel Core i5 / i7 (Rec), Intel Core 2 Duo (Min)            Note: Intel i3 and AMD microprocessors are not supported            RAM: 8GB (Rec), 4GB (Min)            Removable Media: Dual Layer DVD            Available Hard Disk Space: 50 GB            Video Card: 2GB "Stand Alone" Video Card (Rec), 512 MB "Stand Alone" Video Card (Min)            Note: Camera will not function on PC's utilizing "shared" video memory (when main system memory is shared for graphics processing).            Available PCI Slots: One available full-size or low-profile PCI slot (for included IEEE 1394 FireWire card where applicable) A PCIe IEEE 1394 FireWire is available as an option            RS232 Port or USB-to-RS232 Converter: Required when interfacing with Olympus motorized microscope or nosepiece encoder.            Windows Log In Credentials: Administrative privileges are required at time of installation            Internet Access: Internet access is required to perform critical system updates prior to installation            Microsoft Office: Microsoft Office 2013, 2010 or 2007 is required for the Report Composer feature in Siream (Basic, Essentials, Motion and Enterprise) image-analysis software            Monitor: A minimum of 1920 x 1080 resolution 21" monitor is recommended</p> <p>Note:            Non-workstation computers are not supported (Examples: Dell Optiplex, Vostro, HP Compaq Elite Series). These computers, laptops and other non-workstation computers have lower end chip-sets and components that do not have enough processing or other issues that could cause the software or camera hardware to fail.</p> <p>The Olympus standard lead time is 45 days with the exception of the following items: LEXT OLS4100 Laser Scanning Microscope, STM6 Measuring Microscope and the AL120 Wafer Loader. These items have a lead time of 60-90 days. Please contact your sales representative or customer service for lead times on non-catalog custom items.</p> <p>The quotation has been prepared by Garrett Standish. Email: <a href="mailto:garrett.standish@olympus.com">garrett.standish@olympus.com</a>            If you wish to place an order, please send your Purchase Order to <a href="mailto:seg.orders@olympus.com">seg.orders@olympus.com</a></p>			

- Price Quotes and Total Package Prices are for listed items only and valid for 90 days
- Changes, Additions or Deletions are from this package quotation may cause pricing adjustments
- Prices quotes are FOB Origin and in USD unless otherwise stated in this quotation. Shipping charges will be added to your invoice at the time of shipment. Olympus will prepay and add shipping costs unless your carrier collect account number is provided.
- Orders and Warranty for Olympus Equipment are accepted based on Olympus Scientific Solutions Americas Terms and Conditions. You can view these terms at <http://www.olympus-ims.com/terms>.
- Orders received and confirmed for custom manufactured products may not be cancelled or returned without written authorization from Olympus Scientific Solutions Americas.
- Olympus Scientific Solutions Americas reserves the right to charge a restocking fee if confirmed order is cancelled or returned.
- Your quotation may be prepared as taxable due to the financial obligations for the state you are located in. If you are tax exempt and need to have tax removed from your quote, please provide your tax exempt form along with your purchase order.

Subtotal :	\$21,265.00
Tax (9.5%) :	2,020.24
<b>Grand Total (USD) :</b>	<b>\$23,285.24</b>



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 3500 Corporate Pkwy  
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<http://www.olympus-ims.com>

# Quotation

Quotation #	QT-US-M-1015021
Quote title	BX51 Optional Components
Date	Oct 19, 2015

**Bill to:**

Las Positas College  
 3000 Campus Hill Drive  
 Livermore, CA 94551, United States

**Ship to:**

Las Positas College  
 3000 Campus Hill Drive  
 Livermore, CA 94551, United States

Expires	Customer Ref #	Contact Name	Contact Phone	Contact Email	Customer Fax	Ship Via
Jan 17, 2016		Andrew Lozano	925-424-1339	alozano@laspositascollege.edu		
Payment Terms	Incoterms	Currency	Sales Rep	Sales Rep Phone	Sales Rep Email	Second Sales Rep
TBD	EXW-ORIGIN	U.S. Dollar	Garrett Standish		garrett.standish@olympus.com	

P/N	Qty	Description	Tax	Unit Price	Extended Price
5-JUL1227	1	U-LH100-3-7;12V/100W HALOGEN L AMPHOUSE,WEEE/ROHS COMPLIANT	Y	636.00	636.00
6-U111	1	U-AC2; ABBE CONDENSER, NA 1.1, 4X-100X COVERAGE	Y	181.00	181.00
<p>The Olympus standard lead time is 45 days with the exception of the following items: LEXT OLS4100 Laser Scanning Microscope, STM6 Measuring Microscope and the AL120 Wafer Loader. These items have a lead time of 60-90 days. Please contact your sales representative or customer service for lead times on non-catalog custom items.</p> <p>The quotation has been prepared by Garrett Standish. Email: garrett.standish@olympus.com</p> <p>If you wish to place an order, please send your Purchase Order to seg.orders@olympus.com</p>					

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 • Orders and Warranty for Olympus Equipment are accepted based on Olympus Scientific Solutions Americas Terms and Conditions. You can view these terms at <http://www.olympus-ims.com/es/terms>.  
 • Orders received and confirmed for custom manufactured products may not be cancelled or returned without written authorization from Olympus Scientific Solutions Americas.  
 • Olympus Scientific Solutions Americas reserves the right to charge a restocking fee if confirmed order is cancelled or returned.  
 • Your quotation may be prepared as taxable due to the financial obligations for the state you are located in. If you are tax exempt and need to have tax removed from your quote, please provide your tax exempt form along with your purchase order.

We invite you to share your opinion about our products and service. Please email customerfeedback@olympus-oss.com with your feedback regarding Olympus

Subtotal:	\$817.00
Tax (9.5%):	77.62
<b>Grand Total (USD):</b>	<b>\$894.62</b>

**LAS POSITAS COLLEGE Equipment, Apparatus and Service Requisition #R**

FOR REIMBURSEMENT: List payee name & ssn. **Olympus Scientific Solutions Americas** TAX ID# FOR OFFICE USE ONLY

SUGGESTED VENDOR **Olympus Scientific Solutions Americas**

NAME OF STAFF MEMBER **Andrew Lozano** DATE WRITTEN **10/19/2015** DATE REQUIRED **10/31/2015** DIVISION/DEPARTMENT **STEMPS/Engineer** For inventory purposes include room # where equipment will reside: **1824** RETURN COPY of REQUISITION TO: **K Rose, A. Lozano**

DESCRIPTION	(PRODUCT, TYPE, SIZE, COLOR, STOCK NUMBER)	UNIT	QTY	UNIT PRICE	EXTENDED COST
BX51 Metallurgical Microscope			1	\$21,265.00	\$ 21,265.00
BX51 Components			1	\$817.00	\$ 817.00

Vendor Information/ Remit To: **Deliver To, include room # (optional):**  
**Room 1824**

Garrett Standish Cell Phone: (503) 407-8943 Email: [garrett.standish@olympus.com](mailto:garrett.standish@olympus.com)

Olympus Scientific Solutions Americas


Comments:  
**Instructional Equipment Request. Contact above**

Subtotal \$ 22,082.00  
 Tax \$ 0.0950 \$ 2,097.79  
 Shipping (if available):

**TOTAL COST \$ 24,179.79**

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

ACCOUNT # FUND ORG ACCT PROGRAM

APPROVALS Supervisor/ Coordinator/ Director   
 Dean/ VP/ President

Business Office