

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2017

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Carol Jones
Program or Service Area:	Science
Division:	Science
Date of Last Program Efficacy:	Spring 2016
What rating was given?	continuation
Amount Requested:	\$43,000 - \$55,501 (~\$8,600-\$11,100 per lab room - 1 vs 2 projectors per room) – to modernize the equipment in Chemistry lab rooms PS-310, 312, 315, 316 & 318
Strategic Initiatives Addressed: Strategic Directions + Goals	2. Promote Student Success 6. Provide Exceptional Facilities

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Meeting 10/03/17 at 2:00-2:30 pm in PS-196 SBVC. Meeting with Bob Jenkins at 11:30 am -12:00 noon 10/06/17 in PS-318 & PS-310 _____

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No. Rick Hrdlicka and Bob Jenkins both met with Carol Jones and said this would be a technology request. We are also submitting a facilities request as well as minor room modification may be needed

3. What technology-based equipment or software are you requesting?

We would like one new LCD projector, mounting equipment and one new motorized projector screens for each chemistry lab room (PS-318, PS-316, PS-315, PS-312, & PS-310) to replace or complement the current projector and screen in this room. We will also need cables, a switchboard display and other accessories that are needed to make this modification possible. {PS-310 is of highest priority}

4. 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 Chemistry/Physical Science 2015-1016 EMP “Goals” are to “continue to improve student success” and to “increase the number of science and engineering majors to affect the economic viability of the region”. Over the last few years (2012-2017) the Chemistry success rates have been about 54-60%, we are seeking innovative ideas to improve student success (EMP, action plan). The modifications to the laboratories will allow for a more interactive lecturing experience which often occurs in lab due to time constraints. The current lab setup has one large screen that completely prevents instructors from using the whiteboard and projector at the same time. Adding a new screen and projector to a new location will allow use of the whiteboard while the projector is also in use. This would allow instructors more freedom of how to show material without having to choose one media source or waste 2-3 minutes each

time they want to switch between different technologies. The current setup prevents the use of the whiteboard if the LCD projector is in use.

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

1. Our LCD projectors & computers in the chemistry lab rooms were installed in 2011, they are due for replacement. We would like to improve the layout and technology in these rooms.
2. We need new screens because the old screens are embedded within the ceiling and cannot easily be moved to a new location that does not block the whiteboard.
3. Our current technology and whiteboard space in the chemistry laboratories is not as advantageous to the advancement of our students' ability to learn compared to neighboring campuses and other departments on this campus. Other campuses like RCC and UCR have newer lecture halls with a large whiteboard space and more advanced technology to assist an instructors' ability to teach. At RCC, all the chemistry lab rooms have plenty of whiteboard space as well as an LCD projector and screen that allows the instructor to use the projector at the same time as the whiteboard. Lecture and lab rooms in the HLS building here at SBVC have also been modified to make the whiteboard space accessible while using the LCD projectors.
4. The success rates at RCC for the 2014/2015 school year (most current data available) for introductory chemistry, general chemistry, GOB course, and organic chemistry were 57%, 73%, 72%, and 77% respectively (Dr. Leo Truttmann, Dept. Chair of Chemistry, RCC), whereas the same courses at SBVC have between 54-60% student success rates for 2012-2017. We have a similar population of students as RCC and it is likely that these updates will help our students succeed.
5. With the current projectors in the chemistry lab rooms the image becomes distorted when instructors must move up the screen to use the whiteboard behind it. (The image is now distorted over the whiteboard split section as well onto the wall.) By installing a new screen and new LCD projector instructors can now use the whiteboard and projector at the same time! Having the ability to have the whiteboard available for use while using the projector screen will allow instructors the ability to manipulate their lecturing format to maximize student learning and understanding.
6. Some instructors have used a rolling whiteboard to gain additional board space in laboratories but this is proving to be a safety issue as the legs of the rolling whiteboards can easily be tripping hazards in the lab room. Additionally, the rolling whiteboards have occasionally been accidentally placed in front of a lab's safety shower – making them a safety hazard preventing students and faculty from rapid access to the shower in the event of an acid spill or fire on one's body. This lab modification makes learning more interactive, keeps students more engaged and therefore is expected to increase success rates.

6. Provide a complete itemized list of the 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.*)

Touchpanel (5 at \$127.60 each); Control Processor Switcher (5 at \$2894.20 each); LCD projector (5-10 at \$1738.00 each: we can keep the location of the old projector and add an additional projector if funds are available) ; Screens (5 at \$273.00); 24' Monitors (5 at \$239); Various other devices/cables/mounting equipment, etc. that are also needed (\$5,650-\$6,600); tax and 20% contingency (\$9,822-\$12,676)
Rick Hrdlicka provided an itemized list that is attached.

7. What are the consequences of not funding this request?

Success Rates will likely remain around 54-60% for chemistry courses without funding of this classroom modification. Students require constant interaction in conceptual learning and problem solving of chemistry and related topics for effective learning and will struggle more often to understand concepts without the interactive nature of this media.



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Campus Technology Services - ESTIMATE ONLY

Project Name: PS Lab 310, 312, 314, 316, 318 Upgrade

Workorder No.

CLIENT : Carol Jones

CONTACT : Coral Jones

Part No.	Qty	Description	Link	Unit Price	Extended
60-1562-02	5	Extron- TLP Pro 725T 7" Tabletop TouchLink Pro Touchpanel	Link	127.6	638
70-775-01	5	Extron- XTP PI 100 Power Injector	Link	168	840
60-1238-85	5	Extron- IN1608 xi IPCP SA Control Processor and Stereo Amp Scaler	Link	2,894.20	14471
60-1331-13	5	Extron- DTP HDMI 4K 330 Rx	Link	319	1595
28-575-01	2	Extron- CSM 6 Captive Screw to Femal RCA Stereo Jack	Link	15.08	30.16
2029	5	Monoprice- DVI-D Single Link Male to HDMI Female Adapter	Link	2.49	12.45
5378	15	Monoprice- Cat6 Punch Down Keystone Jack - Black	Link	0.81	12.15
6727	10	Monoprice- Wall Plate for Keystone, 2 Hole - White	Link	0.32	3.2
6539	1	Monoprice- Black Insert For Wall Plate - 10pcs/Pack (White)	Link	0.67	0.67
7013	10	Monoprice- 1-Gang Low Voltage Mounting Bracket	Link	1.15	11.5
15428	10	Monoprice- Certified Premium High Speed HDMI® Cables 6ft	Link	3.79	37.9
15429	5	Monoprice- Certified Premium High Speed HDMI Cable 10ft	Link	4.39	21.95
87	5	Monoprice- Super VGA (SVGA) Monitor cable 10ft	Link	3.81	19.05
13371	5	Monoprice- Select DisplayPort 1.2a to HDTV cABLE, 6FT	Link	10.99	54.95
659	5	Monoprice- 6ft 2 RCA Plug/2 RCA Plug	Link	0.83	4.15
9766	5	Monoprice- 10ft 3.5mm Audio Cable	Link	1.74	8.7
-----	10	Troxell- Hitachi CP-WU5505	Link	1738	17380
-----	5	Troxell- Da-Lite DAL85324 Model B X/CSR-106D 52x92	Quote	273	1365
-----	10	Troxell- Chief - RSMAU	Link	169.6	1696
-----	5	Troxell- Peerless - CMJ455	Link	57.58	287.9
413639	5	CDW- Tripp Lite Rackmounted Power Strip	Link	50.19	250.95
4034615	5	CDW- Microsoft Wireless Display Adapter - v2	Link	58.99	294.95
4138024	5	CDW- Dell P2417H-LED Monitor-Full Hd (1080p)-24"	Link	238.99	1194.95
1269577	5	CDW- Tripp Lite 6ft Power Strip	Link	11.12	55.6
-----	5	Amazon- Quartet Wall Bracket for Projection Screens, 6 Inches, x2	Link	12.63	63.15
ODARSCLP1	5	B&H- Odyssey Innovation Designs ARSCLP-1 1U Security Cover	Link	17.99	89.95
MIVTF3	10	B&H- Middle Atlantic 3U Blank Mounted Spacer w/ Venting	Link	15.95	159.5
RAPNTX100	3	B&H Raxxess Pin Torx Security Screw, Model PNTX-100 (Black)	Link	25.36	76.08
AURS2U	5	B&H Auray RS-U2 Rack Mounted Shelf	Link	29.99	149.95
	2	Moving up lights near Projector Mounting Screen		750	1500
	2	Power Ran to new Projector location		250	500
					0
Parts Total					42824.81
Tax 8%					3425.99
Sub Total					46250.8
20% Contingency					9250.16
Grand Total					55500.96