

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:	Chemistry
Division:	Science
Date of Last Program Efficacy:	Spring 2016
What rating was given?	continuation
Amount Requested:	\$23,039.44 to modernize the equipment (LCD projectors and add new screens) in PS-228
Strategic Initiatives Addressed: Strategic Directions + Goals	2. Promote Student Success 6. Provide Exceptional Facilities

Replacement X Growth x(both)

- 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_____

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

No, my meeting with Bob and Rick ended suggesting that no facilities request would be needed for this.

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

Two new LCD projectors, mounting equipment and two new motorized projector screens for PS-228 to replace (or complement) the current projector and screen in PS-228. We will also need cables, a switchboard display and other accessories that are needed to make this modification possible.

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.*)

Our 2015-2016 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%, the chemistry department seeks innovative ideas to improve student success (EMP, action plan). The modifications to the classroom will allow for a more interactive lecturing experience. The current set up has one large screen that almost completely prevents instructors from using the whiteboard while the screen is down. The new split screens will allow instructors to use different technologies at the same time (one screen for the computer (PC or laptop) to show PowerPoint slides or videos from the Internet, etc. and the other screen for the document camera to show a molecular model, a demonstration, how to use the advanced features on a scientific calculator, to write out and solve problems, etc.) or the option of using only one screen, freeing up the other side to use the whiteboard space. Instructors would be allowed more freedom of how to show material to students without having to choose one media source or waste 2-3 minutes of time each time they want to switch between different technologies. Freeing up whiteboard space is also of major importance in the sciences (a single word problem or reaction

mechanism may require the use of multiple whiteboards) and the current setup prevents use of most of the white board 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 projector & computer in PS-228 were installed in 2011, they are due for replacement. We would like to take this opportunity to improve the layout and technology in this room.
2. Our current technology and whiteboard space in PS-228 is not as advantageous to the advancement of our students' ability to learn compared to neighboring campuses. Other campuses like RCC and UCR have newer lecture halls with a large whiteboard space and more advanced technology to assist in an instructors' ability to affectively teach. While I was an instructor at UCR, one of the main lecture halls had three separate projectors and screens and an entire wall of whiteboard space. Each lecture period I would take advantage of this technology and use one projector for the document camera, one for my laptop and one for the computer in the classroom – this allowed me to have no time lag between showing a) a demonstration under the document camera, b) going over my PowerPoint slides on my laptop, c) using the PC to show any videos or blackboard/Canvas issues (etc.) and d) using the whiteboard. The ability to use multiple technologies at once was of huge benefit to my students. With this technology, instructors do not have to choose between lecturing options or deal with the several minute time lag that exists when switching between technologies. At RCC, all the chemistry lecture rooms have plenty of whiteboard space as well as built-in tablets that are attached to the classroom computer which allow instructors to digitally ink the screen – which is of great benefit to the students' understanding of course material.
3. Having the ability to use two different screens at one time will allow instructors the ability to manipulate their lecturing format to maximize student learning. This update will make learning more interactive, keeps students more engaged, and therefore is expected to increase success rates. The success rates at RCC for the 2014/2015 school year (most current data they had 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 and this modification will likely help our students succeed.
4. With the current projector in the classroom, instructors have been projecting an image that becomes distorted when instructors move up the screen to use the whiteboard behind it. With two projectors and screens in the room – instructors can keep one screen down and use the other to show the problem-solving process on the other screen (using the document camera) or on the now available whiteboard space that is no longer blocked by the other screen.

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 (\$1,618); Crosspoint Presentation Switcher (\$6,606); Two LCD projectors (\$3,476) 24' Monitor (\$239); Motorized screens (\$3,000); Two Projector mounts and power (\$1,000); Various other equipment/cables/etc. that are also needed (\$1,850); tax and 20% contingency (\$5262)

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. This classroom modification makes learning more interactive, eliminates the current frustration with teaching in this room, keeps students more engaged and therefore is expected to increase success rates.



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Campus Technology Services - ESTIMATE ONLY

Project Name: PS Lab 228 Lecture Hall Upgrade

Workorder No.

CLIENT : Carol Jones

CONTACT : Coral Jones

Part No.	Qty	Description	Link	Unit Price	Extended
60-1601-02	1	Extron- TLP Pro 1022T Touchpanel 10" Inch Panel	Link	1618	1618
60-1233-01	1	Extron- PS Series Power Supply 12V, 1A, Captive Screw Connector	Link	168.2	168.2
60-1515-22	1	Extron- DTP CrossPoint 84 4K IPCP SA	Link	6,606.20	6606.2
60-1331-13	1	Extron- DTP HDMI 4K 330 Rx	Link	319	319
28-575-01	1	Extron- CSM 6 Captive Screw to Femal RCA Stereo Jack	Link	15.08	15.08
12795	1	Monoprice- Thunderbolt to a 4K HDMI	Link	7.99	7.99
15430	1	Monoprice- Certified Premium High Speed HDMI® Cables 15ft	Link	8.99	8.99
2029	1	Monoprice- DVI-D Single Link Male to HDMI Female Adapter	Link	2.49	2.49
5378	1	Monoprice- Cat6 Punch Down Keystone Jack - Black	Link	0.81	0.81
6727	1	Monoprice- Wall Plate for Keystone, 2 Hole - White	Link	0.32	0.32
6539	1	Monoprice- Black Insert For Wall Plate - 10pcs/Pack (White)	Link	0.67	0.67
7013	1	Monoprice- 1-Gang Low Voltage Mounting Bracket	Link	1.15	1.15
15428	1	Monoprice- Certified Premium High Speed HDMI® Cables 6ft	Link	3.79	3.79
15429	1	Monoprice- Certified Premium High Speed HDMI Cable 10ft	Link	4.39	4.39
87	1	Monoprice- Super VGA (SVGA) Monitor cable 10ft	Link	3.81	3.81
13371	1	Monoprice- Select DisplayPort 1.2a to HDTV cABLE, 6FT	Link	10.99	10.99
659	1	Monoprice- 6ft 2 RCA Plug/2 RCA Plug	Link	0.83	0.83
9766	2	Monoprice- 10ft 3.5mm Audio Cable	Link	1.74	3.48
-----	2	Troxell- Hitachi CP-WU5505	Link	1738	3476
-----	2	Troxell- Da-Lite DAL85324 Model B X/CSR-106D 52x92	Quote	273	546
-----	2	Troxell- Chief - RSMAU	Link	169.6	339.2
-----	2	Troxell- Peerless - CMJ455	Link	57.58	115.16
-----	2	B&H- Middle Atlantic VTF3 3U Vented Rack Mounted Plate	Link	21.75	43.5
ODARSCLP1	1	B&H- Odyssey Innovation Designs ARSCLP-1 2U Security Cover	Link	17.99	17.99
RAPNTX100	1	B&H Raxxess Pin Torx Security Screw, Model PNTX-100 (Black)	Link	25.36	25.36
AURS2U	2	B&H Auray RS-U2 Rack Mounted Shelf	Link	29.99	59.98
4034615	1	CDW- Microsoft Wireless Display Adapter - v2	Link	58.99	58.99
413639	1	CDW- Tripp Lite Rackmounted Power Strip	Link	68.99	68.99
4138024	1	CDW- Dell P2417H-LED Monitor-Full Hd (1080p)-24"	Link	238.99	238.99
1269577	1	CDW- Tripp Lite 6ft Power Strip	Link	10.99	10.99
	2	Cost of two screens plus screen install w power and relay control.		1500	3000
	2	Cost of Two additional Projectors Mounted and power.		500	1000
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Parts Total	17777.34
Tax 8%	1422.19
Sub Total	19199.53
20% Contingency	3839.91
Grand Total	23039.44